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Green Data *for a* Growing Green Economy

Green Job Gap Analysis in the District of Columbia, Maryland, and Virginia



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Green Data for a Growing Green Economy

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MARC Mid-Atlantic Regional Collaborative

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Virginia Employment Commission

Virginia's Community Colleges Workforce Development

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1. Executive Summary

This report presents a summary of preliminary findings from a "gap" analysis for those occupations identified in the MARC LMI Green Jobs Survey conducted by ICF International in 2010 in the District of Columbia, Maryland, and Virginia. The purpose of the gap analysis is to compare the projected demand for workers in these "green job" occupations with the pipeline of completers from associated postsecondary education programs within the MARC region to identify potential gaps between the demand for, and supply of, trained workers. The principal findings from our analysis are as follows.

1.1. Current and Projected Employment

The MARC LMI Green Jobs Survey identified green employment in 50 unique green jobs at the six-digit standard occupation code (SOC) level in the District of Columbia, 188 in Maryland, and the 214 in Virginia.[1] Our analysis shows that employment in these identified green occupations comprise a larger proportion of total current and projected employment in Maryland (51.3 percent in 2008 and 51.0 percent in 2018) and Virginia (54.5 percent in 2008 and 54.7 percent in 2018), than in the District of Columbia (30.1 percent in 2006 and 29.9 percent in 2016). In addition, our analysis has shown that of the three jurisdictions, Virginia is the only one where employment in green occupations is projected to account for a larger proportion of future employment compared to current employment in identified green occupations.[2]

In terms of projected employment growth, our analysis shows that between 2006 and 2016, employment in identified green occupations is projected to increase by 7.7 percent in the District of Columbia, as compared to an 8.5 percent projected increase in total employment. Whereas in Maryland, employment in identified green occupations is projected to increase by 8.5 percent between 2008 and 2018, as compared to a 9.1 projected increase in total employment, and in Virginia green occupational employment is projected to increase by 15.4 percent between 2008 and 2018, as compared to a 14.9 projected increase in total employment. As these data show, of the three jurisdictions, Virginia is not only projected to experience the largest increase in employment in identified green occupations, but also it is the only jurisdiction where growth in these occupations exceeds total employment growth.

Finally, as part of our analysis we also disaggregated the green occupation data for each state/jurisdiction and Workforce Investment Area (WIA) into major occupation categories and ranked those major categories according to projected employment growth. Interestingly, that analysis identified significant similarities across jurisdictions. Specifically, we found that across all three jurisdictions and in most of the WIAs there were five major occupational categories that consistently ranked in the top ten in terms of largest anticipated employment growth. Those five

[1] A comprehensive list of these occupation at both the state/jurisdiction level and the WIA level is provided in Table A2 of the data appendix.

[2] Recall that, because the gap analysis compares the totality of employment demand in a given occupation to the totality of completers in postsecondary education programs associated with that occupation, the employment numbers presented in this report are more expansive than those identified in the MARC LMI Green Jobs Survey. The reason for this is that, of necessity, they include all employment in a given occupation, regardless of whether that occupational employment is in identified green industries or not. What this means in practice, for example, is that we compare the total number of completers coming out of accounting programs to the total occupational demand for accountants. It is necessary to conduct the analysis at this level because we have no way to know in advance what proportion of completers will go into green industries, and what proportion will not.

were: *Arts Design, Entertainment, and Media*; *Business and Financial*; *Community and Social Services*; *Computer and Mathematical*; and *Life, Physical, and Social Science* occupations. In addition, *Architecture and Engineering* occupations ranked among the top ten fastest growing in the District of Columbia and Maryland, and *Legal* occupations ranked among the top ten in the District of Columbia.

1.2. Education and Core Employability Skill Levels

Our analysis also evaluated the required education and core employability skill levels associated with occupations identified in the MARC LMI Green Jobs Survey. With regard to required education levels, that evaluation indicates that in the District of Columbia jobs requiring a BA degree or above accounted for approximately 69 percent of total employment in identified green occupations in 2006 and are projected to account for 70 percent in 2016. In Maryland and Virginia, however, these percentages were much lower. In Maryland, jobs requiring a BA degree or above account for approximately 23 percent of total employment in identified green occupations in both 2008 and 2018, while in Virginia they account for 26 percent in 2008 and 27 percent in 2018. These differences are likely attributable to differences in the types of green jobs identified by the MARC LMI Green Jobs Survey in each jurisdiction, where the preponderance of "green jobs" identified in the District of Columbia tended to be in the high education/high skill professional and technical services sector, where the preponderance of "green jobs" identified in Maryland and Virginia tended to be in the lower education/lower skill building trades sector.

With regard to core employability skill levels, our analysis indicates that in 2006 approximately 49 percent of total employment in identified green occupations in the District of Columbia was in jobs that required a gold-level Career Readiness Certificate (CRC) or above, while that proportion is projected to increase to 50 percent in 2016.[3] Again because of differences in the types of "green jobs" identified in the District of Columbia as compared to Maryland and Virginia these percentages tend to be lower in Maryland and Virginia. In Maryland, jobs requiring a gold-level CRC or above accounted for approximately 29 percent of total employment in identified green occupations in 2008 and are projected to account for 28 percent in 2018, while in Virginia they account for 28 percent in 2008 and are projected to account for 28 percent in 2018.

1.3. Gap Analysis

For purposes of this analysis, we define the "gap" as the difference between the likely annual supply of trained graduates associated with each identified green occupation and the projected average annual openings for each occupation. Further, we focus our analysis only on those instances where there is a possible shortage of trained graduates. In the data provided in this report, the gap is presented in a summary form where projected average annual openings are compared to the aggregated sum of all completers, at all degree levels, from all associated postsecondary programs within the appropriate state/jurisdiction or WIA. Importantly, the number of graduates presented for each occupation is a "distributed" number, which takes into account the many-to-many relationship between occupations and educational programs, where graduates from one academic program often qualify for employment in more than one occupation, and more than one academic program can be associated with a single occupation.

[3] The CRC is a workforce certification program that is based on ACT's *WorkKeys* skill assessment system. It certifies that a recipient possess core skills in three assessment categories: applied math, reading for information, and locating information.[3] For a Bronze certificate, a recipient must score at least a level 3 in all three assessment categories. for a Silver certificate at least a level 4, for a Gold certificate at least a level 5, and for a Platinum certificate at least a level 6.

Our analysis has revealed several similarities and many differences between the three jurisdictions. One of the primary similarities is that the largest gaps, in terms of likely shortages of trained graduates, tend to be at the BA level and above. In the District of Columbia five out of the top 10 largest gaps are for occupations that typically require a BA degree or above, while in both Maryland and Virginia nine out of the top 10 largest gaps are for occupations that typically require a BA degree or above.

When we look at the types of occupations that fall into these top 10, however, there are significant differences between the jurisdictions. In the District of Columbia three out of the top 10 largest gaps are in *Life, Physical, and Social Science* occupations, while two are in *Architecture and Engineering* and two are in *Business and Financial Operations* occupations.[4] In contrast, in both Maryland and Virginia *Business and Financial Operations* and *Computer and Mathematical* occupations are more heavily represented. In Maryland, four out of the top 10 largest gaps are in *Business and Financial Operations* occupations and two are in *Computer and Mathematical* occupations.[5] Where in Virginia, four out of the top 10 largest gaps are also in *Business and Financial Operations* occupations and four are in *Computer and Mathematical* occupations.[6]

1.4. Conclusion

Our analysis shows that are significant differences in the current and projected employment, required education and core employability skill levels, and potential gaps in the supply of trained workers for green jobs identified in the District of Columbia, Maryland, and Virginia through the MARC LMI Green Jobs Survey and that these differences are driven in part by differences in the types of green jobs identified in each jurisdiction. Of the three jurisdictions, Virginia is projected to experience the largest employment increase in identified green occupations and is the only one of the three jurisdictions where projected growth in green occupations is expected to exceed projected growth in total employment. Another key difference pertains to required education and core employability skills levels, with identified green occupations in the District of Columbia typically requiring much higher education and core employability skills levels than in either Maryland or Virginia.

In addition, our analysis shows that, in terms of likely shortages of trained graduates the largest gaps in all three jurisdictions tend to be disproportionately at the BA level and above. This is an interesting and perhaps counter intuitive finding given that, in general, identified green jobs in the District of Columbia typically have higher education and skills requirements than green jobs in both Maryland and Virginia. However, the reader should keep in mind that shortages are a function of both demand and supply. As a result, these findings are likely driven by inter-jurisdictional similarities in the shortages of certain trained workers, more than by inter-jurisdictional dissimilarities in the distribution of green jobs.

Finally, our analysis shows that, although the largest gaps in all three jurisdictions tend to be disproportionately at the BA level and above, there are differences in the types of occupations that are most adversely impacted in each jurisdiction. Specifically, whereas in the District of Columbia the largest number of "top 10" gaps are in *Life, Physical,*

[4] The remaining three "top 10" largest gaps are evenly distributed between *Arts, Design, Entertainment, Sports, and Media*; *Installation, Maintenance, and Repair*; and *Legal* occupations.

[5] The remaining four "top 10" largest gaps are evenly distributed between Architecture and Engineering; Community and Social Services; Healthcare Practitioners and Technical; and Legal.

[6] The remaining two "top 10" largest gaps are split between *Installation, Maintenance, and Repair*; and *Management* occupations.

and Social Science; *Architecture and Engineering*; and *Business and Financial Operations* occupations (in order of frequency), in Maryland and Virginia *Business and Financial Operations* occupations are most heavily represented in the top ten and *Computer and Mathematical* occupations rank second.

In sum, what these data show is that there are clear distinctions in "green" employment between the three jurisdictions and, as a result, to be successful strategies designed to promote that employment will have to be tailored to take into account those distinctions.

2. Introduction

This report presents a summary of preliminary findings from a "gap" analysis for those occupations identified in the MARC LMI Green Jobs Survey conducted by ICF International in 2010 in the District of Columbia, Maryland, and Virginia. The purpose of the gap analysis is to compare the projected demand for workers in these "green job" occupations with the pipeline of completers from associated postsecondary education programs within the MARC region to identify potential gaps between the demand for, and supply of, trained workers. In addition to findings from the gap analysis, we also provide information on the general characteristics of the identified green occupations in terms of projected employment, and required education and core employability skill levels.

The remainder of this report is divided into three sections. The *Method* section briefly describes the methods that were used to perform the gap analysis. The *Findings* section presents summaries of findings at the state/jurisdiction level for the District of Columbia, Maryland, and Virginia, and at the Workforce Investment Area (WIA) level for the 12 WIA's within Maryland and the 14 WIAs within Virginia. The *Summary and Conclusion* section provides a closing summary.

Finally, in addition to the summaries provided in the *Findings* section, the attached data appendix also provides a comprehensive list of the postsecondary education institutions included in the analysis, the green occupations identified in each state/jurisdiction through the MARC LMI Green Jobs Survey, complete details for the state/jurisdiction level gap analyses of the District of Columbia, Maryland, and Virginia, and a listing of related labor pools – those occupations most closely related to an identified green occupation in terms of necessary knowledge and skills, and that pay wages below those of the identified green occupation.[7]

3. Method

The method used to produce the gap analysis is not new and has been successfully employed in earlier studies conducted in several states.[8]

[7] Only occupations that offer wages below that of the identified green occupation because is it presumed that the individuals already employed in occupations paying a higher wage would be unwilling to transition into the lower paying green job.

[8] For an exposition of this method *see*, William J. Drummond and Jan L Youtie, "Occupational Employment, Demand for College Graduates, and Migration: A Statewide View," a report to the Board of Regents, University System of Georgia, 1999. For an example of how this method has been used previously *see*, A. Fletcher Mangum, "System-Wide Needs Assessment for Virginia Education," State Council of Higher Education for Virginia, March 28, 2002; A. Fletcher Mangum, "The Impact of Postsecondary Schools and Colleges on Florida's Economy," June 2006; A. Fletcher Mangum, "Analysis of Occupation-Driven Demand for Postsecondary Education Programs within the Service Area of Roane State Community College," February 2009;and A. Fletcher Mangum, "Texas Rural Workforce Network Consortium Biotechnology/Life Sciences – Medical Targeted Industry Economic Study," November 2010, .

3.1. Demand for Trained Workers

ICF International's MARC LMI Green Jobs Survey identified 50 unique green jobs in the District of Columbia at the six-digit standard occupation code (SOC) level, 188 in Maryland, and 214 in Virginia.[9] To estimate the likely demand for trained workers in these green occupations, we employ state-level and, where applicable, WIA-level projections of average annual openings from the District of Columbia's Department of Employment Services; Maryland Department of Labor, Licensing, and Regulation; and Virginia Employment Commission. In each case, projections are for the most recent forecast horizon available for each state/jurisdiction and WIA.[10]

It is important to keep in mind that, because the gap analysis compares the totality of employment demand in a given occupation to the totality of completers in postsecondary education programs associated with that occupation, the employment numbers presented in this report are more expansive than those identified in the MARC LMI Green Jobs Survey. The numbers in this report include all employment in a given occupation, regardless of whether or not that employment is in identified green industries. For example, we compare the total number of completers coming out of accounting programs to the total occupational demand for accountants. It is necessary to conduct the analysis at this level because we have no way to know in advance what proportion of completers will go into green industries, and what proportion will not.

3.2. Supply of Trained Workers

To estimate the likely supply of trained workers associated with the green job occupations identified in the MARC LMI Green Jobs Survey, we first use a crosswalk developed by the National Crosswalk Service Center to map occupations into the prerequisite education and training program(s) necessary for entry into each occupation.[11] Once those education and training programs are identified, we then employ completions data from the U.S. Department of Education's *Integrated Postsecondary Education Data System* (IPEDS) to quantify the pipeline of trained

[9] A comprehensive list of these occupation at both the state/jurisdiction level and the WIA level is provided in Table A2 of the data appendix.

[10] Occupational employment projections for the District of Columbia are for the 2006-2016 forecast horizon. Occupational employment projections for Maryland are for the 2008-2018 forecast horizon at the state level and the 2006-2016 forecast horizon at the sub-state level. Occupational employment projections for Virginia are for the 2008-2018 forecast horizon at both the state and sub-state level.

[11] The National Crosswalk Service Center (NCSC) is funded by the U.S. Department of Labor, Employment and Training Administration. The specific NCSC crosswalk used in this analysis is the *2000 Standard Occupational Classification Crosswalk to 2000 Classification of Instructional Programs*. This crosswalk identifies the prerequisite instructional programs (classified according to the National Center for Educational Statistics' *2000 Classification of Instructional Program*, or *CIP*, code) necessary for employment in 1,364 specific occupations (classified according to the Bureau of Labor Statistics' *2000 Standard Occupational Classification*, or *SOC*, code). Often, these are many-to-many relationships where a given instructional program can serve as an avenue into one of many jobs, or one of several instructional programs can serve as a prerequisite for a given job.

workers associated with each occupation.[12] These data consist of the number of completers reported by postsecondary education institutions within each state/jurisdiction and, where applicable, WIA included in the analysis for the 2008-2009 academic year. The universe of institutions included in the analysis includes 274 individual postsecondary schools, colleges, and universities (24 in the District of Columbia, 94 in Maryland, and 156 in Virginia).[13]

3.3. Gap Analysis

The "gap" is defined as the difference between the likely annual supply of trained graduates associated with each occupation (as estimated from the 2008-2009 IPEDS completions data), and the projected average annual openings for each occupation (as estimated from the most recent occupational employment projections for each state/jurisdiction and WIA). The tables that follow provide information for the top 20 largest negative gaps in each state/jurisdiction and WIA – those gaps where there is a possible shortage of trained graduates.[14] These tables present the gap in a summary form where projected average annual openings are compared to the aggregated sum of all completers, at all degree levels, from all associated postsecondary programs within the appropriate state/jurisdiction or WIA. The number of completers presented for each occupation is a "distributed" number, which takes into account the many-to-many relationship between occupations and educational programs, where graduates from one academic program often qualify for employment in more than one occupation, and more than one occupation can be associated with a single academic program.

In addition, at the state/jurisdiction level, we provide a comprehensive listing of the negative (possible shortage of trained workers), or positive (possible over-supply of trained workers), gap associated with every occupation identified in the MARC LMI Green Jobs Survey in the data appendix. In this instance, we present the gap in two ways: first, in the summary form described above; second, in a more detailed format where projected average annual openings are disaggregated according to the typical education levels of new hires within that occupation as reported by the U.S. Bureau of Labor Statistics, and associated completers are similarly disaggregated according to degree levels.

These more granular data provide a more comprehensive description of the postsecondary pipeline feeding each occupation, and to take into account the fact that "typically requires a baccalaureate (BA) degree" may mean very different things in different occupations. For example, although the occupations *Business Operations Specialists, All Other* and *Environmental Scientists*

[12] These data consist of the number of completers reported by postsecondary education institutions within each stat/jurisdiction and sub-state area included in the analysis for the 2008-2009 academic year.

[13] A comprehensive list of these institutions at both the state/jurisdiction level and the WIA level is provided in Table A1 of the data appendix

[14] A comprehensive listing at the state/jurisdiction level of the negative (possible shortage of trained workers), or positive (possible over-supply of trained workers), gap associated with each occupation identified in the MARC LMI Green Jobs Survey is provided in Tables A6 and A7 (DC), Tables A10 and A11 (Maryland), and Tables A14 and A15 (Virginia) of the data appendix.

and Specialists, Including Health both "typically require a BA degree," in the case of *Business Operations Specialists, All Other*, only 49 percent of new hires generally have a BA degree, where for *Environmental Scientists and Specialists, Including Health*, the comparable figure is 93 percent. Further, in this instance the numbers of completers presented for each occupation are not "distributed." This approach provides the reader with full information on the upper ceiling of graduates who qualify for employment in a given occupation, regardless of whether those completers also qualify for employment in one or more other occupations.

The gap analysis was performed using the *WIN Strategic Compass*, a web-based software product produced by Worldwide Interactive Network.

4. Findings

In this section, we provide a summary of findings for: 1) the District of Columbia, 2) the state of Maryland and its 12 WIAs, and 3) the state of Virginia and its 14 WIAs.

4.1. District of Columbia

Current and Projected Employment

ICF International's MARC LMI Green Jobs Survey identified 50 green occupations in the District of Columbia at the six-digit SOC level. As shown in Figure 1, total employment in these occupations is estimated to have been 228,451 in 2006, which is equivalent 30.1 percent of total estimated employment. Based on the most recent projections available from the District of Columbia's Department of Employment Services, total employment in these occupations is expected to increase to 246,050 in 2016, but will grow more slowly than overall employment, causing the occupations' share of total employment to fall to 29.9 percent of total projected employment.

Figure 2 provides information on the aggregate projected growth rate for the 50 identified green occupations as compared to the projected growth rate for total employment. As this graph indicates, between 2006 and 2016 aggregate employment in these occupations is projected to increase by 7.7 percent, as compared to an 8.5 percent increase in total employment. Table 1 breaks the green occupation data down into major occupation categories and ranks them according to projected growth. As these data show: 1)*Community and Social Services*, 2)*Office and Administrative Support*, 3)*Food Preparation*, 4)*Installation, Maintenance, and Repair*, and 5) *Business and Financial Operations* occupations are expected to experience the largest percentage increases in employment over the period.

Education and Core Employability Skill Levels

The pie charts in Figure 3 break down estimated 2006, and projected 2016, employment in the identified green occupations according to the education or training level typically required. A key finding from these data is that jobs that require a BA degree or above accounted for 69 percent of the total employment in these occupations in 2006, and are projected to account for 70 percent in 2016.

The pie charts in Figure 4 provide a comparable breakdown by Career Readiness Certificate (CRC) level for 2006 and 2016 employment. The CRC is a workforce certification program that has been adopted in 27 states.[15] It is based on ACT's *WorkKeys* skill assessment system and certifies that a recipient possesses core skills in three assessment categories: applied math, reading for information, and locating information.[16] To earn a Bronze certificate, a recipient must score at least a level 3 in all three assessment categories. Where to earn a Silver certificate, they must score at least a level 4, to earn a Gold certificate they must score at least a level 5, and to earn a Platinum certificate they must score at least a level 6. As the data presented in Figure 4 indicate, identified green jobs that require core employability skills at the gold CRC level or above comprised 49 percent of total employment in these occupations in 2006, and are projected to comprise 50 percent of total employment in 2016.

Gap Analysis

Table 2 presents the "top 20" gaps estimated for the District of Columbia (although in this instance, only 14 occupations were actually found to have a negative gap – a possible shortage of trained workers). As these data show, the largest estimated gaps occurred in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Graphic Designers*, 3) *Meeting and Convention Planners*, 4) *Paralegals and Legal Assistants*, and 5) *Environmental Scientists and Specialists, Including Health*. It is also interesting to note that, out of the 14 occupations listed in Table 2, seven, or half, typically require a BA degree or above, and all but one of the occupations for which data are available require a gold CRC or above.

[15] *Data Source*: the Career Readiness Certificate Consortium.

[16] *WorkKeys* is a job skills assessment system developed by ACT.

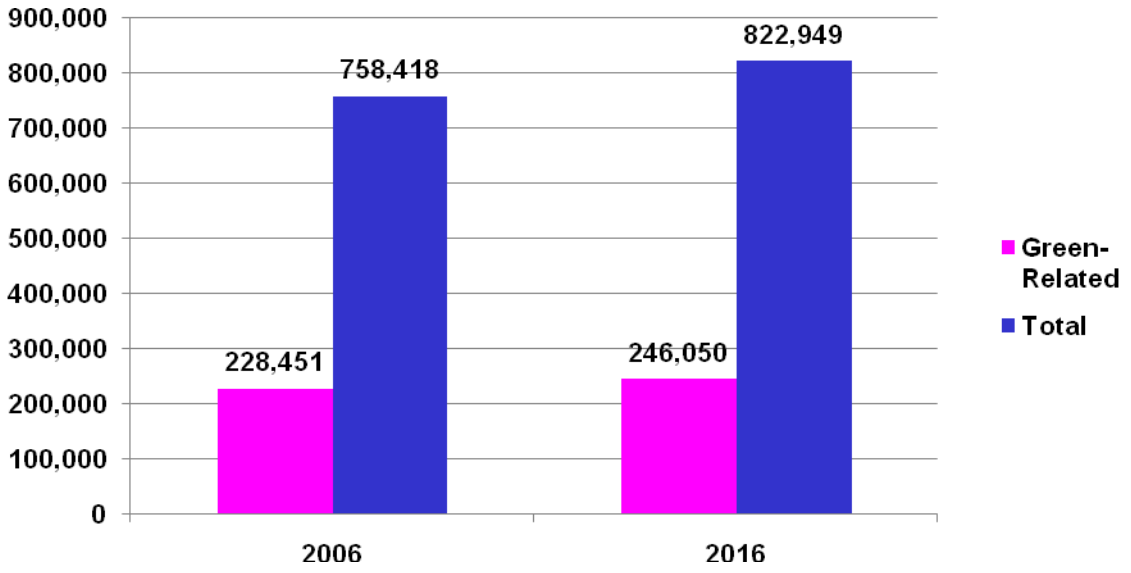


Figure 1: District of Columbia – Green-Related Occupational Employment, 2006 to 2016

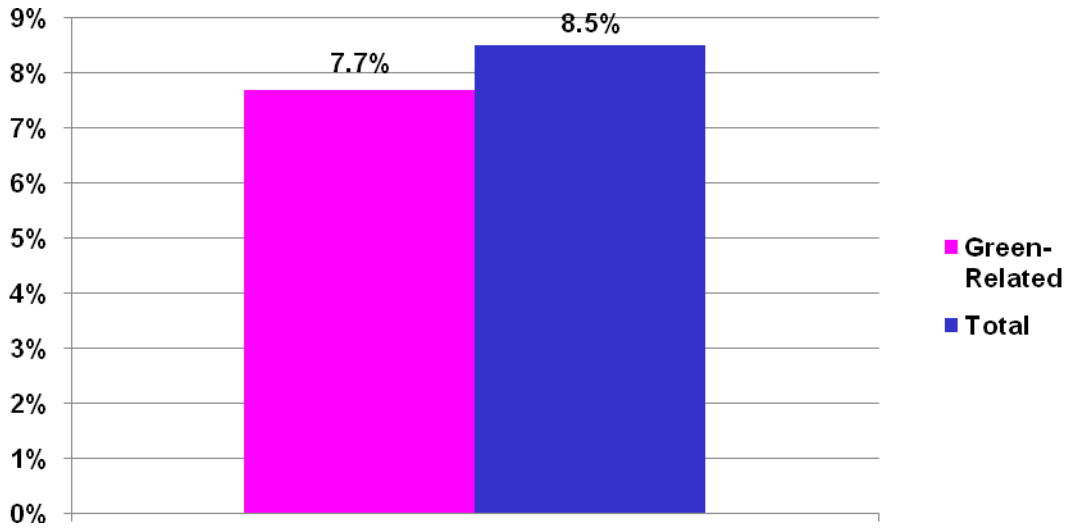


Figure 2: District of Columbia – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 1: District of Columbia – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Community and Social Services Occupations	21-0000	3,451	4,398	27.4%
Office and Administrative Support Occupations	43-0000	11,279	12,908	14.4%
Food Preparation and Serving Related Occupations	35-0000	9,286	10,255	10.4%
Installation, Maintenance, and Repair Occupations	49-0000	5,274	5,807	10.1%
Business and Financial Operations Occupations	13-0000	64,318	70,472	9.6%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	6,157	6,741	9.5%
Architecture and Engineering Occupations	17-0000	2,799	3,027	8.1%
Computer and Mathematical Occupations	15-0000	12,301	13,193	7.3%
Legal Occupations	23-0000	57,996	61,995	6.9%
Life, Physical, and Social Science Occupations	19-0000	3,365	3,514	4.4%
Management Occupations	11-0000	52,225	53,740	2.9%

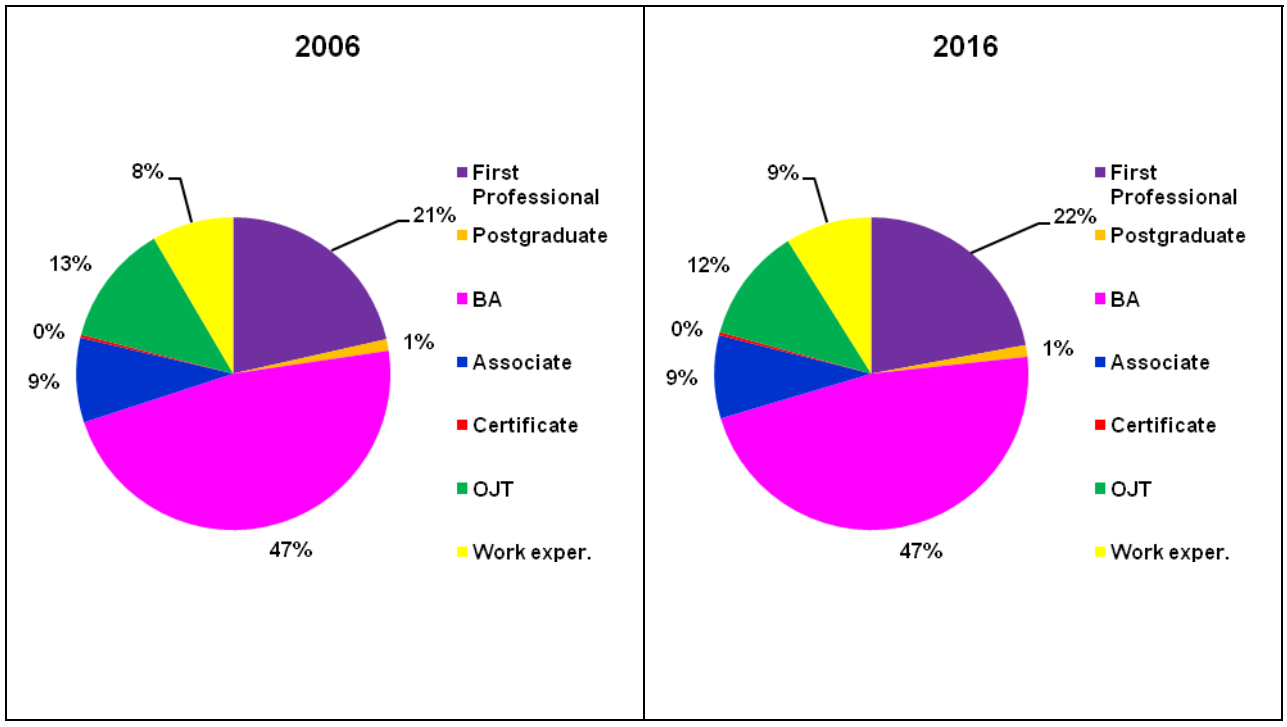


Figure 3: District of Columbia – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

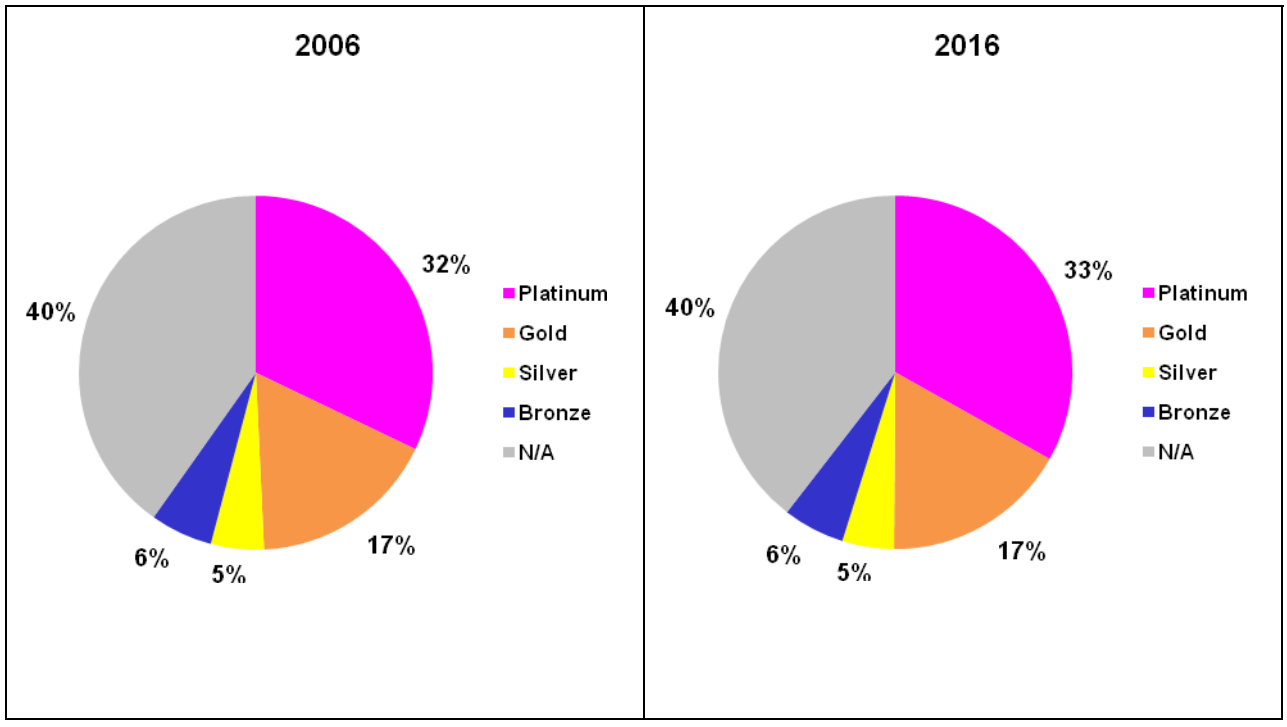


Figure 4: District of Columbia – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 2: District of Columbia – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	664	23	-641
Graphic Designers	27-1024	Gold	BA degree	94	23	-71
Meeting and Convention Planners	13-1121	Gold	BA degree	64	0	-64
Paralegals and Legal Assistants	23-2011		Associate degree	260	212	-48
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	56	17	-39
Environmental Engineers	17-2081		BA degree	28	0	-28
Social Science Research Assistants	19-4061		Associate degree	40	13	-27
Life, Physical, and Social Science Technicians, All Other	19-4099		Associate degree	19	0	-19
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	14	0	-14
Architectural and Civil Drafters	17-3011	Gold	Certificate	9	0	-9
Multi-Media Artists and Animators	27-1014		BA degree	19	13	-6
Interior Designers	27-1025		Associate degree	24	21	-3
Agricultural and Food Science Technicians	19-4011		Associate degree	2	0	-2
Electrical Engineers	17-2071	Gold	BA degree	26	25	-1

4.2. Maryland

Statewide

Current and Projected Employment

In the state of Maryland, the MARC LMI Green Jobs Survey identified 188 green occupations at the six-digit SOC level. In this instance, according to the most recent projections available from the Maryland Department of Labor, Licensing, and Regulation, combined statewide employment in these green occupations is estimated to have been 1,411,530 in 2008, or 51.3 percent of total employment, and projected statewide employment is estimated to be 1,531,400 in 2018, or 51.0 percent of total employment (*see* Figure 5). In terms of projected growth rates, between 2008 and 2018 aggregate statewide employment in these occupations is projected to increase by 8.5 percent, as compared to a 9.1 percent increase in total employment across all occupations (*see* Figure 6). Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1)*Personal Care and Service*, 2)*Building and Grounds Cleaning and Maintenance*, 3)*Healthcare Practitioners and Technical*, 4)*Business and Financial Operations*, and 5) *Community and Social Service* occupations (*see* Table 3).

Education and Core Employability Skill Levels

As shown in the pie charts depicted in Figure 7, we estimate that jobs requiring a BA degree or above account for 23 percent of the total employment in the 188 green occupations identified in Maryland in both 2008 and 2018. In addition, as shown in Figure 8, green jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 29 percent of total employment in these occupations in 2008, and are projected to comprise 28 percent in 2018.[17]

Gap Analysis

The "top 20" gaps for the state of Maryland are presented in Table 4. According to these data, the largest estimated gaps are in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Computer Support Specialists*, 3) *Computer Software Engineers, Applications*, 4) *Civil Engineers*, and 5) *Accountants and Auditors*. One striking feature of the data provided in Table 4 is the very high education and skills levels required for these occupations. Seventeen out of the top 20 gaps are in occupations that typically require a BA degree or above, while 10 out of the 13 occupations for which data are available require a gold CRC or above.

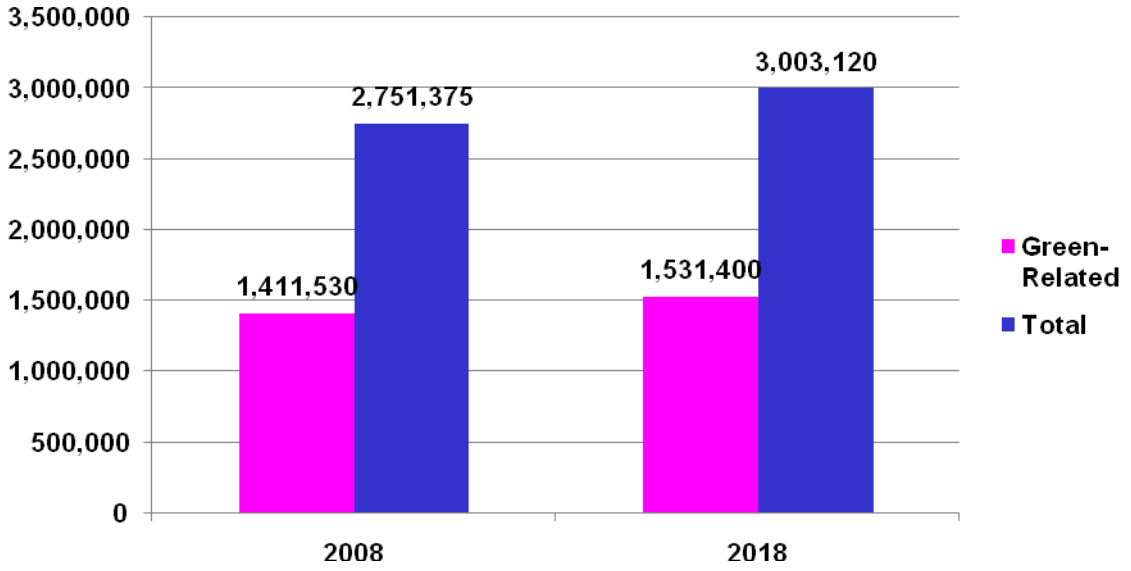


Figure 5: Maryland Statewide – Green-Related Occupational Employment, 2008 to 2018

[17]The CRC is a workforce certification program that is based on ACT's *WorkKeys* skill assessment system. It certifies that a recipient possess core skills in three assessment categories: applied math, reading for information, and locating information.[17] For a Bronze certificate, a recipient must score at least a level 3 in all three assessment categories. for a Silver certificate at least a level 4, for a Gold certificate at least a level 5, and for a Platinum certificate at least a level 6.

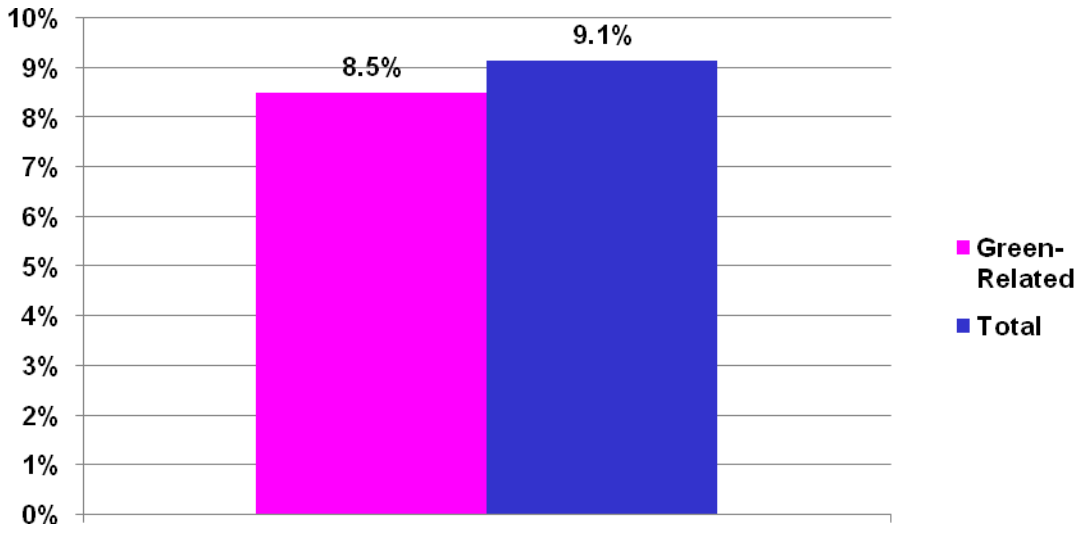


Figure 6: Maryland Statewide – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 3: Maryland Statewide – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Personal Care and Service Occupations	39-0000	5,890	8,605	46.1%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	34,830	42,770	22.8%
Healthcare Practitioners and Technical Occupations	29-0000	71,480	84,800	18.6%
Business and Financial Operations Occupations	13-0000	120,645	141,845	17.6%
Community and Social Services Occupations	21-0000	3,145	3,670	16.7%
Life, Physical, and Social Science Occupations	19-0000	8,435	9,610	13.9%
Architecture and Engineering Occupations	17-0000	45,630	51,945	13.8%
Computer and Mathematical Occupations	15-0000	46,530	51,820	11.4%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	16,225	17,650	8.8%
Education, Training, and Library Occupations	25-0000	27,410	29,640	8.1%
Food Preparation and Serving Related Occupations	35-0000	54,370	58,510	7.6%
Installation, Maintenance, and Repair Occupations	49-0000	68,830	73,890	7.4%
Office and Administrative Support Occupations	43-0000	305,835	328,295	7.3%
Construction and Extraction Occupations	47-0000	129,265	138,060	6.8%
Protective Service Occupations	33-0000	11,325	11,940	5.4%
Management Occupations	11-0000	146,670	153,800	4.9%
Sales and Related Occupations	41-0000	225,000	235,030	4.5%
Transportation and Material Moving Occupations	53-0000	37,775	38,520	2.0%
Farming, Fishing, and Forestry Occupations	45-0000	4,130	4,145	0.4%
Legal Occupations	23-0000	20,435	20,025	-2.0%
Production Occupations	51-0000	27,675	26,830	-3.1%

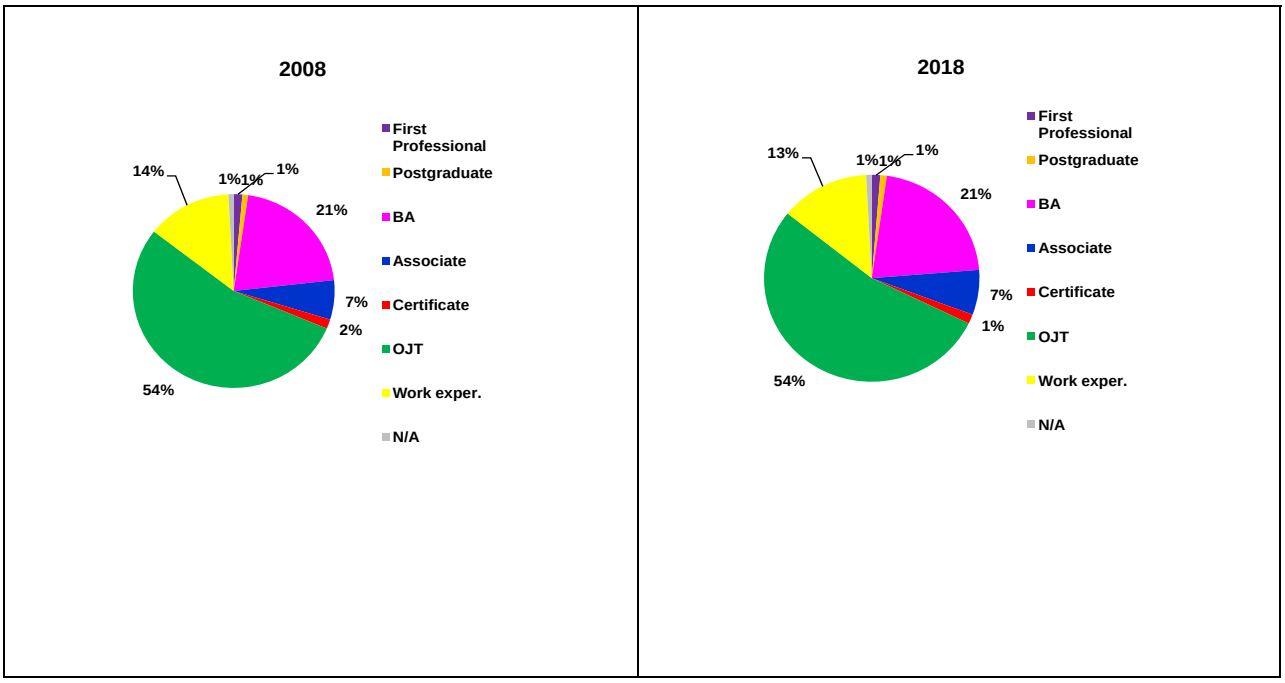


Figure 7: Maryland Statewide – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

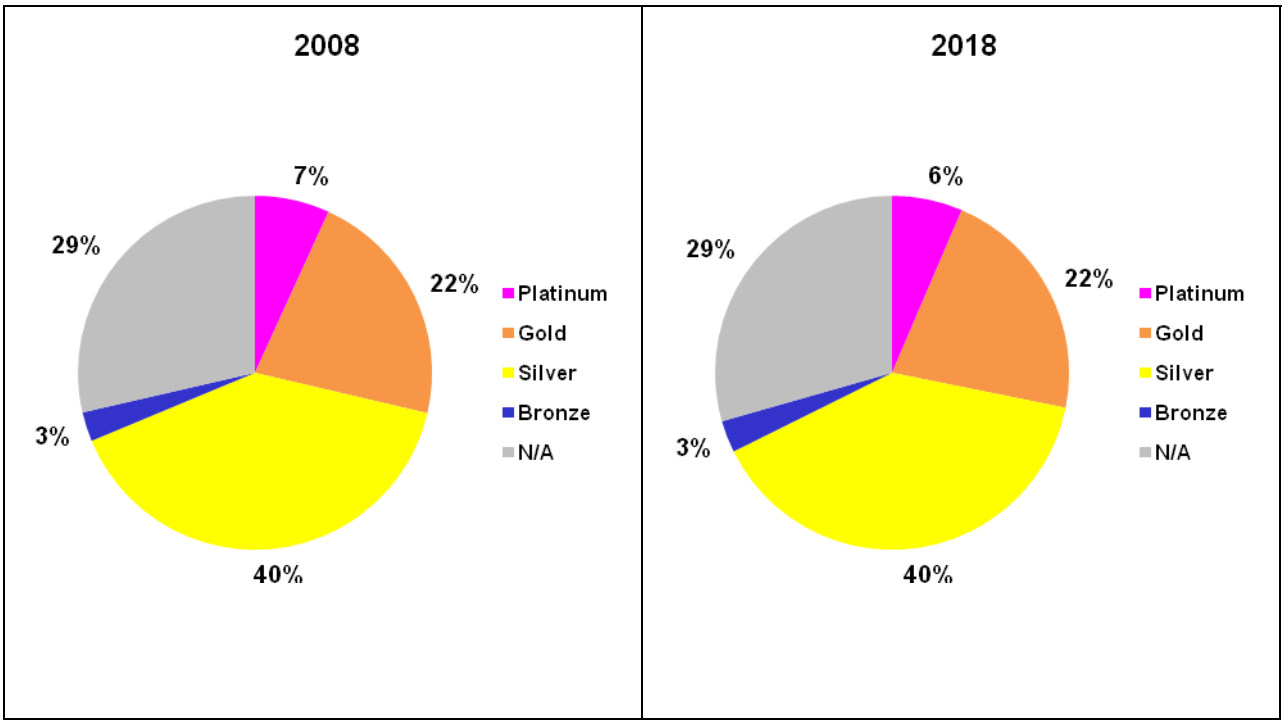


Figure 8: Maryland Statewide – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 4: Maryland Statewide – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	739	3	-736
Computer Support Specialists	15-1041	Gold	Associate degree	511	8	-503
Computer Software Engineers, Applications	15-1031		BA degree	436	97	-339
Civil Engineers	17-2051		BA degree	345	99	-245
Accountants and Auditors	13-2011	Bronze	BA degree	1,091	852	-239
Pharmacists	29-1051	Platinum	First professional degree	199	2	-197
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	240	62	-178
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	223	52	-170
Lawyers	23-1011	Platinum	First professional degree	267	113	-154
Rehabilitation Counselors	21-1015	Gold	Master's degree	117	0	-116
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	132	20	-111
Logisticians	13-1081		BA degree	147	45	-101
Industrial Engineers	17-2112	Gold	BA degree	101	3	-97
Financial Analysts	13-2051		BA degree	228	137	-91
Financial Managers	11-3031	Gold	BA or higher degree, plus experience	259	172	-86
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	132	60	-71
Meeting and Convention Planners	13-1121	Gold	BA degree	65	0	-65
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	332	267	-65
Environmental Engineers	17-2081		BA degree	80	16	-63
Engineering Technicians, Except Drafters, All Other	17-3029	Silver	Associate degree	87	26	-61

Anne Arundel WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 126,470 (or 50.5 percent of total employment) in 2006 to 156,286 (or 50.4 percent of total employment) in 2016 (*see* Figure 9).
- Overall, employment in identified green occupations is projected to increase by 23.6 percent between 2006 and 2016, as compared to a 23.9 percent increase in total employment (*see* Figure 10).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Community and Social Service*, 2) *Farming, Fishing, and Forestry*, 3) *Personal Care and Service*, 4) *Computer and Mathematical*, and 5) *Healthcare Practitioners and Technical* occupations (*see* Table 5).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 21 percent of the total employment in green occupations in 2006 and 2016 (*see* Figure 11).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 30 percent of total employment in green occupations in 2006 and 2016 (*see* Figure 12).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Computer Software Engineers, Applications*, 2) *Business Operations Specialists, All Other*, 3) *Accountants and Auditors*, 4) *General and Operations Managers*, and 5) *Registered Nurses* (*see* Table 6).
- Sixteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 6).
- Twelve of the 15 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 6).

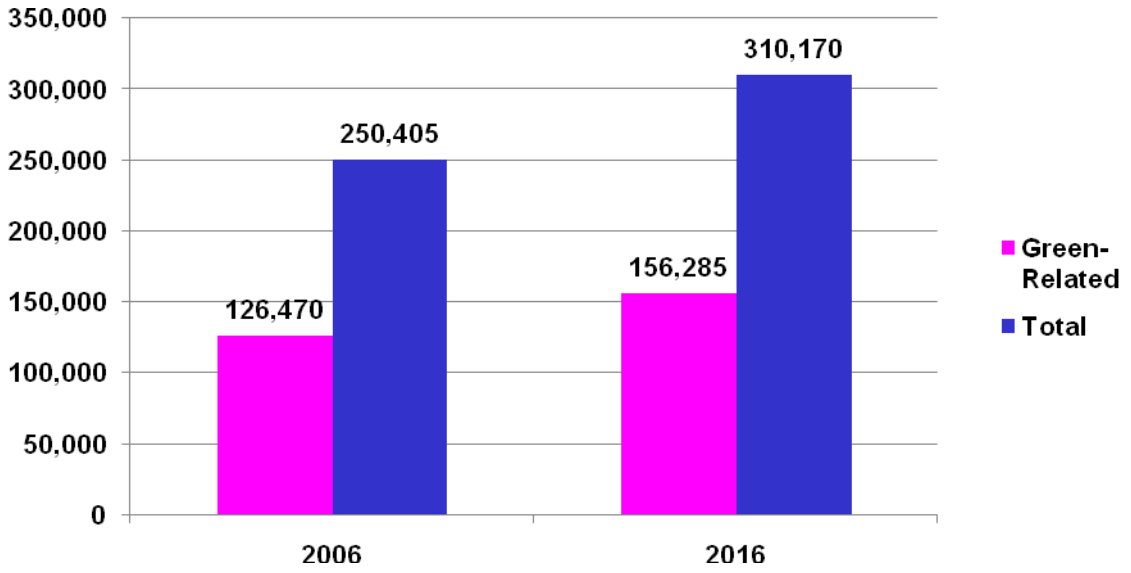


Figure 9: Anne Arundel – Green-Related Occupational Employment, 2006 to 2016

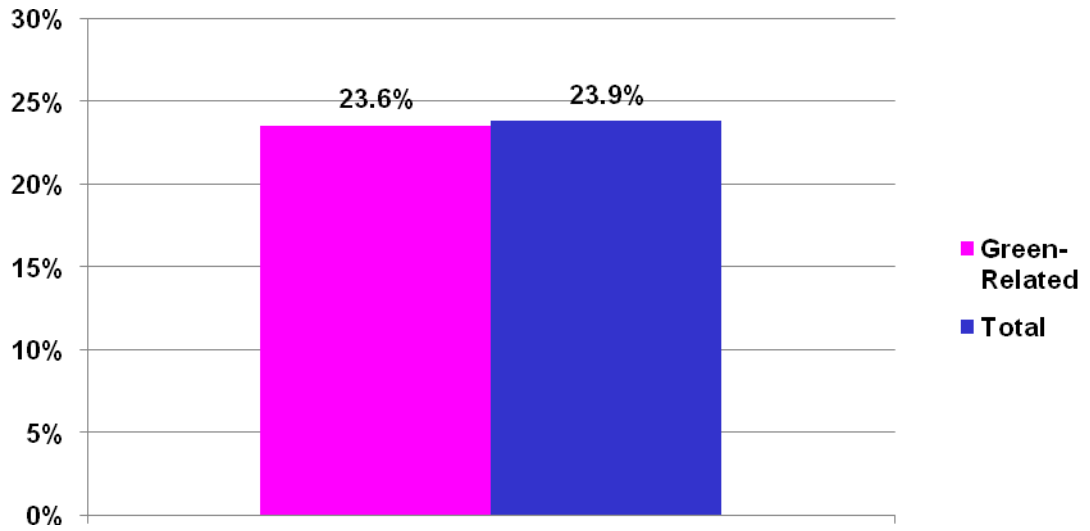


Figure 10: Anne Arundel – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 5: Anne Arundel – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Community and Social Services Occupations	21-0000	470	810	72.3%
Farming, Fishing, and Forestry Occupations	45-0000	165	260	57.6%
Personal Care and Service Occupations	39-0000	155	235	51.6%
Computer and Mathematical Occupations	15-0000	3,790	5,605	47.9%
Healthcare Practitioners and Technical Occupations	29-0000	3,540	5,100	44.1%
Transportation and Material Moving Occupations	53-0000	4,300	5,910	37.4%
Food Preparation and Serving Related Occupations	35-0000	7,110	9,535	34.1%
Construction and Extraction Occupations	47-0000	11,605	15,180	30.8%
Business and Financial Operations Occupations	13-0000	10,635	13,560	27.5%
Sales and Related Occupations	41-0000	25,135	32,015	27.4%
Education, Training, and Library Occupations	25-0000	1,660	2,110	27.1%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	3,595	4,505	25.3%
Management Occupations	11-0000	11,105	12,980	16.9%
Legal Occupations	23-0000	1,050	1,195	13.8%
Office and Administrative Support Occupations	43-0000	28,145	31,880	13.3%
Life, Physical, and Social Science Occupations	19-0000	760	860	13.2%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	1,085	1,225	12.9%
Installation, Maintenance, and Repair Occupations	49-0000	6,735	7,565	12.3%
Architecture and Engineering Occupations	17-0000	3,500	3,880	10.9%
Production Occupations	51-0000	1,930	1,875	-2.8%

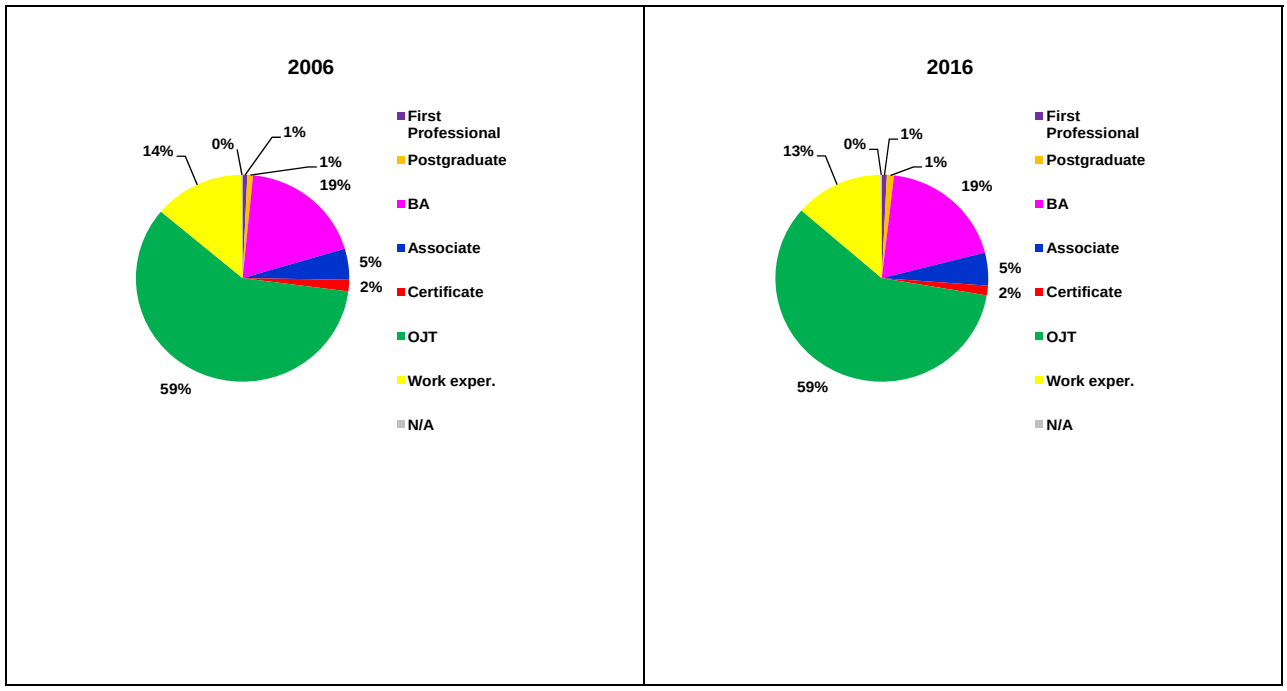


Figure 11: Anne Arundel – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

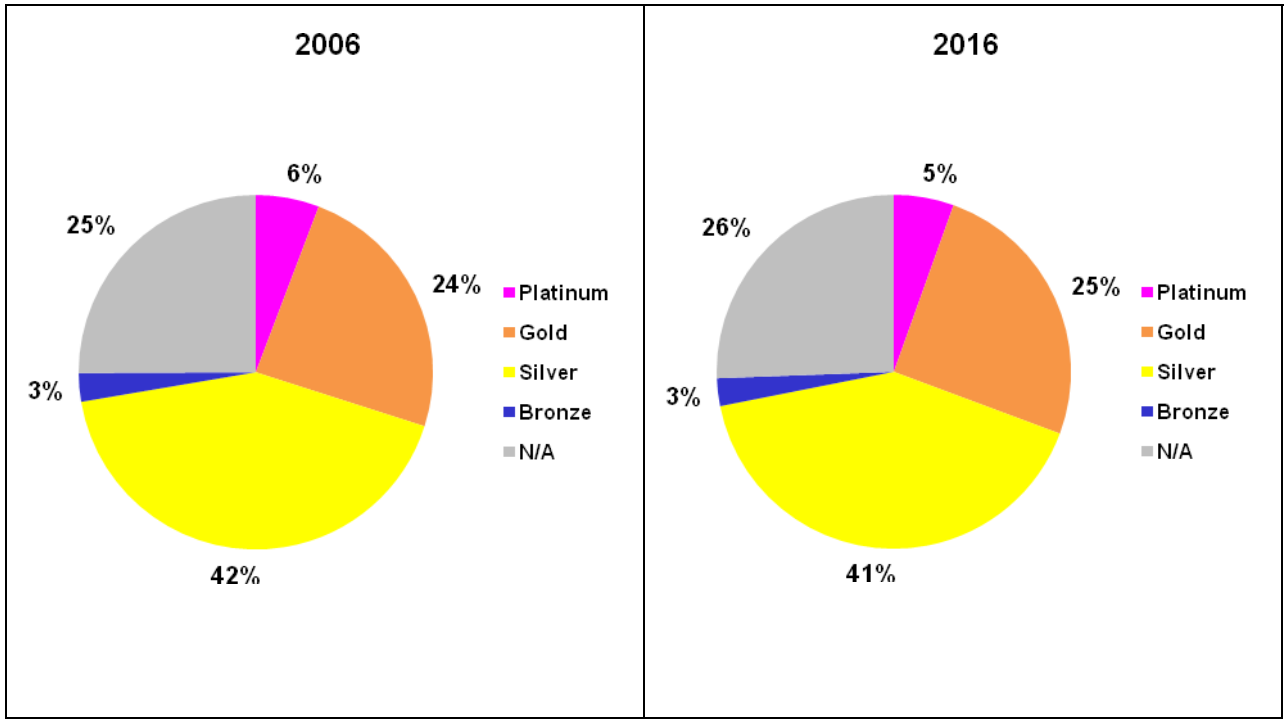


Figure 12: Ann Arundel – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 6: Anne Arundel – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Computer Software Engineers, Applications	15-1031		BA degree	153	19	-134
Business Operations Specialists, All Other	13-1199		BA degree	105	0	-104
Accountants and Auditors	13-2011	Bronze	BA degree	87	0	-87
General and Operations Managers	11-1021	Platinum	BA or higher degree, plus experience	164	84	-80
Registered Nurses	29-1111		Associate degree	172	104	-68
Computer Support Specialists	15-1041	Gold	Associate degree	66	0	-66
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	53	0	-52
Management Analysts	13-1111	Gold	BA or higher degree, plus experience	99	50	-49
Rehabilitation Counselors	21-1015	Gold	Master's degree	44	0	-43
Pharmacists	29-1051	Platinum	First professional degree	29	0	-29
Construction Managers	11-9021	Silver	BA degree	55	28	-26
Librarians	25-4021	Gold	Master's degree	24	0	-24
Financial Managers	11-3031	Gold	BA or higher degree, plus experience	23	0	-23
Financial Analysts	13-2051		BA degree	21	0	-20
Computer and Information Systems Managers	11-3021	Platinum	BA or higher degree, plus experience	32	12	-19
Meeting and Convention Planners	13-1121	Gold	BA degree	18	0	-18
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	19	0	-18
Computer Specialists, All Other	15-1099		Associate degree	29	13	-16
Sales Managers	11-2022	Platinum	BA or higher degree, plus experience	32	16	-15
Lawyers	23-1011	Platinum	First professional degree	16	0	-15

Baltimore City WIA

Current and Projected Employment

- Employment in identified green occupations is projected to decline from 173,855 (or 47.2 percent of total employment) in 2006 to 170,945 (or 46.9 percent of total employment) in 2016 (*see* Figure 13).
- Overall, employment in identified green occupations is projected to decline by 1.7 percent between 2006 and 2016, as compared to a 1.0 percent decrease in total employment (*see* Figure 14).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Healthcare Practitioners and Technical*, 2) *Personal Care and Service*, 3) *Legal*, 4) *Architecture and Engineering*, and 5) *Education, Training, and Library* occupations (*see* Table 7).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 24 percent of the total employment in green occupations in 2006 and are projected to account for 25 percent in 2016 (*see* Figure 15).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 27 percent of total employment in green occupations in 2006 and 2016 (*see* Figure 16).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Lawyers*, 2) *Computer Support Specialists*, 3) *Pharmacists*, 4) *Business Operations Specialists, All Other*, and 5) *Training and Development Specialists* (*see* Table 8).
- Fifteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 8).
- Nine of the 12 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 8).

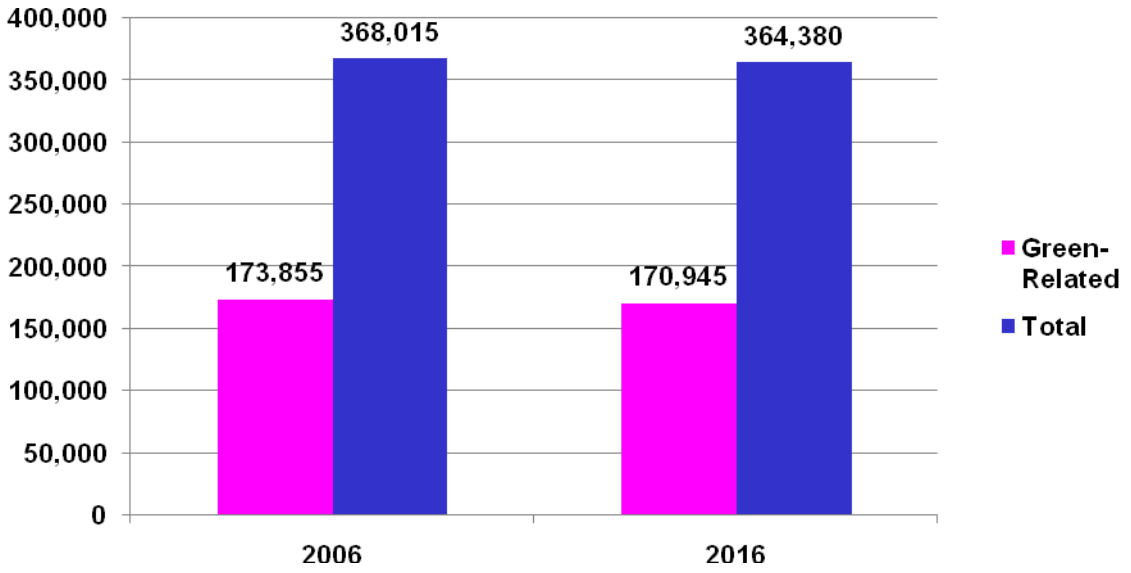


Figure 13: Baltimore City – Green-Related Occupational Employment, 2006 to 2016

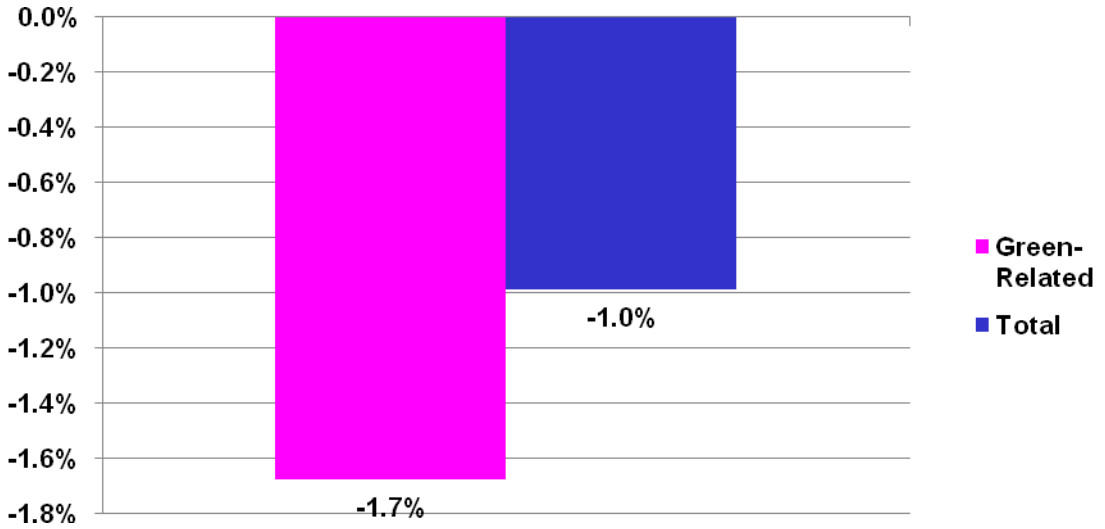


Figure 14: Baltimore City – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 7: Baltimore City – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Healthcare Practitioners and Technical Occupations	29-0000	17,775	21,520	21.1%
Personal Care and Service Occupations	39-0000	1,105	1,235	11.8%
Legal Occupations	23-0000	6,115	6,655	8.8%
Architecture and Engineering Occupations	17-0000	4,625	4,950	7.0%
Education, Training, and Library Occupations	25-0000	4,985	5,205	4.4%
Community and Social Services Occupations	21-0000	190	195	2.6%
Food Preparation and Serving Related Occupations	35-0000	4,420	4,480	1.4%
Construction and Extraction Occupations	47-0000	11,780	11,815	0.3%
Farming, Fishing, and Forestry Occupations	45-0000	50	50	0.0%
Business and Financial Operations Occupations	13-0000	14,205	14,175	-0.2%
Computer and Mathematical Occupations	15-0000	4,045	4,030	-0.4%
Sales and Related Occupations	41-0000	18,520	18,340	-1.0%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	1,370	1,340	-2.2%
Life, Physical, and Social Science Occupations	19-0000	900	850	-5.6%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	2,745	2,550	-7.1%
Management Occupations	11-0000	18,960	17,525	-7.6%
Transportation and Material Moving Occupations	53-0000	5,265	4,860	-7.7%
Office and Administrative Support Occupations	43-0000	45,440	41,460	-8.8%
Installation, Maintenance, and Repair Occupations	49-0000	7,370	6,585	-10.7%
Production Occupations	51-0000	3,990	3,125	-21.7%

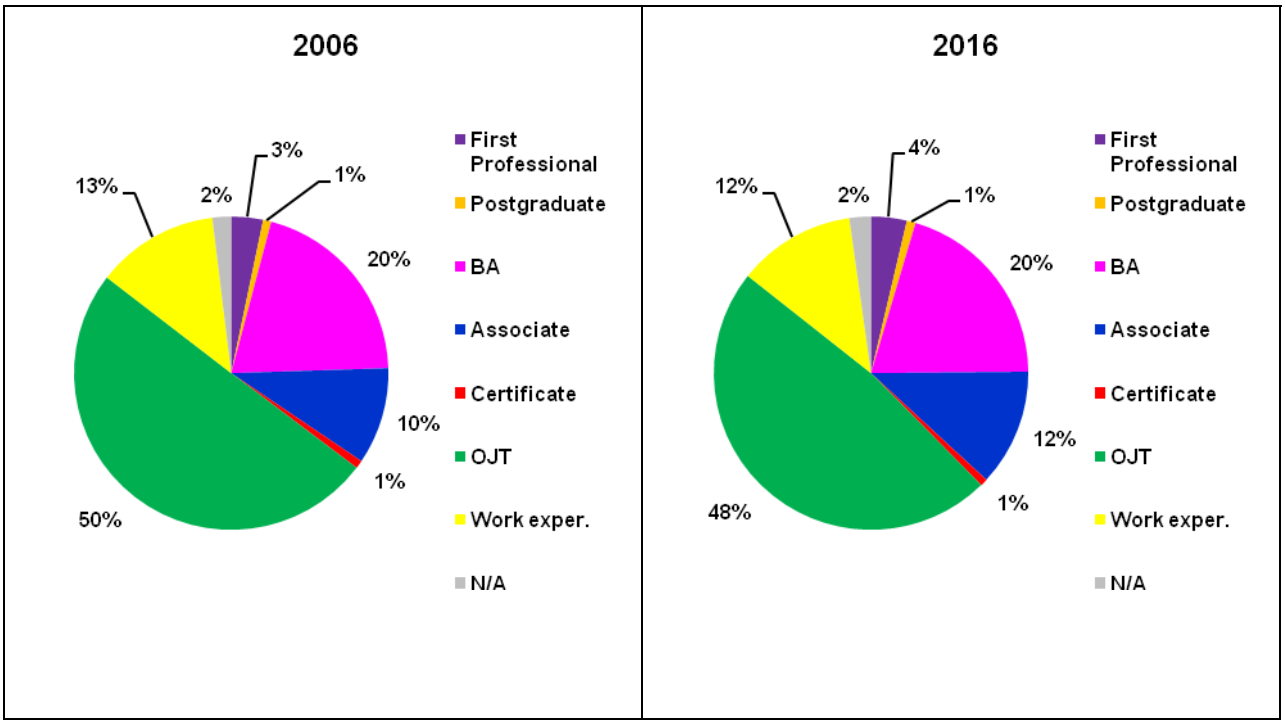


Figure 15: Baltimore City – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

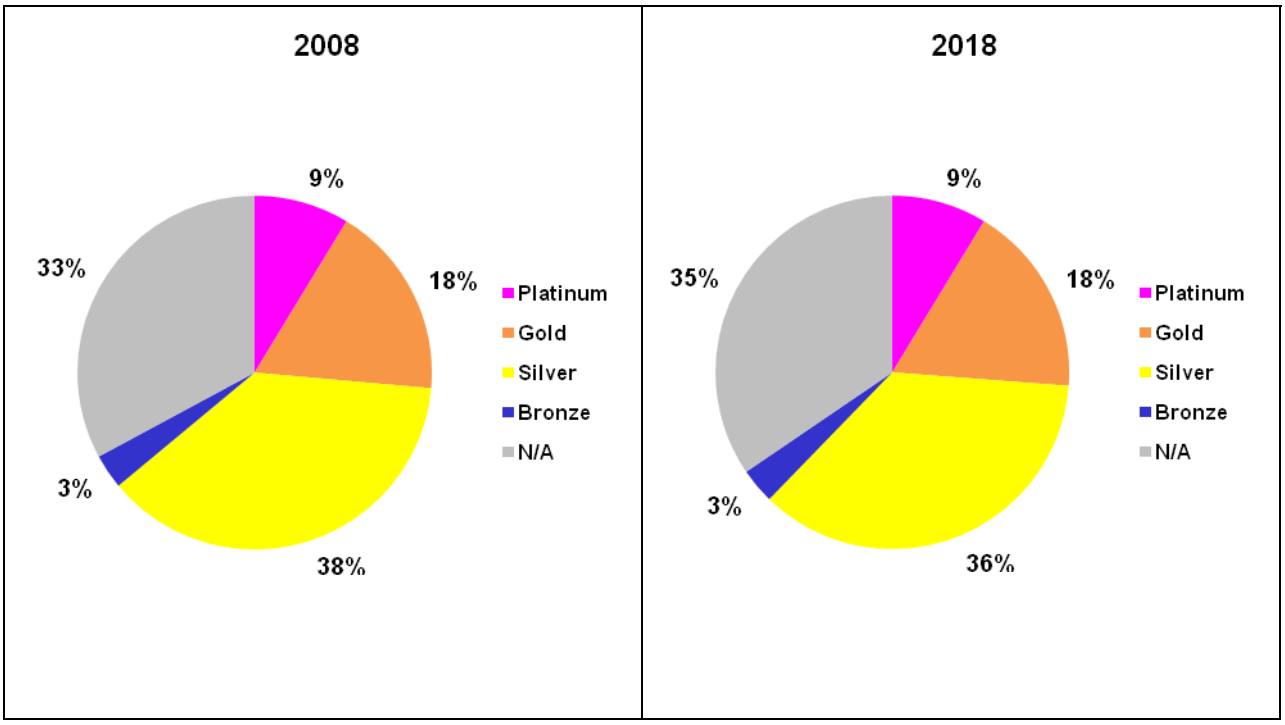


Figure 16: Baltimore City – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 8: Baltimore City – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Lawyers	23-1011	Platinum	First professional degree	137	62	-74
Computer Support Specialists	15-1041	Gold	Associate degree	46	0	-46
Pharmacists	29-1051	Platinum	First professional degree	31	1	-29
Business Operations Specialists, All Other	13-1199		BA degree	28	0	-27
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	22	0	-21
Paralegals and Legal Assistants	23-2011		Associate degree	27	7	-20
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	18	0	-17
Operations Research Analysts	15-2031	Gold	Master's degree	15	0	-14
Librarians	25-4021	Gold	Master's degree	14	0	-13
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	11	0	-11
Computer Software Engineers, Applications	15-1031		BA degree	23	11	-11
Health Diagnosing and Treating Practitioners, All Other	29-1199		BA degree	8	0	-7
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	6	0	-6
Engineering Technicians, Except Drafters, All Other	17-3029	Silver	Associate degree	6	0	-5
Surveyors	17-1022		BA degree	5	0	-5
Urban and Regional Planners	19-3051		Master's degree	8	2	-5
Electrical and Electronics Drafters	17-3012		Certificate	5	0	-5
Computer Programmers	15-1021	Gold	BA degree	26	21	-4
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	5	1	-4
Purchasing Managers	11-3061	Silver	BA or higher degree, plus experience	5	0	-4

Baltimore County WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 210,260 (or 51.6 percent of total employment) in 2006 to 232,725 (or 51.1 percent of total employment) in 2016 (*see* Figure 17).
- Overall, employment in identified green occupations is projected to increase by 10.7 percent between 2006 and 2016, as compared to an 11.6 percent increase in total employment (*see* Figure 18).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Personal Care and Service*, 2) *Community and Social Services*, 3) *Healthcare Practitioners and Technical*, 4) *Construction and Extraction*, and 5) *Architecture and Engineering* occupations (*see* Table 9).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 19 percent of the total employment in green occupations in 2006 and are projected to account for 20 percent in 2016 (*see* Figure 19).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 29 percent of total employment in green occupations in 2006 and projected to comprise 28 percent in 2016 (*see* Figure 20).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Computer Support Specialists*, 3) *Civil Engineers*, 4) *Automotive Service Technicians and Mechanics*, and 5) *Rehabilitation Counselors* (*see* Table 10).
- Sixteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 10).
- Eleven of the 13 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 10).

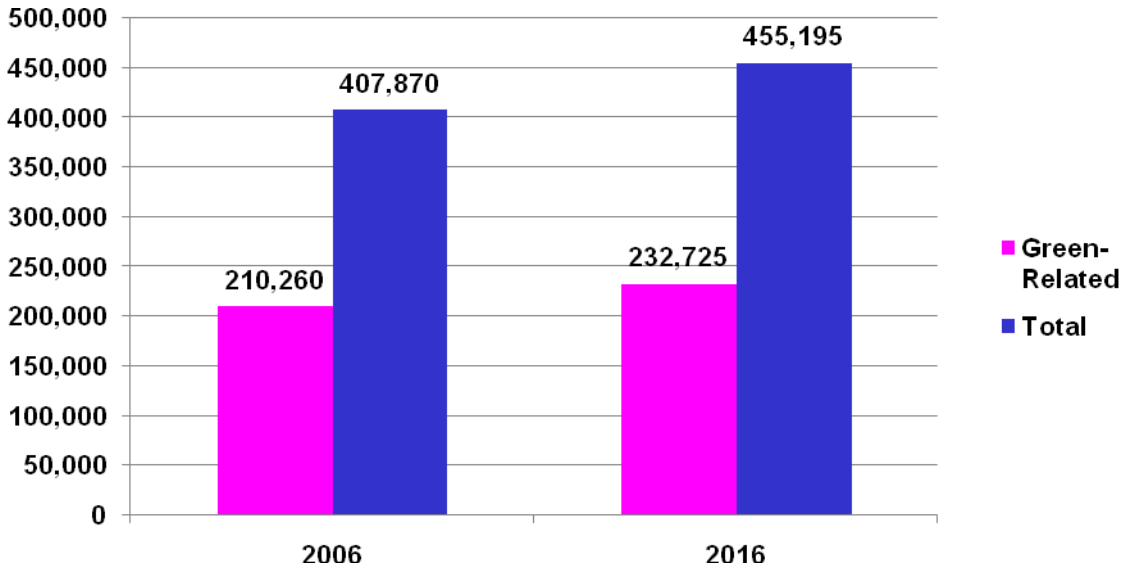


Figure 17:Baltimore County – Green-Related Occupational Employment, 2006 to 2016

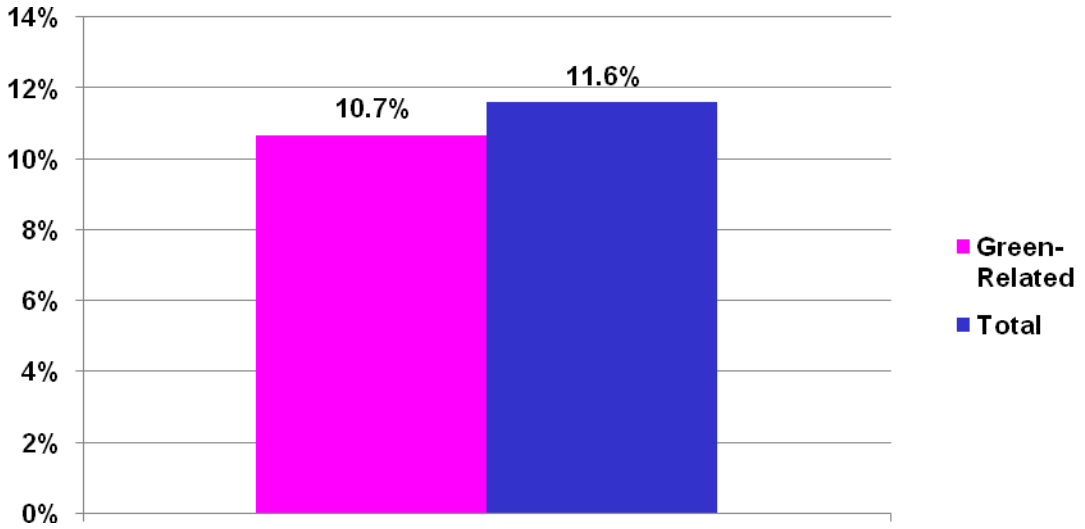


Figure 18: Baltimore County – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 9: Baltimore County – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Personal Care and Service Occupations	39-0000	875	1,240	41.7%
Community and Social Services Occupations	21-0000	745	985	32.2%
Healthcare Practitioners and Technical Occupations	29-0000	8,780	11,185	27.4%
Construction and Extraction Occupations	47-0000	19,035	23,525	23.6%
Architecture and Engineering Occupations	17-0000	4,820	5,750	19.3%
Food Preparation and Serving Related Occupations	35-0000	8,145	9,665	18.7%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	4,665	5,530	18.5%
Life, Physical, and Social Science Occupations	19-0000	805	940	16.8%
Education, Training, and Library Occupations	25-0000	3,640	4,185	15.0%
Farming, Fishing, and Forestry Occupations	45-0000	480	540	12.5%
Installation, Maintenance, and Repair Occupations	49-0000	10,980	12,105	10.2%
Business and Financial Operations Occupations	13-0000	19,445	21,420	10.2%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	1,675	1,845	10.1%
Management Occupations	11-0000	19,295	21,120	9.5%
Legal Occupations	23-0000	3,295	3,585	8.8%
Transportation and Material Moving Occupations	53-0000	4,515	4,895	8.4%
Office and Administrative Support Occupations	43-0000	47,195	50,420	6.8%
Computer and Mathematical Occupations	15-0000	8,240	8,760	6.3%
Sales and Related Occupations	41-0000	38,640	40,460	4.7%
Production Occupations	51-0000	4,990	4,570	-8.4%

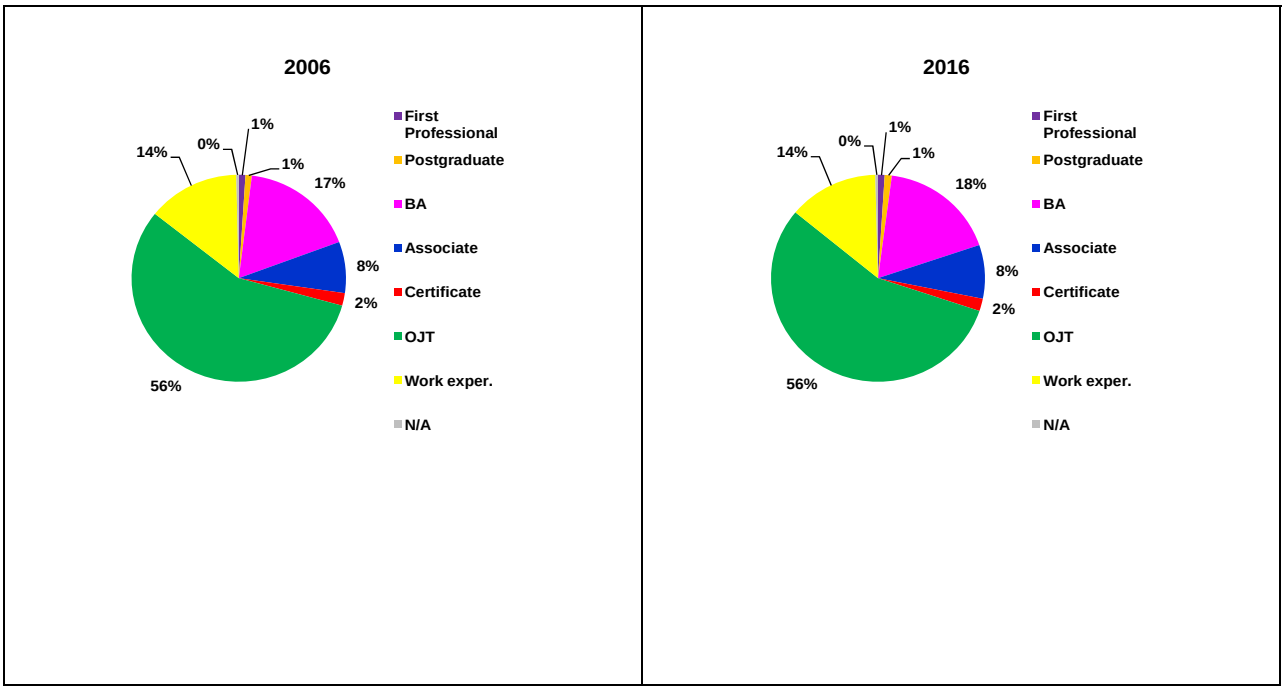


Figure 19: Baltimore County – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

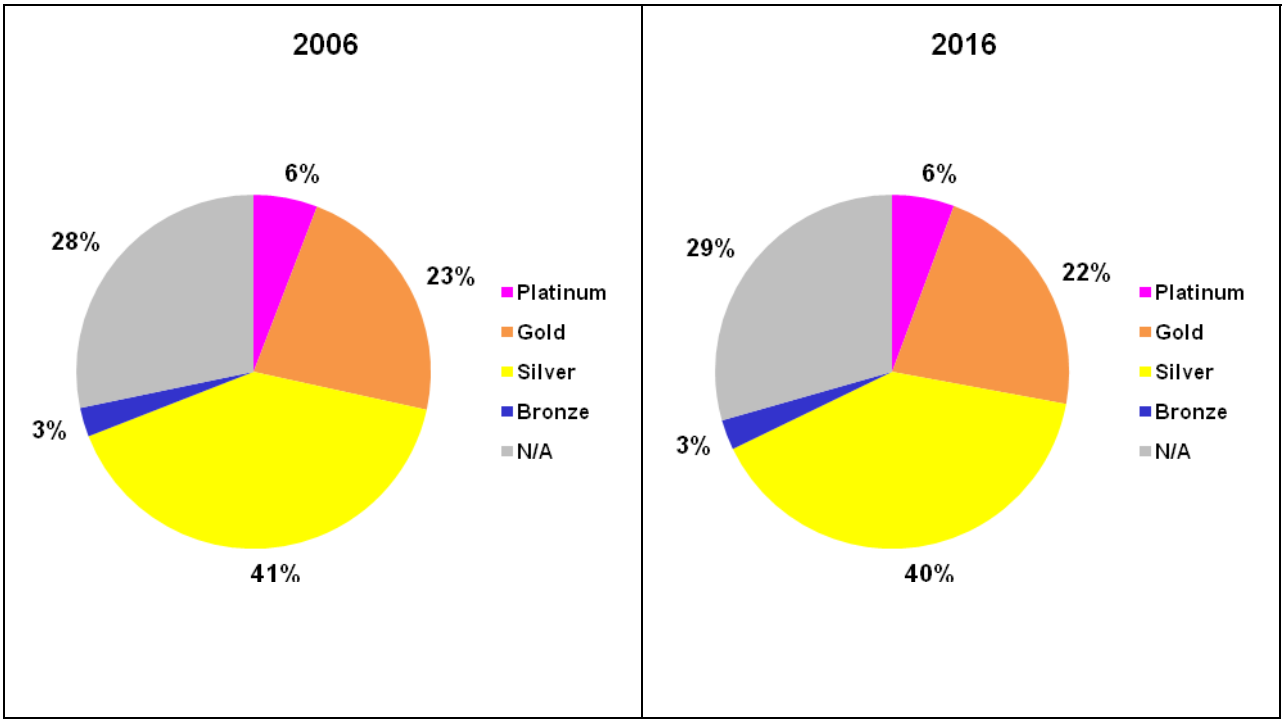


Figure 20: Baltimore County – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 10: Baltimore County – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	80	2	-78
Computer Support Specialists	15-1041	Gold	Associate degree	75	0	-74
Civil Engineers	17-2051		BA degree	66	2	-63
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	98	47	-50
Rehabilitation Counselors	21-1015	Gold	Master's degree	39	0	-39
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	37	2	-34
Financial Managers	11-3031	Gold	BA or higher degree, plus experience	31	0	-31
Education Administrators, Postsecondary	11-9033	Platinum	BA or higher degree, plus experience	29	0	-28
Pharmacists	29-1051	Platinum	First professional degree	28	0	-28
Librarians	25-4021	Gold	Master's degree	27	0	-26
Computer Software Engineers, Applications	15-1031		BA degree	65	40	-24
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	30	5	-24
Interior Designers	27-1025		Associate degree	20	0	-19
Financial Analysts	13-2051		BA degree	18	0	-17
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	14	0	-14
Accountants and Auditors	13-2011	Bronze	BA degree	140	128	-12
Environmental Engineers	17-2081		BA degree	13	0	-12
Electrical and Electronics Drafters	17-3012		Certificate	11	0	-11
Electrical Engineers	17-2071	Gold	BA degree	14	3	-10
Industrial Engineers	17-2112	Gold	BA degree	10	0	-9

Frederick County WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 49,970 (or 52.6 percent of total employment) in 2006 to 61,775 (or 52.3 percent of total employment) in 2016 (*see* Figure 21).
- Overall, employment in identified green occupations is projected to increase by 23.6 percent between 2006 and 2016, as compared to a 24.5 percent increase in total employment (*see* Figure 22).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Food Preparation and Serving Related*, 2) *Arts, Design, Entertainment, Sports, and Media*, 3) *Healthcare Practitioners and Technical*, 4) *Construction and Extraction*, and 5) *Education, Training, and Library* occupations (*see* Table 11).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 19 percent of the total employment in green occupations in both 2006 and 2016 (*see* Figure 23).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 24 percent of total employment in green occupations in both 2006 and 2016 (*see* Figure 24).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Civil Engineers*, 2) *Business Operations Specialists, All Other*, 3*) Automotive Service Technicians and Mechanics*, 4) *Engineering Technicians, Except Drafters, All Other*, and 5) *Computer Support Specialists* (*see* Table 12).
- Thirteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 12).
- Ten of the 13 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 12).

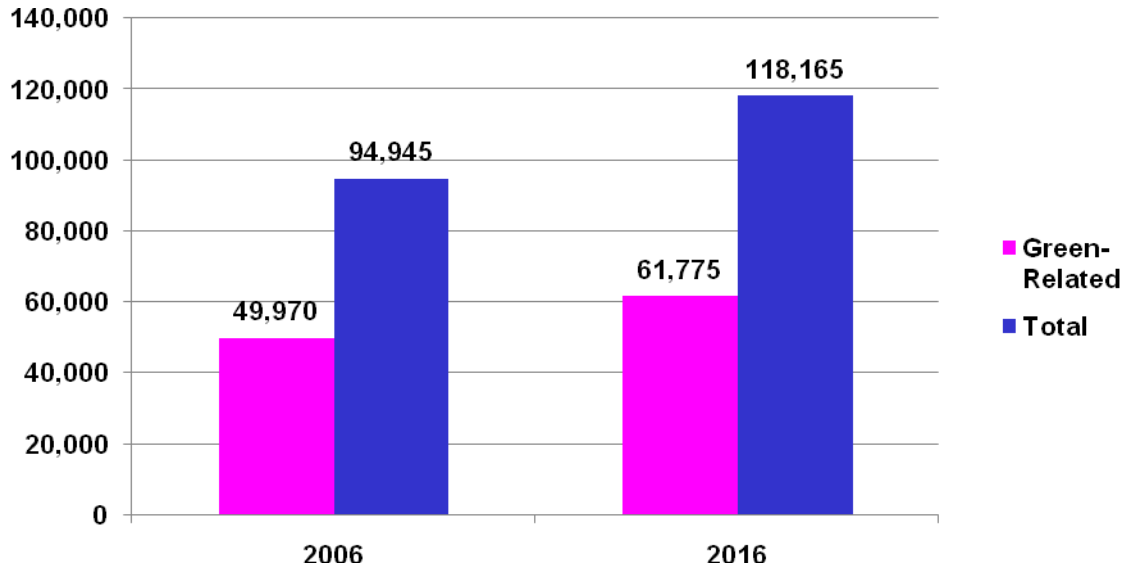


Figure 21: Frederick County – Green-Related Occupational Employment, 2006 to 2016

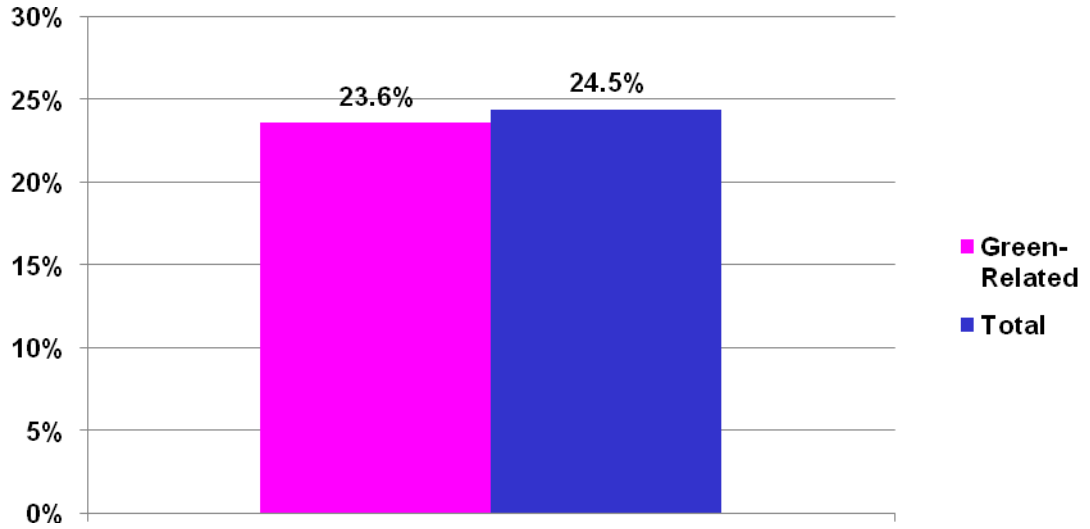


Figure 22: Frederick County – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 11: Frederick County – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Food Preparation and Serving Related Occupations	35-0000	2,535	3,755	48.1%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	280	390	39.3%
Healthcare Practitioners and Technical Occupations	29-0000	1,640	2,270	38.4%
Construction and Extraction Occupations	47-0000	5,230	7,225	38.1%
Education, Training, and Library Occupations	25-0000	1,125	1,500	33.3%
Transportation and Material Moving Occupations	53-0000	1,635	2,170	32.7%
Business and Financial Operations Occupations	13-0000	3,540	4,570	29.1%
Architecture and Engineering Occupations	17-0000	1,850	2,365	27.8%
Sales and Related Occupations	41-0000	8,230	10,405	26.4%
Installation, Maintenance, and Repair Occupations	49-0000	2,515	3,140	24.9%
Legal Occupations	23-0000	290	350	20.7%
Computer and Mathematical Occupations	15-0000	1,370	1,620	18.2%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	1,045	1,210	15.8%
Management Occupations	11-0000	3,595	4,130	14.9%
Office and Administrative Support Occupations	43-0000	13,215	14,745	11.6%
Life, Physical, and Social Science Occupations	19-0000	390	430	10.3%
Production Occupations	51-0000	1,215	1,250	2.9%
Farming, Fishing, and Forestry Occupations	45-0000	270	250	-7.4%

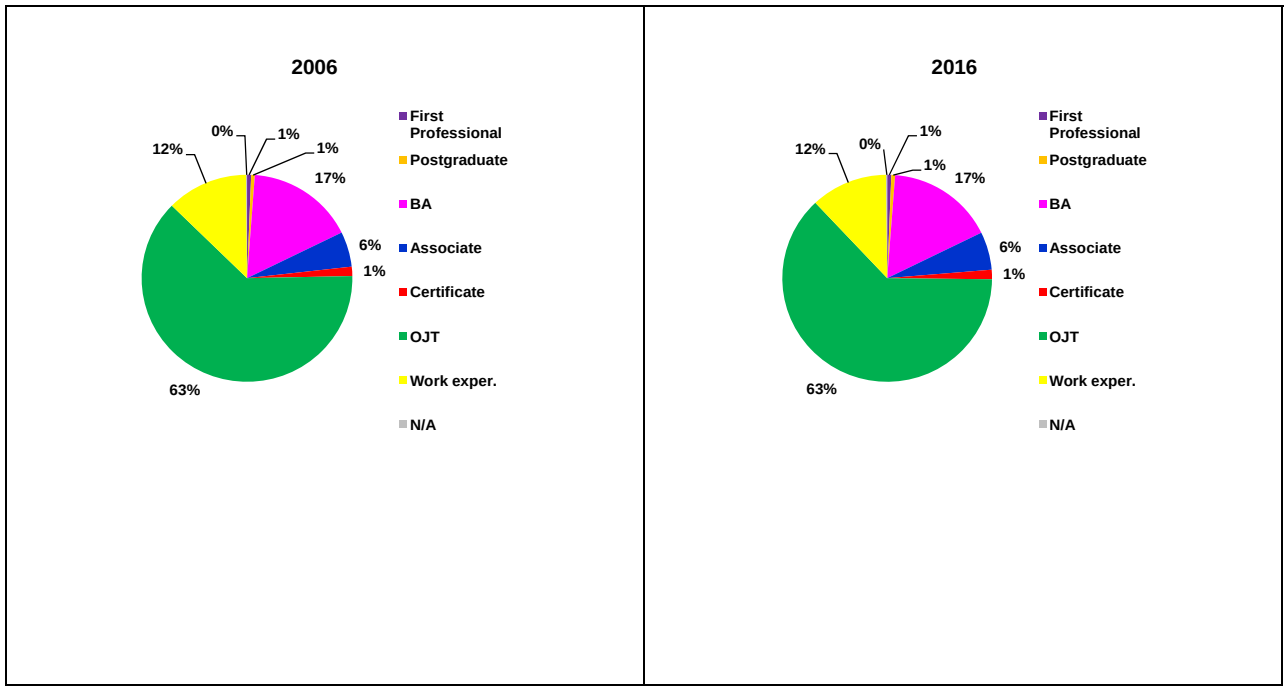


Figure 23: Frederick County – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

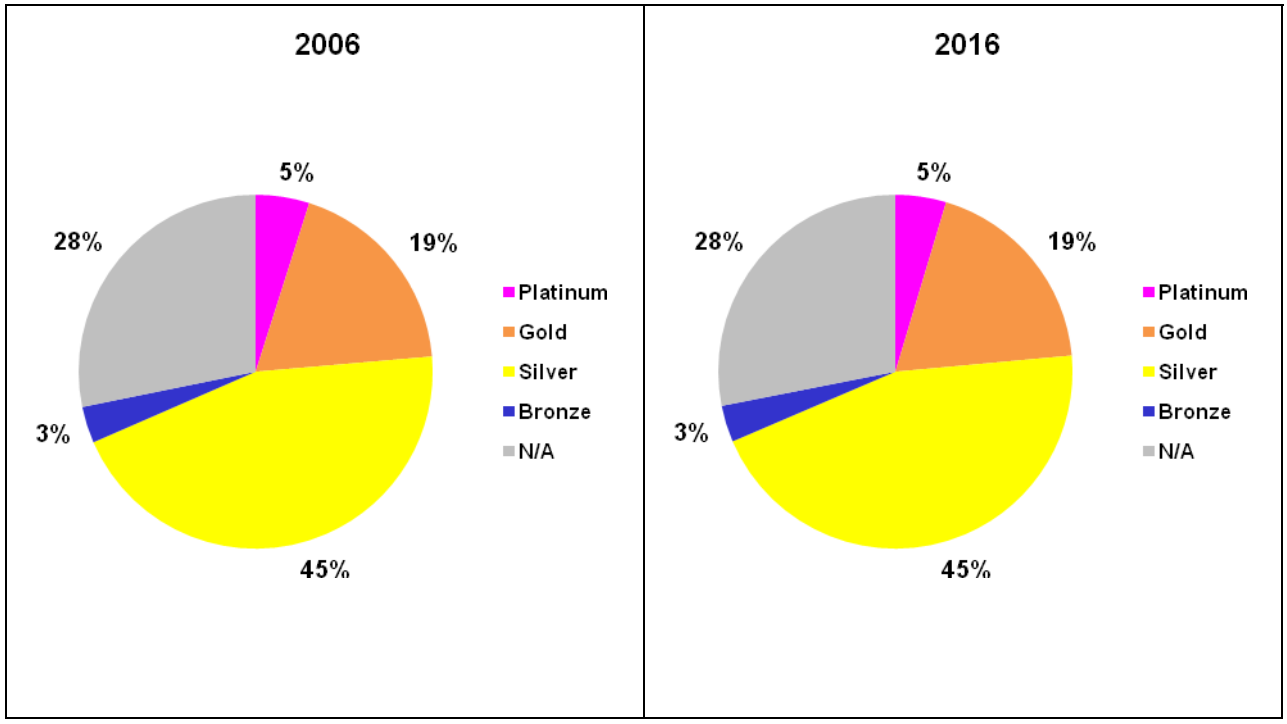


Figure 24: Frederick County – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 12: Frederick County – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Civil Engineers	17-2051		BA degree	36	0	-35
Business Operations Specialists, All Other	13-1199		BA degree	32	0	-31
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	26	0	-26
Engineering Technicians, Except Drafters, All Other	17-3029	Silver	Associate degree	21	0	-21
Computer Support Specialists	15-1041	Gold	Associate degree	15	0	-15
Interior Designers	27-1025		Associate degree	9	0	-9
Computer Software Engineers, Applications	15-1031		BA degree	12	3	-9
Computer Programmers	15-1021	Gold	BA degree	15	7	-8
Pharmacists	29-1051	Platinum	First professional degree	8	0	-8
Computer Specialists, All Other	15-1099		Associate degree	16	8	-7
Accountants and Auditors	13-2011	Bronze	BA degree	42	35	-6
Logisticians	13-1081		BA degree	6	0	-6
Architectural and Civil Drafters	17-3011	Gold	Certificate	10	3	-6
Architects, Except Landscape and Naval	17-1011		BA degree	6	0	-5
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	5	0	-5
Financial Managers	11-3031	Gold	BA or higher degree, plus experience	6	0	-5
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	5	0	-5
Lawyers	23-1011	Platinum	First professional degree	6	0	-5
Librarians	25-4021	Gold	Master's degree	6	0	-5
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	5	0	-4

Lower Shore WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 42,975 (or 50.6 percent of total employment) in 2006 to 47,525 (or 50.0 percent of total employment) in 2016 (*see* Figure 25).
- Overall, employment in identified green occupations is projected to increase by 10.6 percent between 2006 and 2016, as compared to an 11.9 percent increase in total employment (*see* Figure 26).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Personal Care and Service*, 2) *Community and Social Services*, 3) *Education, Training, and Library*, 4) *Healthcare Practitioners and Technical*, and 5) *Protective Service* occupations (*see* Table 13).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 12 percent of the total employment in green occupations in both 2006 and 2016 (*see* Figure 27).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 25 percent of total employment in green occupations in 2006 and are projected to comprise 26 percent in 2016 (*see* Figure 28).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Rehabilitation Counselors*, 2) *Automotive Service Technicians and Mechanics*, 3) *Computer Support Specialists*, 4) *Business Operations Specialists, All Other*, and 5) *Training and Development Specialists* (*see* Table 14).
- Fifteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 14).
- Eleven of the 12 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 14).

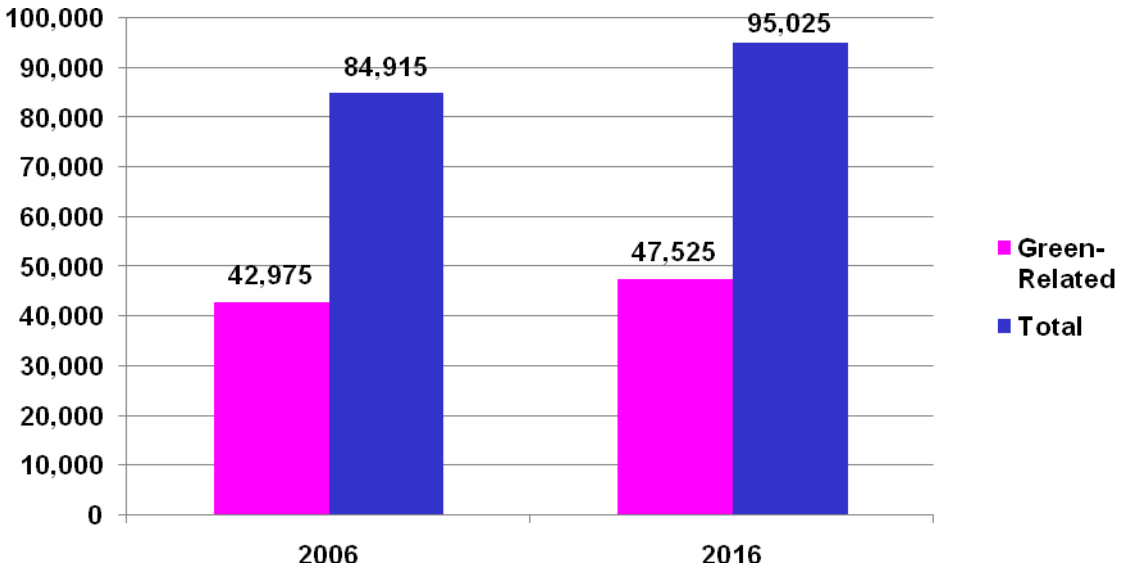


Figure 25: Lower Shore – Green-Related Occupational Employment, 2006 to 2016

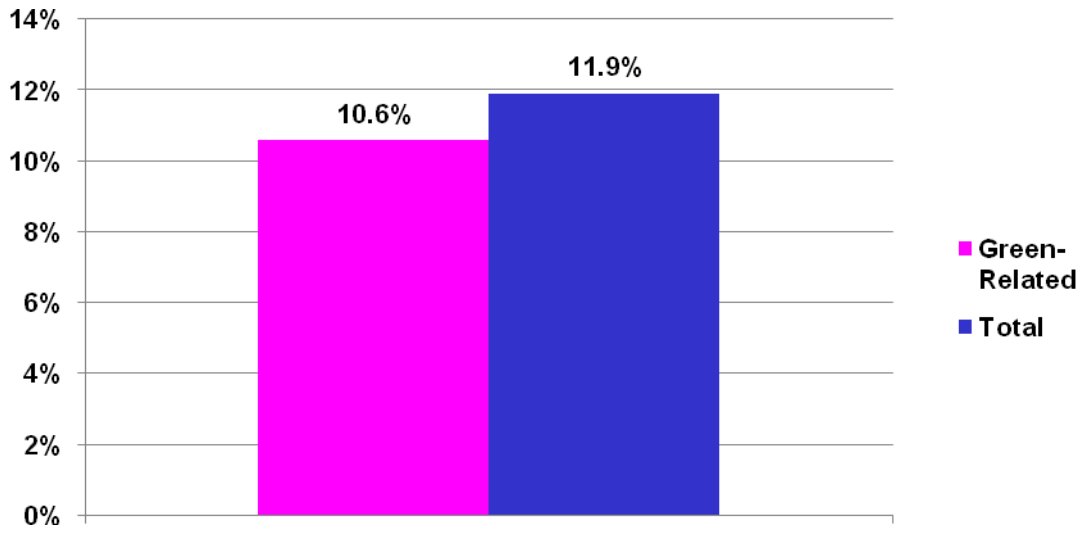


Figure 26: Lower Shore – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 13: Lower Shore – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Personal Care and Service Occupations	39-0000	85	135	58.8%
Community and Social Services Occupations	21-0000	200	280	40.0%
Education, Training, and Library Occupations	25-0000	855	1,090	27.5%
Healthcare Practitioners and Technical Occupations	29-0000	1,905	2,290	20.2%
Protective Service Occupations	33-0000	1,015	1,200	18.2%
Business and Financial Operations Occupations	13-0000	1,690	1,955	15.7%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	1,120	1,280	14.3%
Life, Physical, and Social Science Occupations	19-0000	155	175	12.9%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	175	195	11.4%
Computer and Mathematical Occupations	15-0000	310	345	11.3%
Office and Administrative Support Occupations	43-0000	9,610	10,645	10.8%
Sales and Related Occupations	41-0000	9,555	10,570	10.6%
Food Preparation and Serving Related Occupations	35-0000	3,195	3,510	9.9%
Legal Occupations	23-0000	300	325	8.3%
Production Occupations	51-0000	885	955	7.9%
Construction and Extraction Occupations	47-0000	4,285	4,585	7.0%
Architecture and Engineering Occupations	17-0000	655	700	6.9%
Installation, Maintenance, and Repair Occupations	49-0000	2,340	2,490	6.4%
Management Occupations	11-0000	2,680	2,840	6.0%
Farming, Fishing, and Forestry Occupations	45-0000	590	485	-17.8%

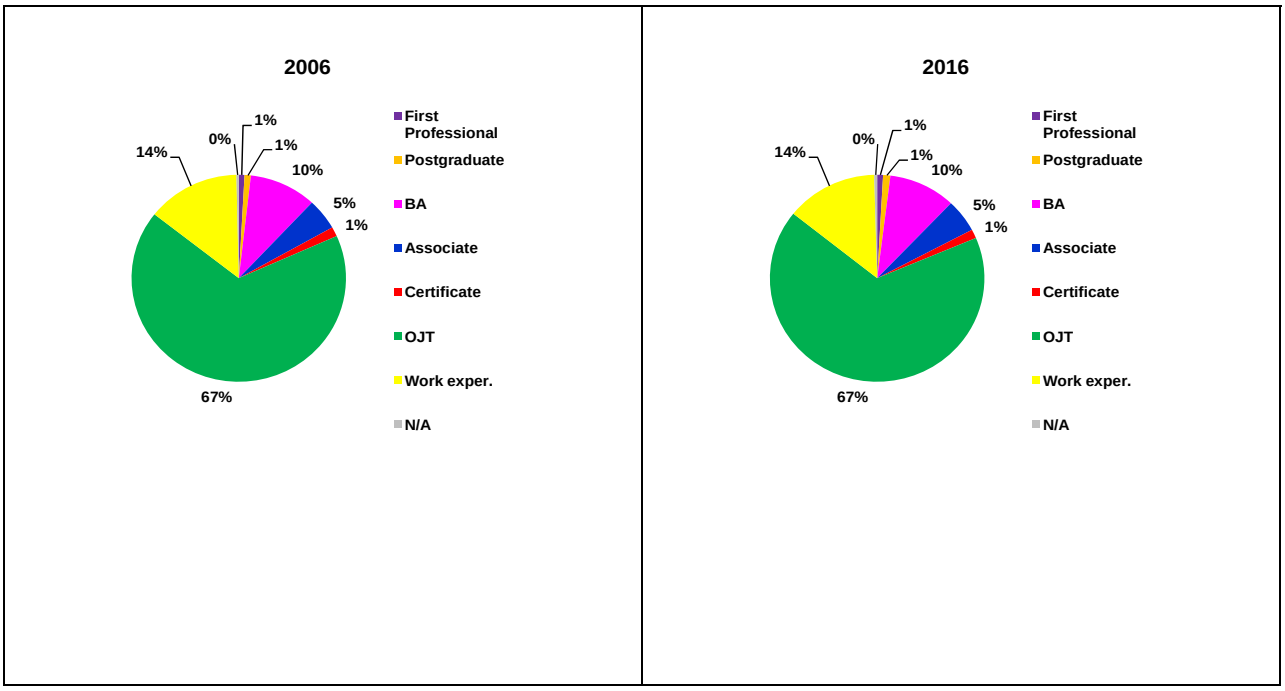


Figure 27: Lower Shore – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

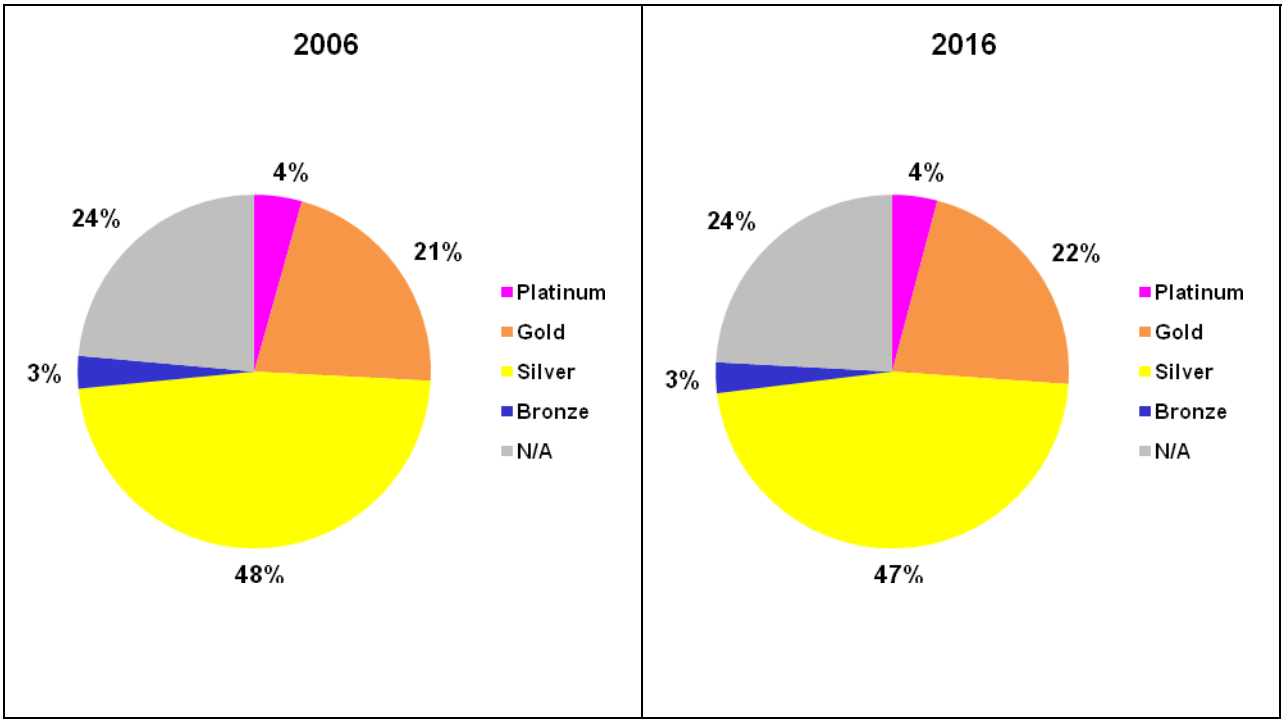


Figure 28: Lower Shore – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 14: Lower Shore – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Rehabilitation Counselors	21-1015	Gold	Master's degree	12	0	-12
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	12	0	-11
Computer Support Specialists	15-1041	Gold	Associate degree	10	0	-9
Business Operations Specialists, All Other	13-1199		BA degree	9	0	-9
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	8	0	-8
Lawyers	23-1011	Platinum	First professional degree	6	0	-6
Pharmacists	29-1051	Platinum	First professional degree	6	0	-5
Civil Engineers	17-2051		BA degree	4	0	-4
Librarians	25-4021	Gold	Master's degree	4	0	-4
Architects, Except Landscape and Naval	17-1011		BA degree	3	0	-3
Surveyors	17-1022		BA degree	3	0	-3
Education Administrators, Postsecondary	11-9033	Platinum	BA or higher degree, plus experience	6	2	-3
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	3	0	-2
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	3	0	-2
Urban and Regional Planners	19-3051		Master's degree	2	0	-2
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	2	1	-1
Interior Designers	27-1025		Associate degree	2	0	-1
Paralegals and Legal Assistants	23-2011		Associate degree	2	0	-1
Computer Programmers	15-1021	Gold	BA degree	2	0	-1
Computer Software Engineers, Applications	15-1031		BA degree	1	0	-1

Mid-Maryland WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 113,850 (or 51.5 percent of total employment) in 2006 to 126,265 (or 49.7 percent of total employment) in 2016 (*see* Figure 29).
- Overall, employment in identified green occupations is projected to increase by 10.9 percent between 2006 and 2016, as compared to a 14.9 percent increase in total employment (*see* Figure 30).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Education, Training, and Library*, 2) *Personal Care and Service*, 3) *Computer and Mathematical*, 4) *Community and Social Services*, and 5) *Food Preparation and Serving Related* occupations (*see* Table 15).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 20 percent of the total employment in green occupations in 2006 and are projected to account for 21 percent in 2016 (*see* Figure 31).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 27 percent of total employment in green occupations in 2006 and are projected to comprise 28 percent in 2016 (*see* Figure 32).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Computer Software Engineers, Applications*, 2) *Business Operations Specialists, All Other*, 3*) Accountants and Auditors*, 4) *Computer Support Specialists*, and 5) *Engineering Technicians, Except Drafters, All Other*(*see* Table 16).
- Seventeen out of the top 20 gaps are in occupations that typically require a BA degree or above (*see* Table 16).
- Thirteen of the 15 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 16).

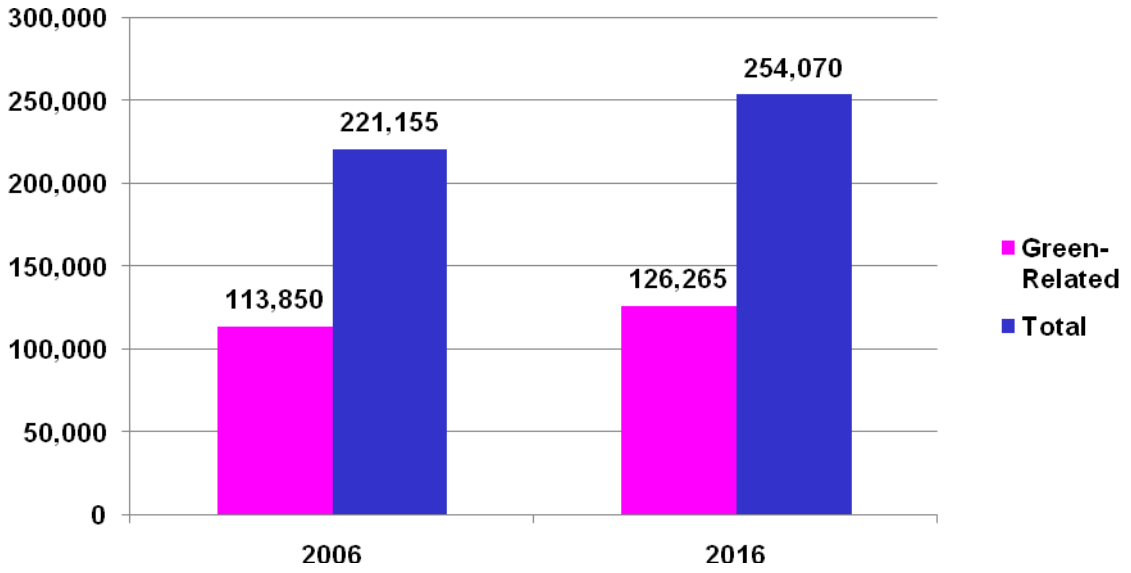


Figure 29: Mid-Maryland – Green-Related Occupational Employment, 2006 to 2016

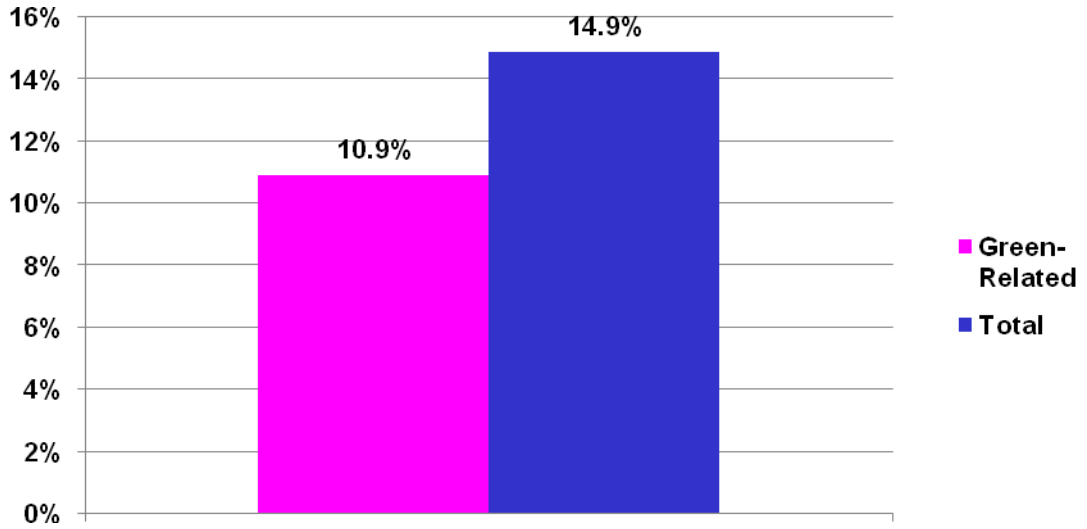


Figure 30: Mid-Maryland – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 15: Mid-Maryland – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Education, Training, and Library Occupations	25-0000	2,470	3,230	30.8%
Personal Care and Service Occupations	39-0000	180	235	30.6%
Computer and Mathematical Occupations	15-0000	4,640	6,015	29.6%
Community and Social Services Occupations	21-0000	325	420	29.2%
Food Preparation and Serving Related Occupations	35-0000	3,615	4,640	28.4%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	3,360	4,220	25.6%
Life, Physical, and Social Science Occupations	19-0000	275	340	23.6%
Healthcare Practitioners and Technical Occupations	29-0000	3,085	3,690	19.6%
Business and Financial Operations Occupations	13-0000	7,870	9,360	18.9%
Architecture and Engineering Occupations	17-0000	3,010	3,575	18.8%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	735	860	17.0%
Legal Occupations	23-0000	495	575	16.2%
Installation, Maintenance, and Repair Occupations	49-0000	4,820	5,400	12.0%
Production Occupations	51-0000	1,810	1,985	9.7%
Office and Administrative Support Occupations	43-0000	26,090	28,340	8.6%
Transportation and Material Moving Occupations	53-0000	4,240	4,575	7.9%
Sales and Related Occupations	41-0000	20,155	21,625	7.3%
Management Occupations	11-0000	10,490	11,210	6.9%
Farming, Fishing, and Forestry Occupations	45-0000	570	595	4.4%
Protective Service Occupations	33-0000	2,145	2,140	-0.2%
Construction and Extraction Occupations	47-0000	13,470	13,235	-1.7%

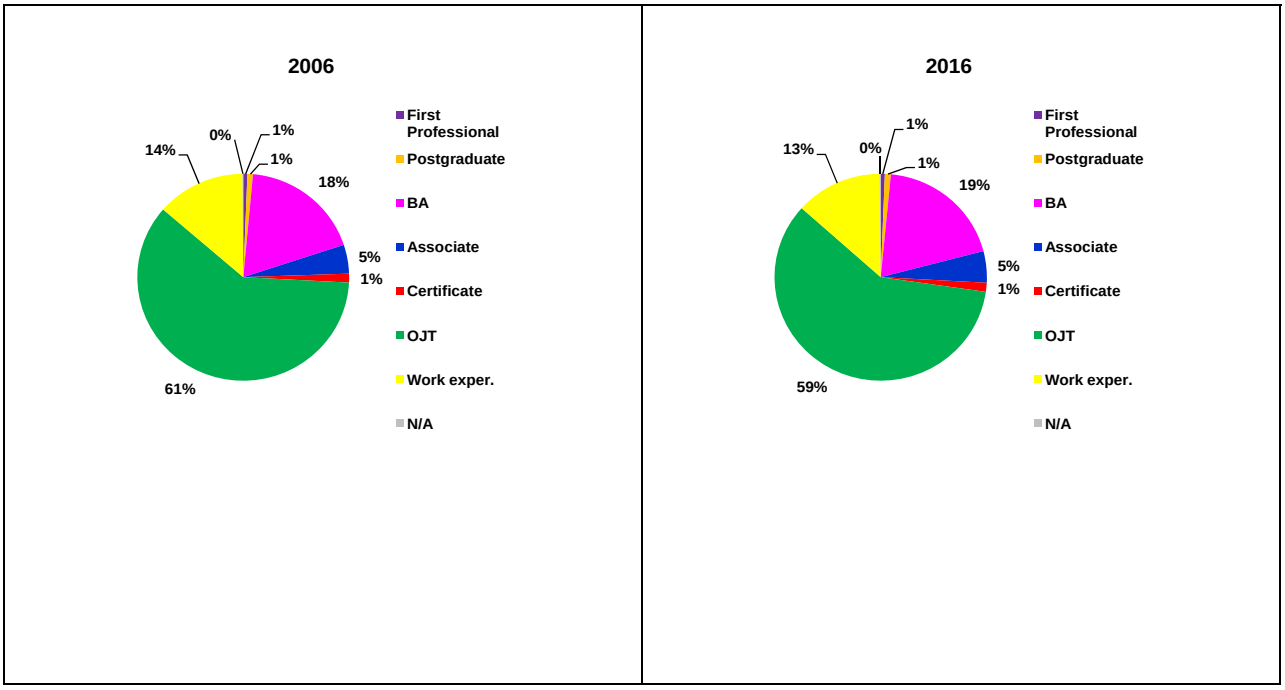


Figure 31: Mid-Maryland – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

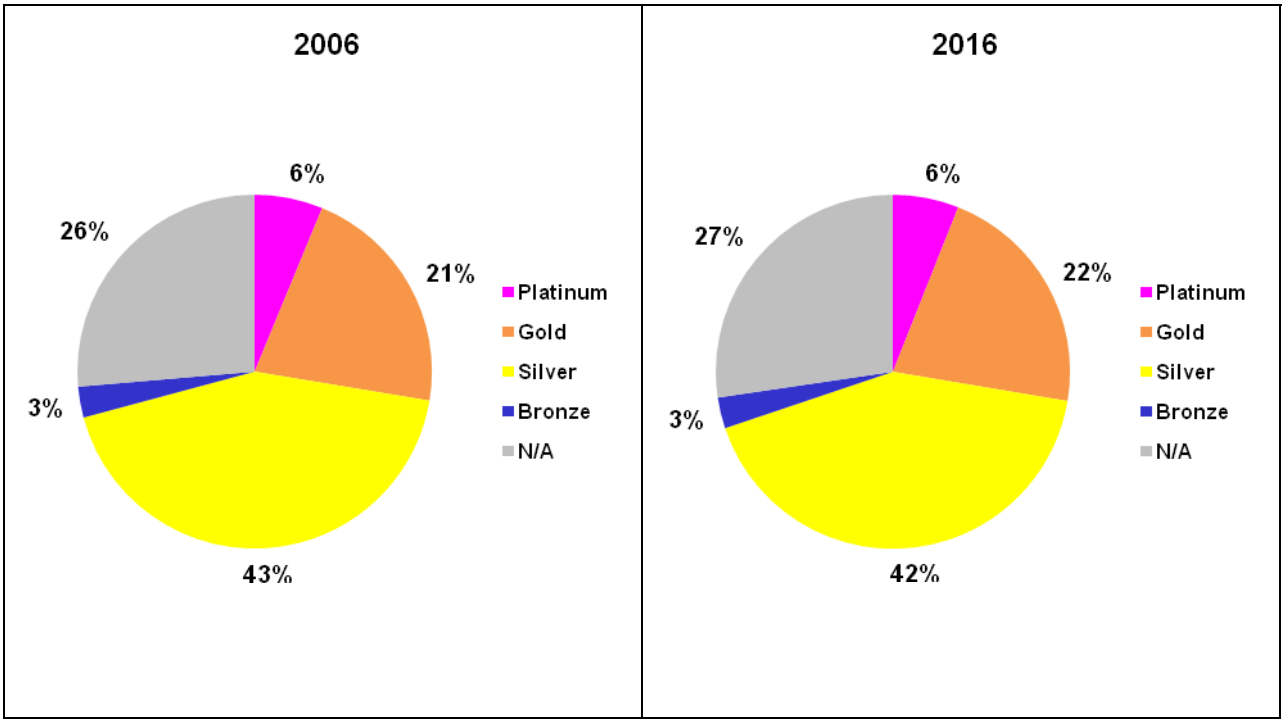


Figure 32: Mid-Maryland – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 16: Mid-Maryland – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Computer Software Engineers, Applications	15-1031		BA degree	137	0	-137
Business Operations Specialists, All Other	13-1199		BA degree	63	1	-61
Accountants and Auditors	13-2011	Bronze	BA degree	62	13	-48
Computer Support Specialists	15-1041	Gold	Associate degree	48	0	-47
Engineering Technicians, Except Drafters, All Other	17-3029	Silver	Associate degree	23	0	-22
Computer Specialists, All Other	15-1099		Associate degree	25	4	-21
Rehabilitation Counselors	21-1015	Gold	Master's degree	16	0	-16
Civil Engineers	17-2051		BA degree	15	0	-14
Electrical Engineers	17-2071	Gold	BA degree	14	0	-14
Producers and Directors	27-2012	Gold	BA or higher degree, plus experience	12	0	-12
Lawyers	23-1011	Platinum	First professional degree	12	0	-12
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	14	2	-11
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	11	1	-10
Industrial Engineers	17-2112	Gold	BA degree	10	0	-10
Mechanical Engineers	17-2141	Gold	BA degree	10	0	-9
Surveyors	17-1022		BA degree	9	0	-8
Financial Managers	11-3031	Gold	BA or higher degree, plus experience	9	2	-7
Pharmacists	29-1051	Platinum	First professional degree	8	0	-7
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	6	0	-6
Computer and Information Systems Managers	11-3021	Platinum	BA or higher degree, plus experience	24	17	-6

Montgomery County WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 126,470 (or 50.5 percent of total employment) in 2006 to 156,285 (or 50.4 percent of total employment) in 2016 (*see* Figure 33).
- Overall, employment in identified green occupations is projected to increase by 13.8 percent between 2006 and 2016, as compared to a 15.1 percent increase in total employment (*see* Figure 34).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Construction and Extraction*, 2) *Personal Care and Service*, 3) *Food Preparation and Serving Related*, 4) *Community and Social Services*, and 5) *Farming, Fishing, and Forestry* occupations (*see* Table 17).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 29 percent of the total employment in green occupations in both 2006 and 2016 (*see* Figure 35).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 30 percent of total employment in green occupations in both 2006 and 2016 (*see* Figure 36).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Accountants and Auditors*, 2) *Computer Software Engineers, Applications*, 3*) Business Operations Specialists, All Other*, 4) *General and Operations Managers*, and 5) *Registered Nurses* (*see* Table 18).
- Sixteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 18).
- Nine of the 12 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 18).

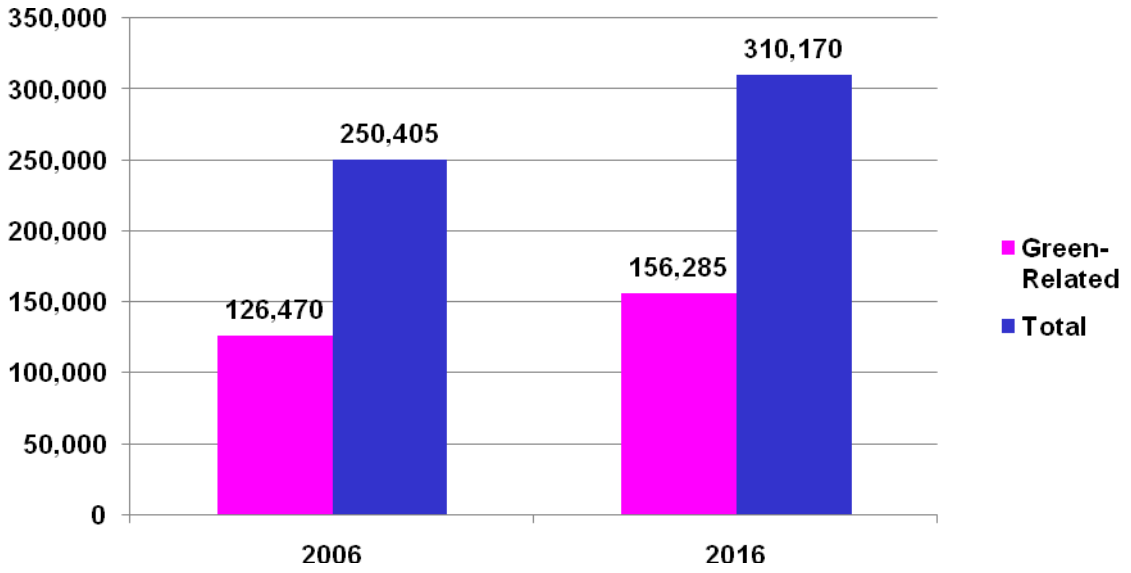


Figure 33: Montgomery County – Green-Related Occupational Employment, 2006 to 2016

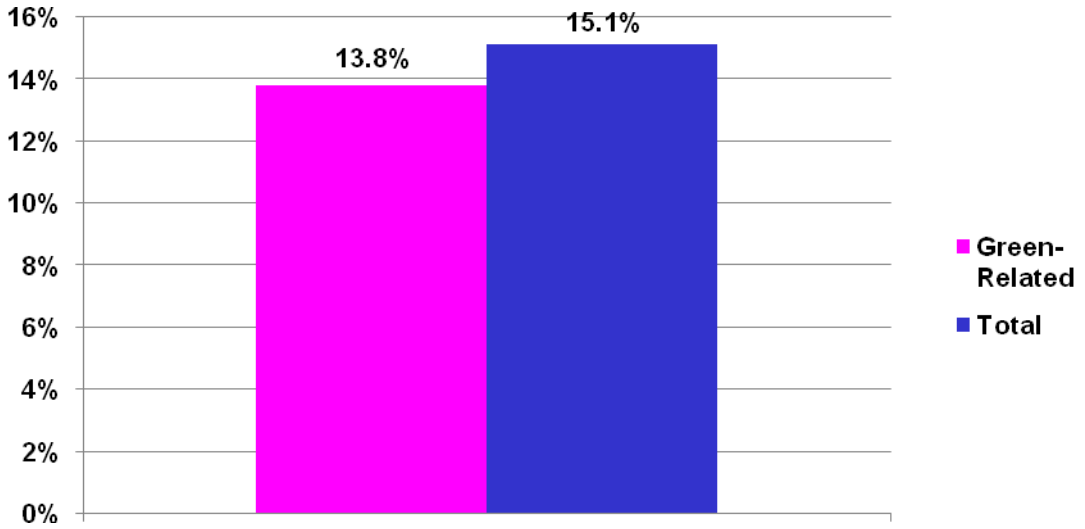


Figure 34: Montgomery County – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 17: Montgomery County – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Construction and Extraction Occupations	47-0000	22,080	29,560	33.9%
Personal Care and Service Occupations	39-0000	2,345	3,125	33.3%
Food Preparation and Serving Related Occupations	35-0000	6,920	9,045	30.7%
Community and Social Services Occupations	21-0000	795	965	21.4%
Farming, Fishing, and Forestry Occupations	45-0000	390	470	20.5%
Business and Financial Operations Occupations	13-0000	28,775	34,560	20.1%
Computer and Mathematical Occupations	15-0000	12,115	14,325	18.2%
Installation, Maintenance, and Repair Occupations	49-0000	12,100	14,185	17.2%
Education, Training, and Library Occupations	25-0000	3,390	3,905	15.2%
Management Occupations	11-0000	29,805	34,250	14.9%
Architecture and Engineering Occupations	17-0000	9,335	10,585	13.4%
Healthcare Practitioners and Technical Occupations	29-0000	15,850	17,965	13.3%
Life, Physical, and Social Science Occupations	19-0000	2,140	2,395	11.9%
Office and Administrative Support Occupations	43-0000	54,775	59,795	9.2%
Transportation and Material Moving Occupations	53-0000	2,855	3,110	8.9%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	7,485	8,075	7.9%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	3,085	3,320	7.6%
Legal Occupations	23-0000	4,135	4,420	6.9%
Production Occupations	51-0000	2,570	2,605	1.4%
Sales and Related Occupations	41-0000	39,510	39,775	0.7%

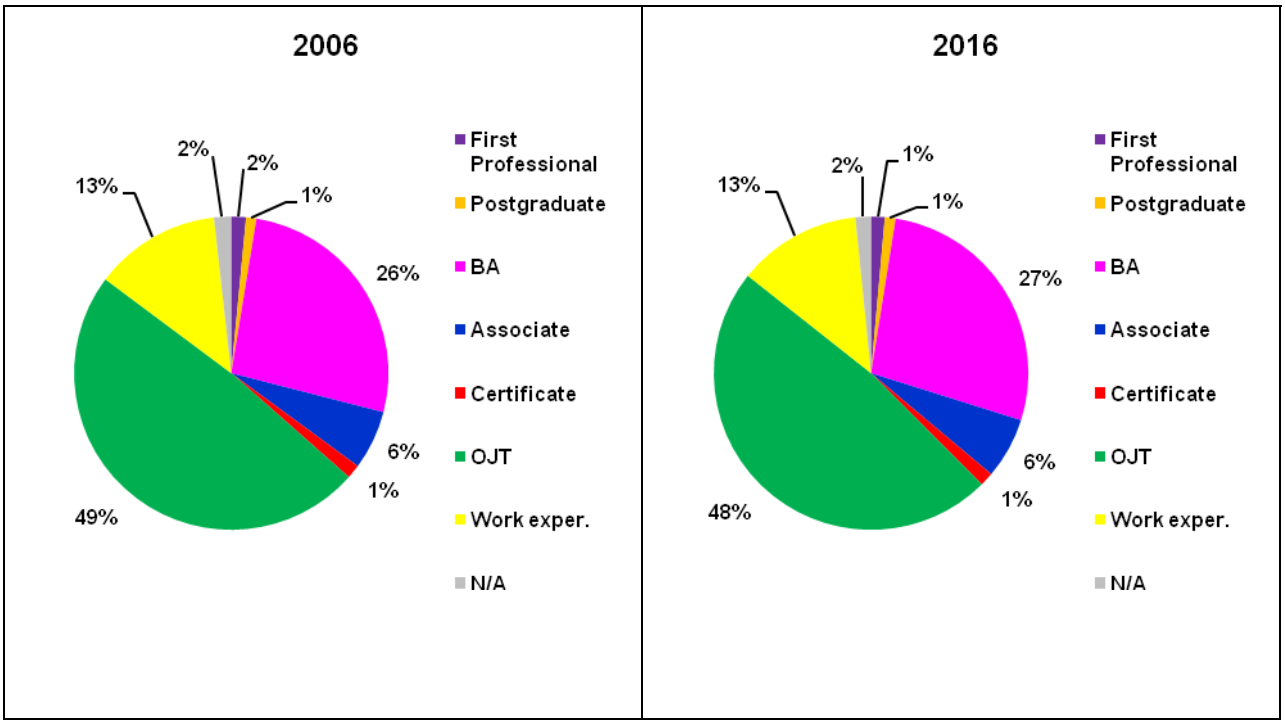


Figure 35: Montgomery County – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

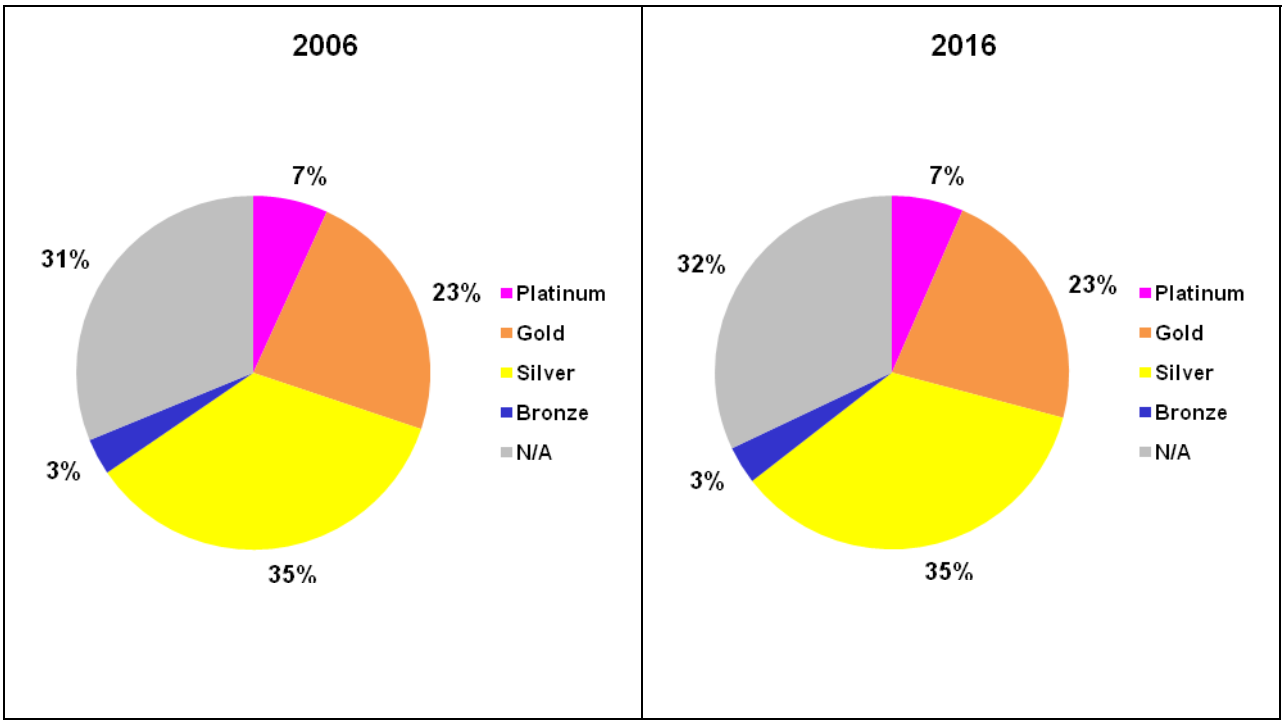


Figure 36: Montgomery County – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 18: Montgomery County – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Accountants and Auditors	13-2011	Bronze	BA degree	253	7	-245
Computer Software Engineers, Applications	15-1031		BA degree	223	0	-223
Business Operations Specialists, All Other	13-1199		BA degree	188	0	-187
General and Operations Managers	11-1021	Platinum	BA or higher degree, plus experience	309	124	-185
Registered Nurses	29-1111		Associate degree	314	163	-150
Management Analysts	13-1111	Gold	BA or higher degree, plus experience	210	84	-126
Computer Support Specialists	15-1041	Gold	Associate degree	127	7	-120
Construction Managers	11-9021	Silver	BA degree	200	80	-120
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	110	18	-91
Financial Managers	11-3031	Gold	BA or higher degree, plus experience	78	1	-77
Lawyers	23-1011	Platinum	First professional degree	75	0	-74
Computer Specialists, All Other	15-1099		Associate degree	85	16	-69
Computer and Information Systems Managers	11-3021	Platinum	BA or higher degree, plus experience	74	4	-69
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	66	1	-65
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	62	1	-61
Civil Engineers	17-2051		BA degree	56	0	-56
Financial Analysts	13-2051		BA degree	52	1	-50
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	49	0	-49
Health Diagnosing and Treating Practitioners, All Other	29-1199		BA degree	48	0	-48
Chemists	19-2031		BA degree	42	0	-41

Prince George's County WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 180,645 (or 53.3 percent of total employment) in 2006 to 199,710 (or 52.4 percent of total employment) in 2016 (*see* Figure 37).
- Overall, employment in identified green occupations is projected to increase by 10.6 percent between 2006 and 2016, as compared to a 12.4 percent increase in total employment (*see* Figure 38).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Personal Care and Service*, 2) *Food Preparation and Serving Related*, 3) *Construction and Extraction*, 4) *Community and Social Services*, and 5) *Healthcare Practitioners and Technical* occupations (*see* Table 19).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 21 percent of the total employment in green occupations in 2006 and are projected to account for 20 percent in 2016 (*see* Figure 39).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 28 percent of total employment in green occupations in both 2006 and 2016 (*see* Figure 40).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Computer Support Specialists*, 3) *Automotive Service Technicians and Mechanics*, 4) *Education Administrators, Postsecondary*, and 5) *Computer Software Engineers, Applications* (*see* Table 20).
- Fifteen out of the top 20 gaps are in occupations that typically require a BA degree or above (*see* Table 20).
- Nine of the 12 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 20).

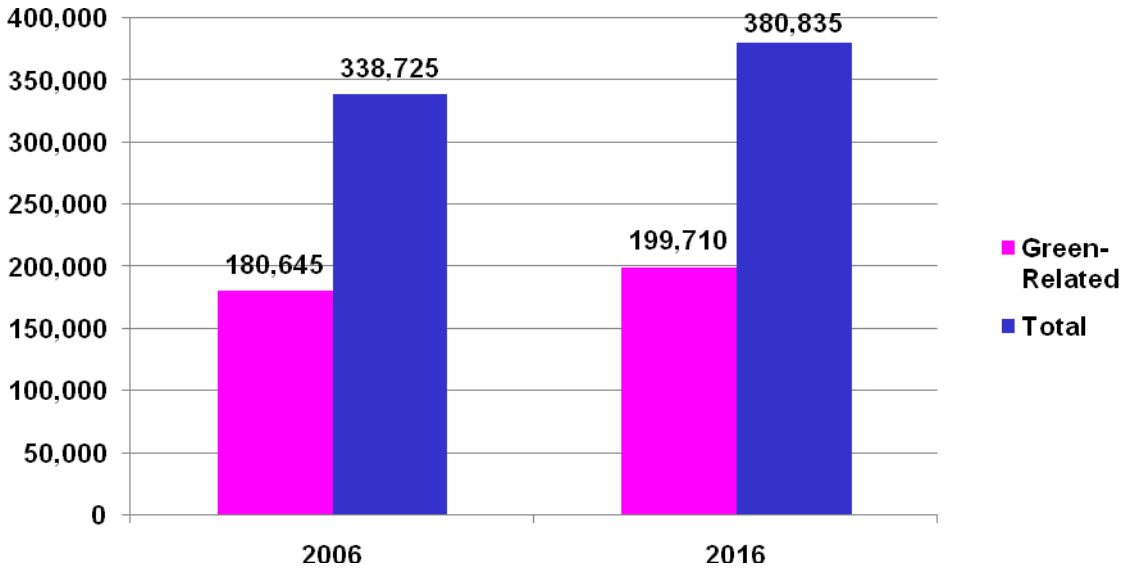


Figure 37: Prince George's County – Green-Related Occupational Employment, 2006 to 2016

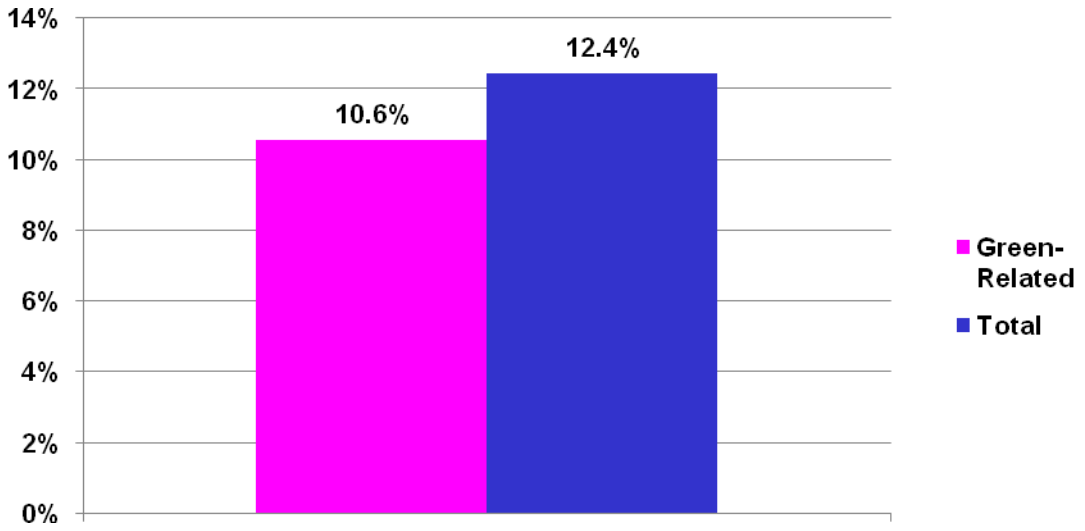


Figure 38: Prince George's County – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 19: Prince George's County – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Personal Care and Service Occupations	39-0000	575	815	41.7%
Food Preparation and Serving Related Occupations	35-0000	4,135	5,540	34.0%
Construction and Extraction Occupations	47-0000	23,715	30,235	27.5%
Community and Social Services Occupations	21-0000	335	420	25.4%
Healthcare Practitioners and Technical Occupations	29-0000	4,395	5,420	23.3%
Education, Training, and Library Occupations	25-0000	6,400	7,860	22.8%
Farming, Fishing, and Forestry Occupations	45-0000	50	60	20.0%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	5,220	6,120	17.2%
Installation, Maintenance, and Repair Occupations	49-0000	9,640	10,910	13.2%
Business and Financial Operations Occupations	13-0000	14,240	15,680	10.1%
Life, Physical, and Social Science Occupations	19-0000	955	1,040	8.9%
Sales and Related Occupations	41-0000	30,755	32,970	7.2%
Management Occupations	11-0000	19,475	20,635	6.0%
Office and Administrative Support Occupations	43-0000	36,995	38,860	5.0%
Legal Occupations	23-0000	1,375	1,435	4.4%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	1,355	1,365	0.7%
Architecture and Engineering Occupations	17-0000	3,520	3,535	0.4%
Transportation and Material Moving Occupations	53-0000	5,910	5,865	-0.8%
Computer and Mathematical Occupations	15-0000	7,815	7,510	-3.9%
Production Occupations	51-0000	3,785	3,435	-9.2%

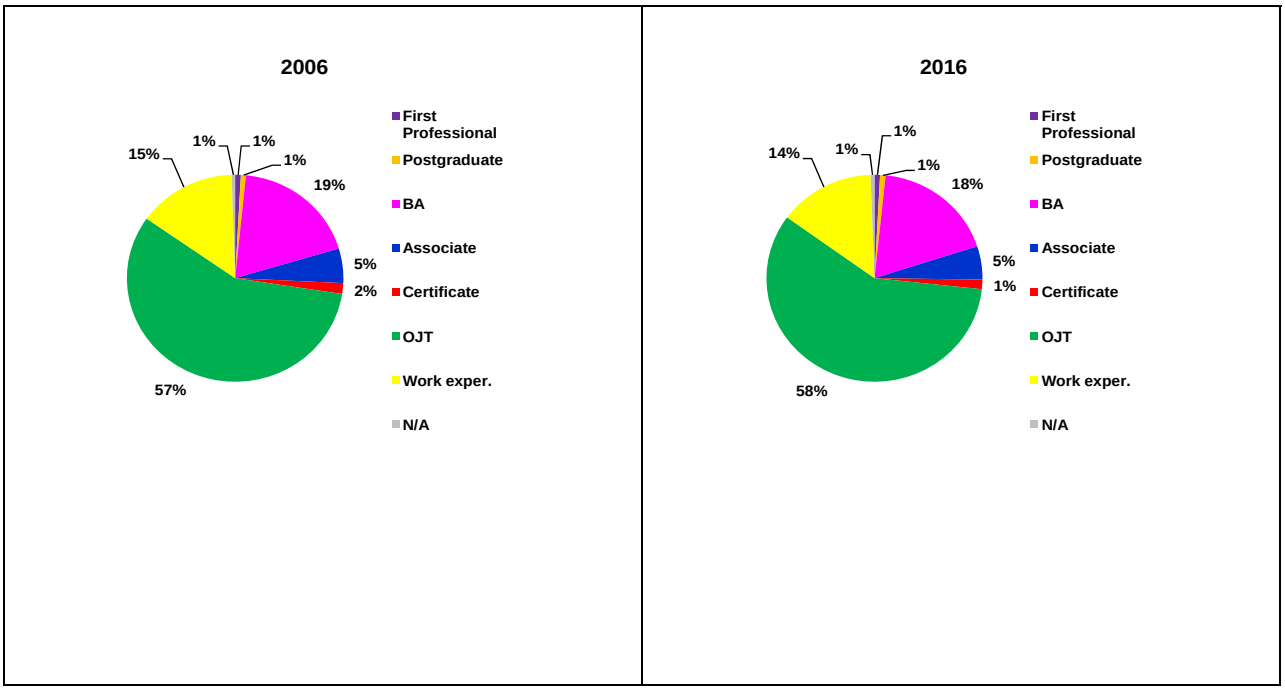


Figure 39: Prince George's County – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

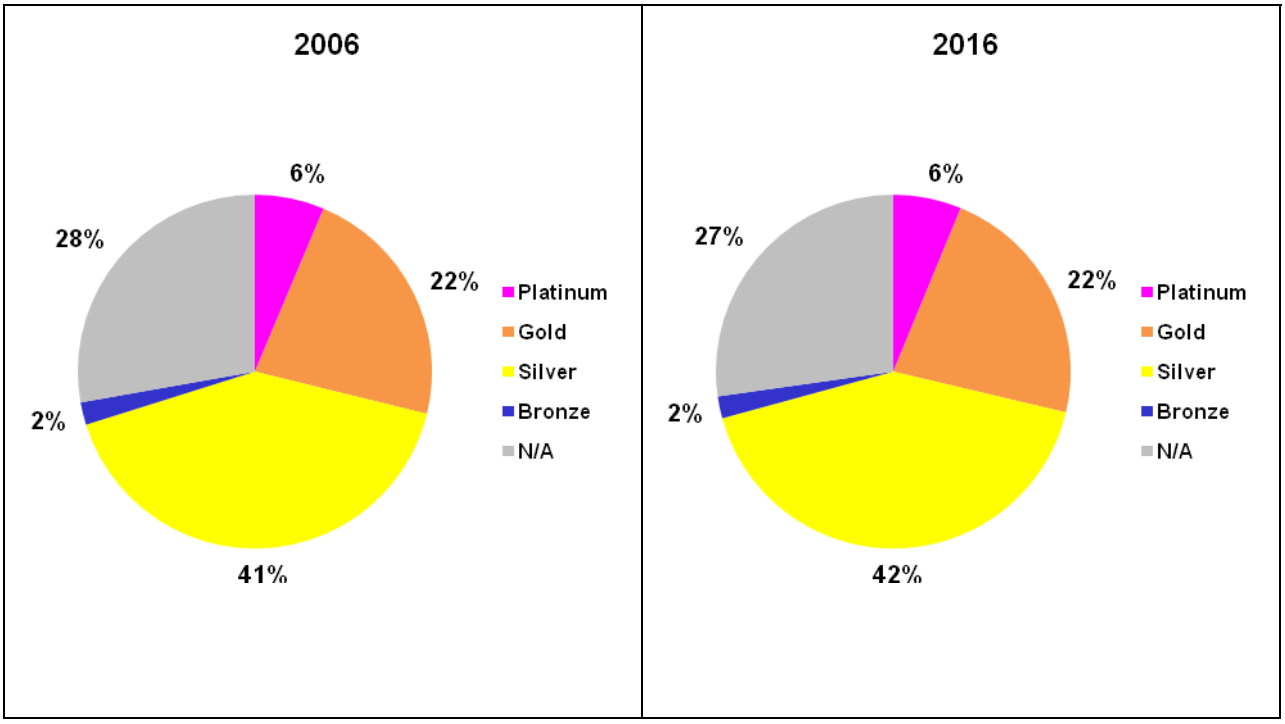


Figure 40: Prince George's County – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 20: Prince George's County – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	66	0	-66
Computer Support Specialists	15-1041	Gold	Associate degree	62	0	-61
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	54	0	-54
Education Administrators, Postsecondary	11-9033	Platinum	BA or higher degree, plus experience	100	63	-36
Computer Software Engineers, Applications	15-1031		BA degree	35	9	-25
Lawyers	23-1011	Platinum	First professional degree	25	0	-25
Pharmacists	29-1051	Platinum	First professional degree	18	0	-18
Rehabilitation Counselors	21-1015	Gold	Master's degree	16	0	-15
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	11	0	-11
Industrial Engineers	17-2112	Gold	BA degree	9	0	-9
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	8	0	-8
Environmental Engineers	17-2081		BA degree	7	0	-7
Meeting and Convention Planners	13-1121	Gold	BA degree	7	0	-6
Urban and Regional Planners	19-3051		Master's degree	7	0	-6
Environmental Science and Protection Technicians, Including Health	19-4091		Associate degree	4	0	-4
Surveyors	17-1022		BA degree	4	0	-4
Education Administrators, Preschool and Child Care Center/Program	11-9031		BA or higher degree, plus experience	12	7	-4
Purchasing Managers	11-3061	Silver	BA or higher degree, plus experience	8	3	-4
Mechanical Drafters	17-3013	Gold	Certificate	4	0	-4
Engineering Technicians, Except Drafters, All Other	17-3029	Silver	Associate degree	4	1	-3

Southern Maryland WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 60,375 (or 54.4 percent of total employment) in 2006 to 71,195 (or 53.6 percent of total employment) in 2016 (*see* Figure 41).
- Overall, employment in identified green occupations is projected to increase by 17.9 percent between 2006 and 2016, as compared to a 19.6 percent increase in total employment (*see* Figure 42).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Community and Social Services*, 2) *Personal Care and Service*, 3) *Food Preparation and Serving Related*, 4) *Healthcare Practitioners and Technical*, and 5) *Education, Training, and Library* occupations (*see* Table 21).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 20 percent of the total employment in green occupations in both 2006 and 2016 (*see* Figure 43).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 29 percent of total employment in green occupations in 2006 and projected to comprise 30 percent in 2016 (*see* Figure 44).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Management Analysts*, 2) *Logisticians*, 3*) Automotive Service Technicians and Mechanics*, 4) *Computer Support Specialists*, and 5) *Business Operations Specialists, All Other* (*see* Table 22).
- Fifteen out of the top 20 gaps are in occupations that typically require a BA degree or above (*see* Table 22).
- Ten of the 13 “top 20” gap occupations for which data are available require a gold CRC or above (*see* Table 22).

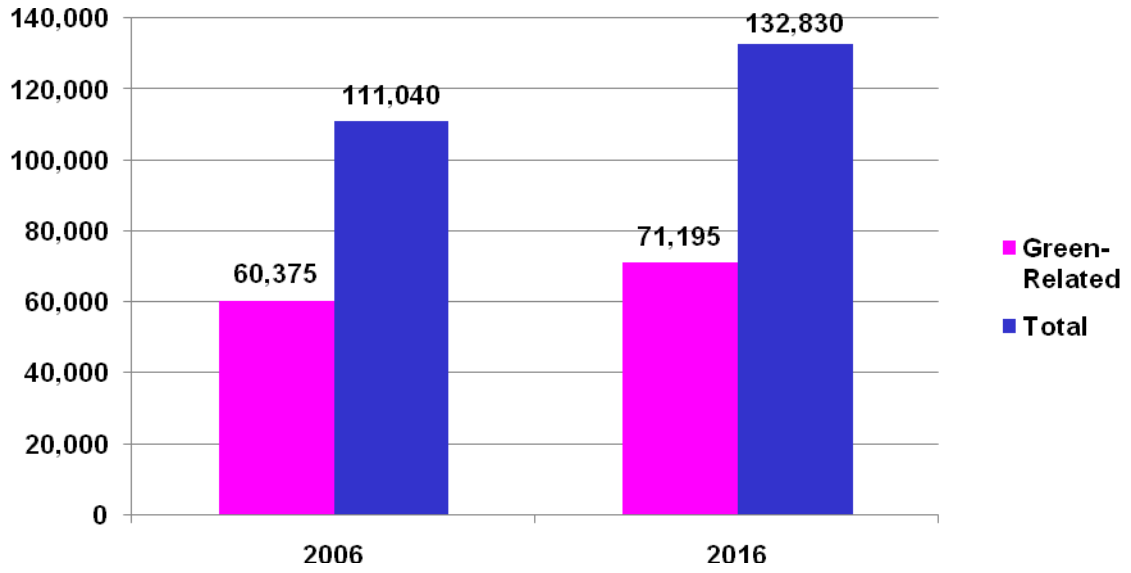


Figure 41: Southern Maryland – Green-Related Occupational Employment, 2006 to 2016

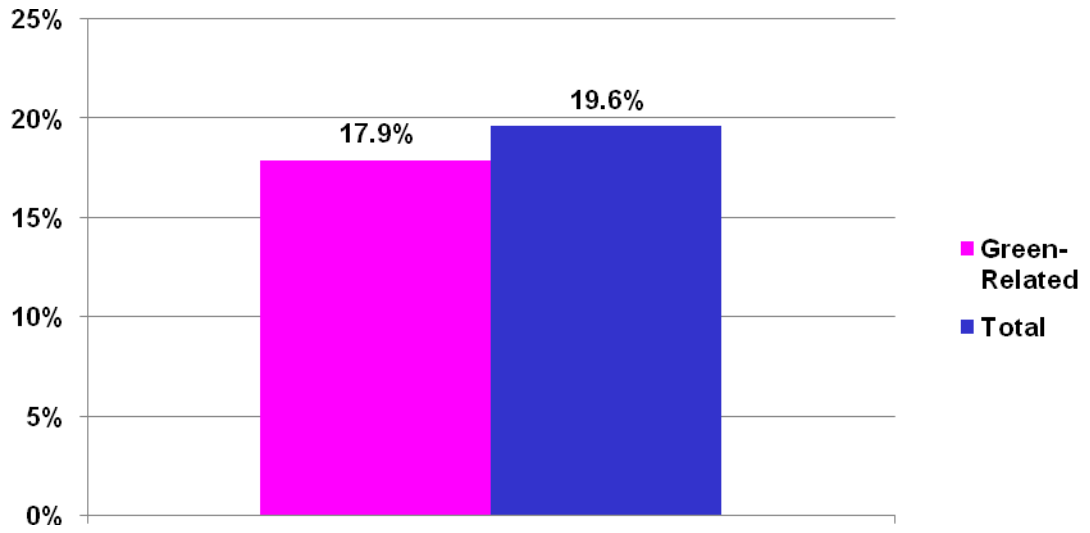


Figure 42: Southern Maryland – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 21: Southern Maryland – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Community and Social Services Occupations	21-0000	55	75	36.4%
Personal Care and Service Occupations	39-0000	85	115	35.3%
Food Preparation and Serving Related Occupations	35-0000	2,475	3,275	32.3%
Healthcare Practitioners and Technical Occupations	29-0000	1,985	2,575	29.7%
Education, Training, and Library Occupations	25-0000	1,450	1,865	28.6%
Construction and Extraction Occupations	47-0000	6,255	7,910	26.5%
Sales and Related Occupations	41-0000	12,175	15,310	25.7%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	375	455	21.3%
Business and Financial Operations Occupations	13-0000	5,145	6,140	19.3%
Transportation and Material Moving Occupations	53-0000	1,715	1,995	16.3%
Installation, Maintenance, and Repair Occupations	49-0000	3,350	3,800	13.4%
Farming, Fishing, and Forestry Occupations	45-0000	40	45	12.5%
Computer and Mathematical Occupations	15-0000	1,740	1,950	12.1%
Protective Service Occupations	33-0000	255	285	11.8%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	1,065	1,190	11.7%
Office and Administrative Support Occupations	43-0000	11,945	13,215	10.6%
Legal Occupations	23-0000	495	545	10.1%
Life, Physical, and Social Science Occupations	19-0000	265	290	9.4%
Management Occupations	11-0000	4,745	5,125	8.0%
Architecture and Engineering Occupations	17-0000	3,875	4,110	6.1%
Production Occupations	51-0000	885	925	4.5%

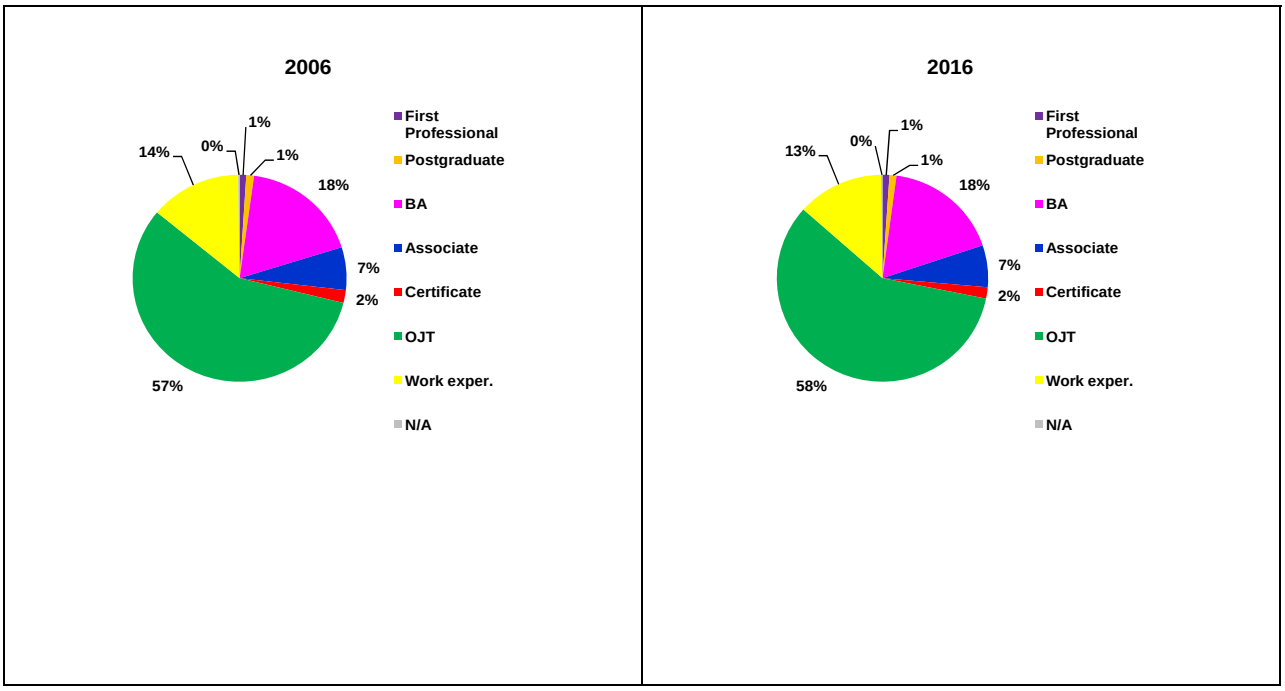


Figure 43: Southern Maryland – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

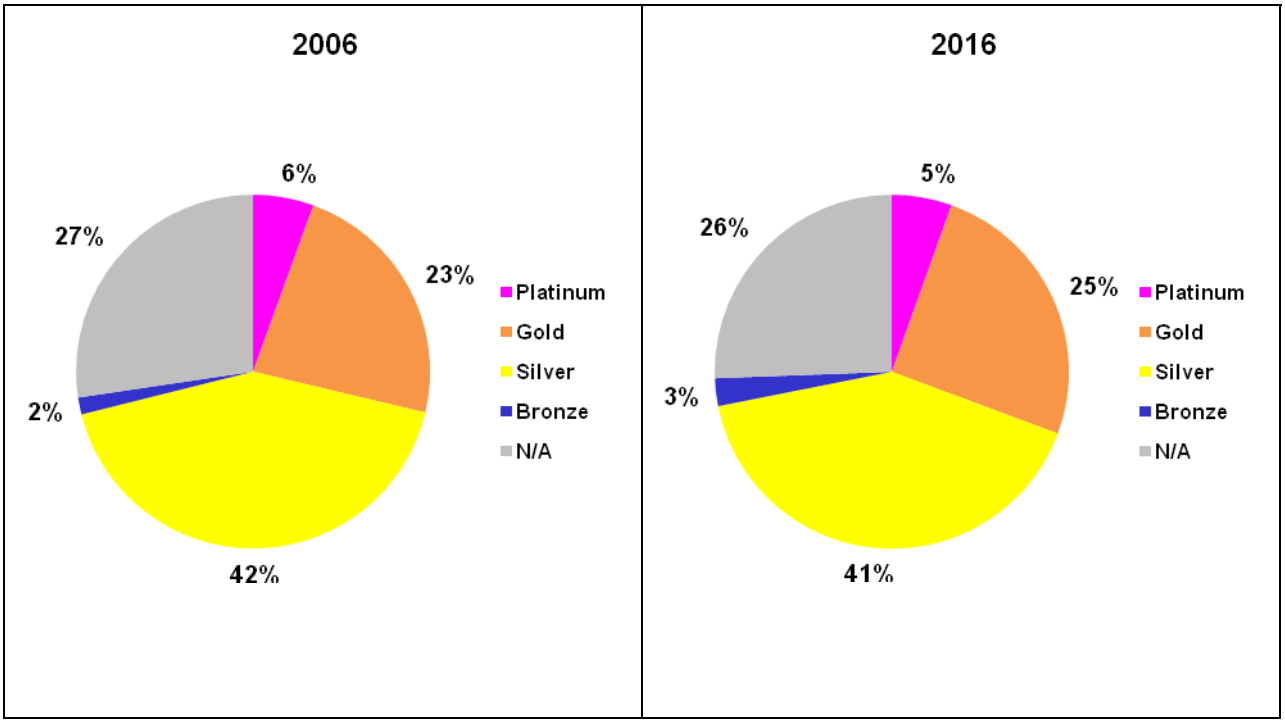


Figure 44: Southern Maryland – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 22: Southern Maryland – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Management Analysts	13-1111	Gold	BA or higher degree, plus experience	78	51	-27
Logisticians	13-1081		BA degree	27	0	-26
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	27	0	-26
Computer Support Specialists	15-1041	Gold	Associate degree	23	0	-22
Business Operations Specialists, All Other	13-1199		BA degree	22	0	-22
General and Operations Managers	11-1021	Platinum	BA or higher degree, plus experience	60	38	-21
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	18	0	-18
Pharmacists	29-1051	Platinum	First professional degree	18	0	-17
Accountants and Auditors	13-2011	Bronze	BA degree	15	0	-15
Computer Specialists, All Other	15-1099		Associate degree	18	3	-14
Electrical Engineers	17-2071	Gold	BA degree	14	0	-13
Librarians	25-4021	Gold	Master's degree	12	0	-12
Computer Software Engineers, Applications	15-1031		BA degree	18	8	-9
Mechanical Engineers	17-2141	Gold	BA degree	10	0	-9
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	10	0	-9
Civil Engineers	17-2051		BA degree	9	0	-8
Lawyers	23-1011	Platinum	First professional degree	8	0	-8
Engineering Technicians, Except Drafters, All Other	17-3029	Silver	Associate degree	12	5	-6
Engineers, All Other	17-2199		BA degree	14	7	-6
Surveyors	17-1022		BA degree	7	0	-6

Susquehanna WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 62,810 (or 51.0 percent of total employment) in 2006 to 77,085 (or 50.0 percent of total employment) in 2016 (*see* Figure 45).
- Overall, employment in identified green occupations is projected to increase by 22.7 percent between 2006 and 2016, as compared to a 25.2 percent increase in total employment (*see* Figure 46).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Community and Social Services*, 2) *Healthcare Practitioners and Technical*, 3) *Education, Training, and Library*, 4) *Construction and Extraction*, and 5) *Food Preparation and Serving Related* occupations (*see* Table 23).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 21 percent of the total employment in green occupations in 2006 and are projected to account for 20 percent in 2016 (*see* Figure 47).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 27 percent of total employment in green occupations in both 2006 and 2016 (*see* Figure 48).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Automotive Service Technicians and Mechanics*, 2) *Business Operations Specialists, All Other*, 3*) Accountants and Auditors*, 4) *Mechanical Engineers*, and 5) *Environmental Engineers* (*see* Table 24).
- Sixteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 24).
- Nine of the 13 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 24).

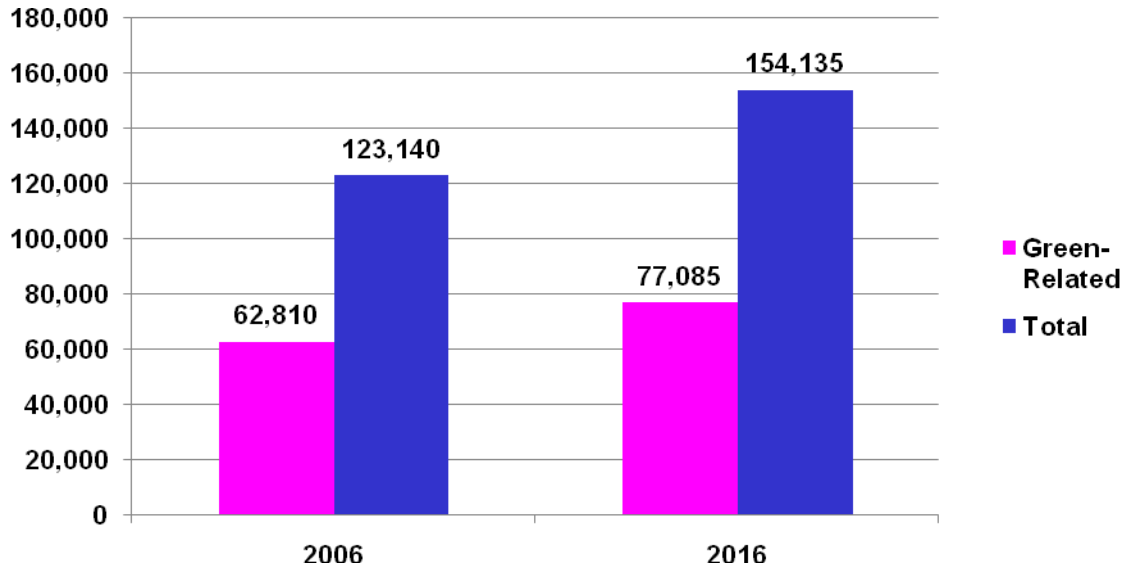


Figure 45: Susquehanna – Green-Related Occupational Employment, 2006 to 2016

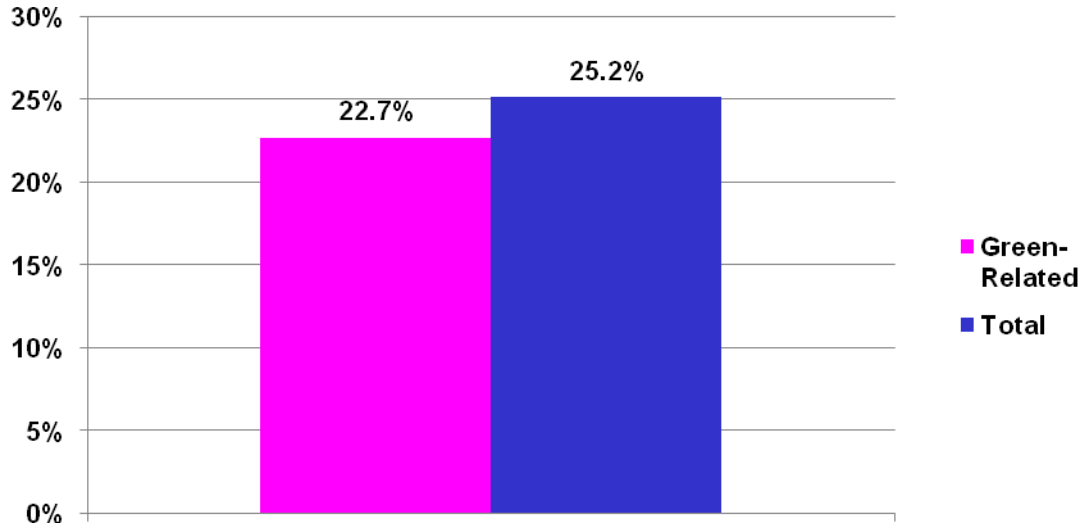


Figure 46: Susquehanna – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 23: Susquehanna – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Community and Social Services Occupations	21-0000	55	85	54.5%
Healthcare Practitioners and Technical Occupations	29-0000	2,510	3,475	38.4%
Education, Training, and Library Occupations	25-0000	1,105	1,475	33.5%
Construction and Extraction Occupations	47-0000	5,975	7,925	32.6%
Food Preparation and Serving Related Occupations	35-0000	2,880	3,755	30.4%
Transportation and Material Moving Occupations	53-0000	2,770	3,605	30.1%
Business and Financial Operations Occupations	13-0000	4,435	5,615	26.6%
Legal Occupations	23-0000	265	330	24.5%
Installation, Maintenance, and Repair Occupations	49-0000	3,495	4,285	22.6%
Life, Physical, and Social Science Occupations	19-0000	800	980	22.5%
Office and Administrative Support Occupations	43-0000	12,965	15,625	20.5%
Management Occupations	11-0000	4,115	4,940	20.0%
Sales and Related Occupations	41-0000	12,145	14,555	19.8%
Architecture and Engineering Occupations	17-0000	3,840	4,445	15.8%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	425	485	14.1%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	1,685	1,905	13.1%
Computer and Mathematical Occupations	15-0000	1,500	1,695	13.0%
Farming, Fishing, and Forestry Occupations	45-0000	385	435	13.0%
Production Occupations	51-0000	1,460	1,470	0.7%

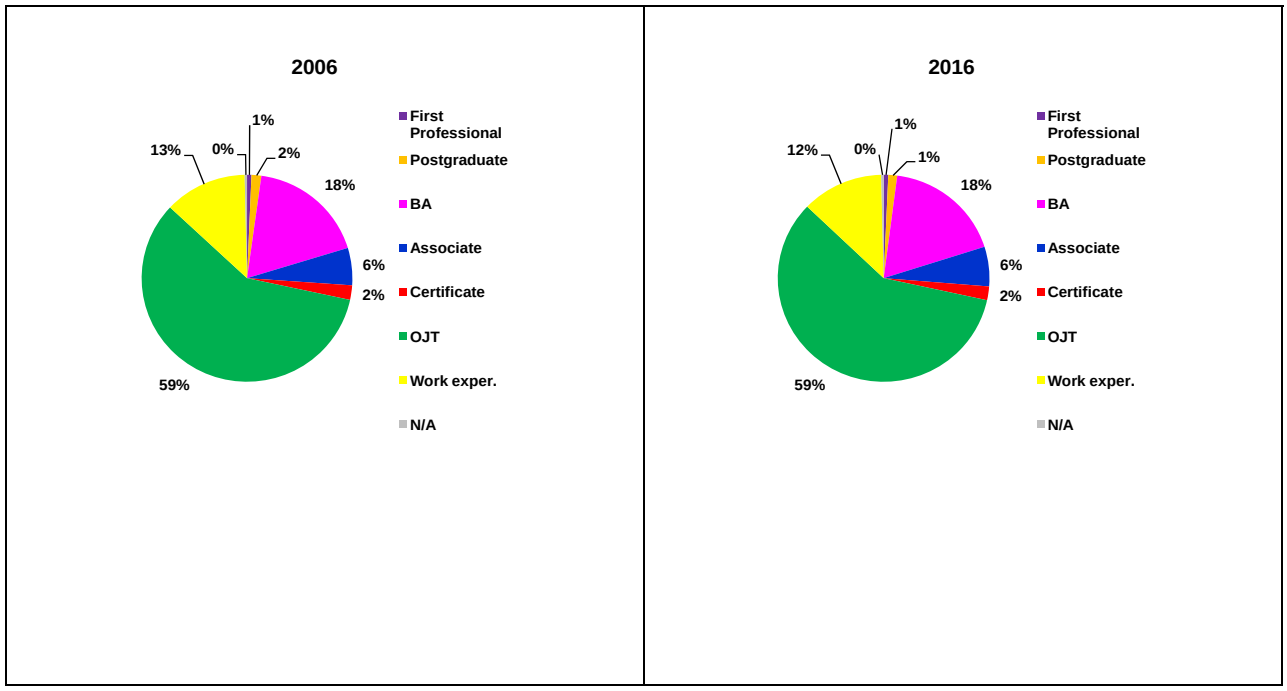


Figure 47: Susquehanna – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

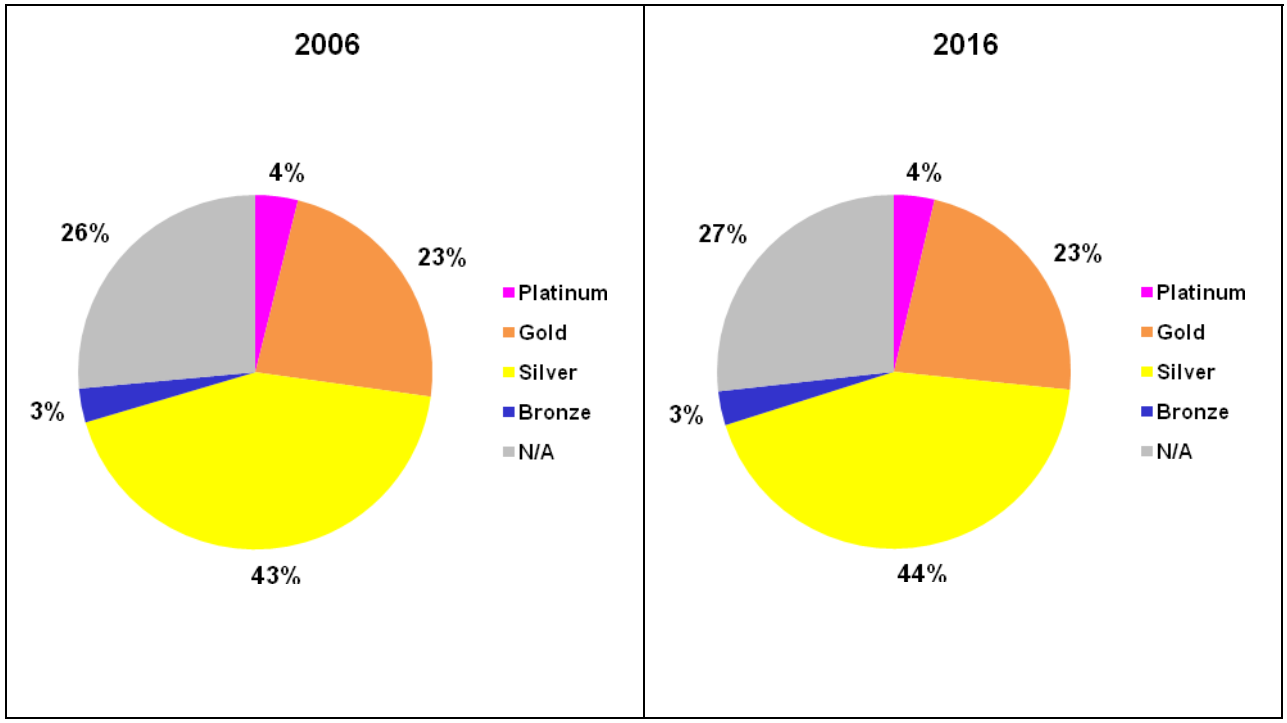


Figure 48: Susquehanna – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 24: Susquehanna – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	50	0	-49
Business Operations Specialists, All Other	13-1199		BA degree	48	0	-47
Accountants and Auditors	13-2011	Bronze	BA degree	30	3	-26
Mechanical Engineers	17-2141	Gold	BA degree	27	0	-26
Environmental Engineers	17-2081		BA degree	18	0	-17
General and Operations Managers	11-1021	Platinum	BA or higher degree, plus experience	50	33	-17
Computer Specialists, All Other	15-1099		Associate degree	17	1	-16
Industrial Engineers	17-2112	Gold	BA degree	17	0	-16
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	17	0	-16
Chemists	19-2031		BA degree	15	0	-15
Computer Support Specialists	15-1041	Gold	Associate degree	14	0	-14
Construction Managers	11-9021	Silver	BA degree	39	26	-13
Engineers, All Other	17-2199		BA degree	17	3	-13
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	14	0	-13
Engineering Technicians, Except Drafters, All Other	17-3029	Silver	Associate degree	12	0	-12
Pharmacists	29-1051	Platinum	First professional degree	13	0	-12
Computer Software Engineers, Applications	15-1031		BA degree	12	0	-11
Management Analysts	13-1111	Gold	BA or higher degree, plus experience	34	22	-11
Librarians	25-4021	Gold	Master's degree	12	0	-11
Civil Engineers	17-2051		BA degree	11	0	-10

Upper Shore WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 34,175 (or 50.7 percent of total employment) in 2006 to 39,270 (or 50.6 percent of total employment) in 2016 (*see* Figure 49).
- Overall, employment in identified green occupations is projected to increase by 14.9 percent between 2006 and 2016, as compared to a 15.2 percent increase in total employment (*see* Figure 50).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Personal Care and Service*, 2) *Community and Social Services*, 3) *Business and Financial Operations*, 4) *Life, Physical, and Social Science*, and 5) *Protective Service* occupations (*see* Table 25).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 12 percent of the total employment in green occupations in 2006 and are projected to account for 13 percent in 2016 (*see* Figure 51).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 24 percent of total employment in green occupations in 2006 and are projected to comprise 25 percent in 2016 (*see* Figure 52).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Automotive Service Technicians and Mechanics*, 3*) Accountants and Auditors*, 4) *Lawyers*, and 5) *Writers and Authors* (*see* Table 26).
- Fifteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 26).
- Fourteen of the 16 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 26).

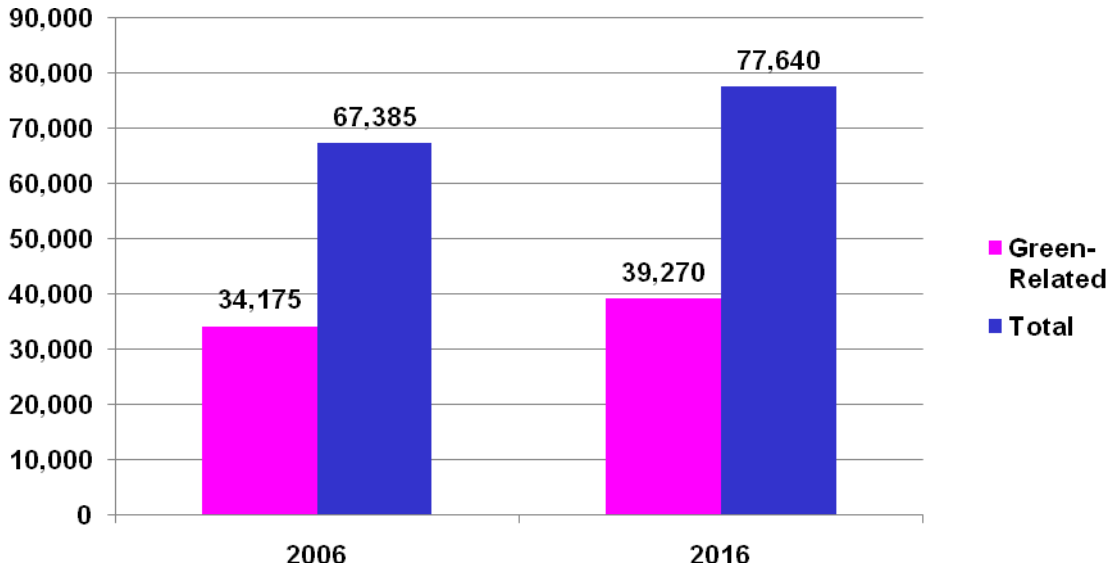


Figure 49: Upper Shore – Green-Related Occupational Employment, 2006 to 2016

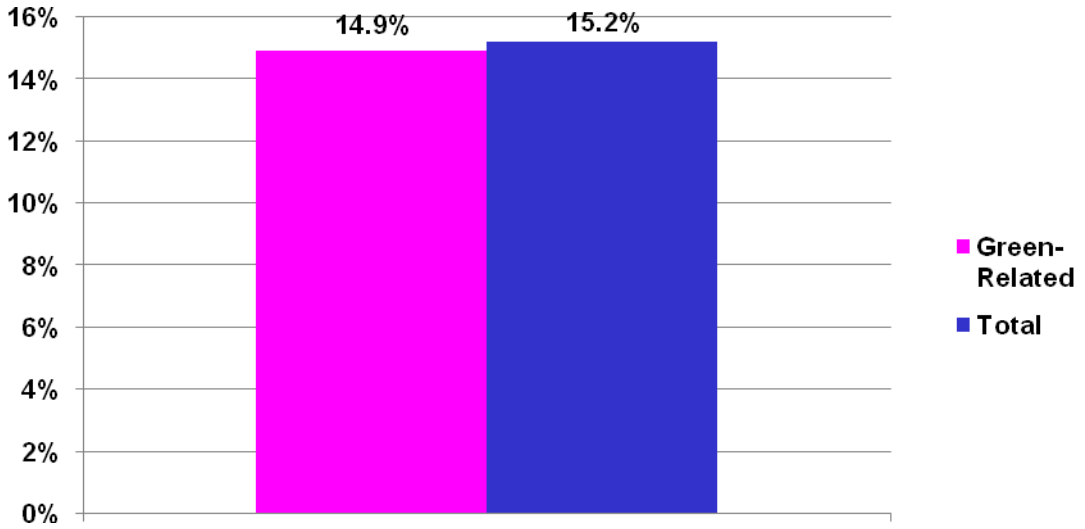


Figure 50: Upper Shore – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 25: Upper Shore – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Personal Care and Service Occupations	39-0000	370	530	43.2%
Community and Social Services Occupations	21-0000	80	110	37.5%
Business and Financial Operations Occupations	13-0000	1,300	1,700	30.8%
Life, Physical, and Social Science Occupations	19-0000	235	300	27.7%
Protective Service Occupations	33-0000	80	100	25.0%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	1,190	1,480	24.4%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	435	540	24.1%
Education, Training, and Library Occupations	25-0000	535	660	23.4%
Legal Occupations	23-0000	435	535	23.0%
Computer and Mathematical Occupations	15-0000	135	165	22.2%
Transportation and Material Moving Occupations	53-0000	1,665	2,035	22.2%
Architecture and Engineering Occupations	17-0000	390	460	17.9%
Sales and Related Occupations	41-0000	5,910	6,960	17.8%
Food Preparation and Serving Related Occupations	35-0000	1,925	2,260	17.4%
Installation, Maintenance, and Repair Occupations	49-0000	2,200	2,580	17.3%
Office and Administrative Support Occupations	43-0000	8,350	9,395	12.5%
Construction and Extraction Occupations	47-0000	3,930	4,275	8.8%
Management Occupations	11-0000	1,995	2,155	8.0%
Healthcare Practitioners and Technical Occupations	29-0000	1,485	1,540	3.7%
Production Occupations	51-0000	795	805	1.3%
Farming, Fishing, and Forestry Occupations	45-0000	735	685	-6.8%

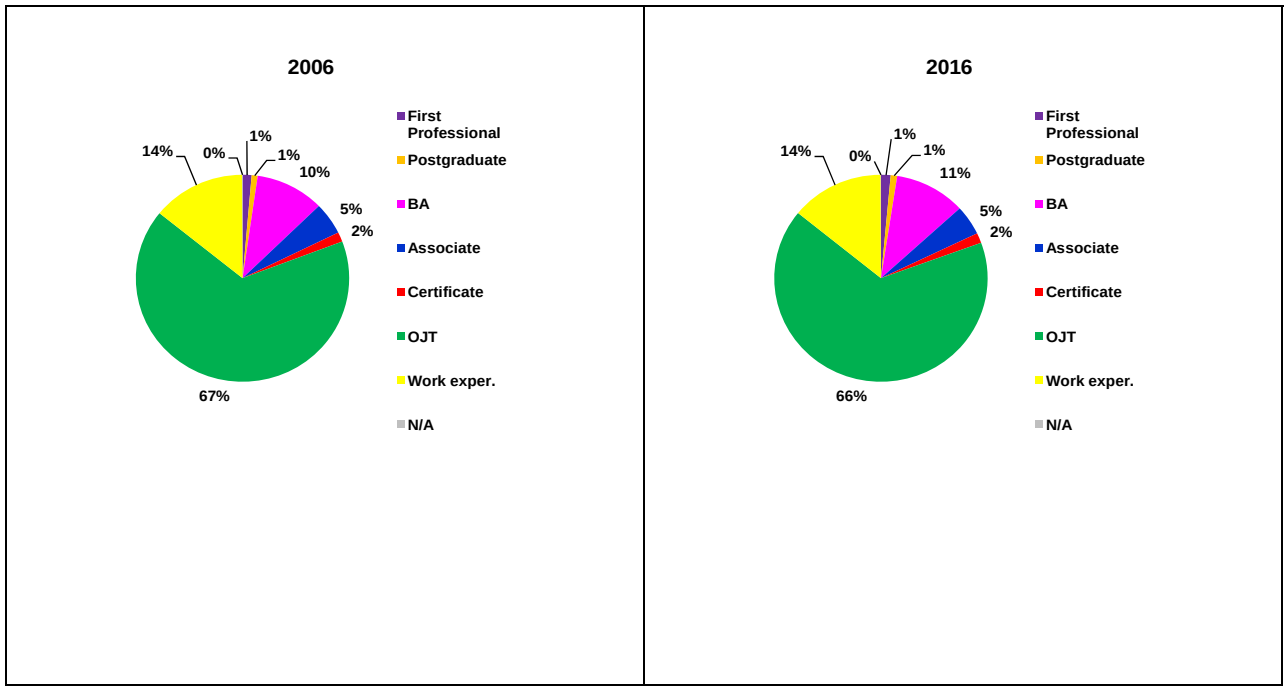


Figure 51: Upper Shore – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

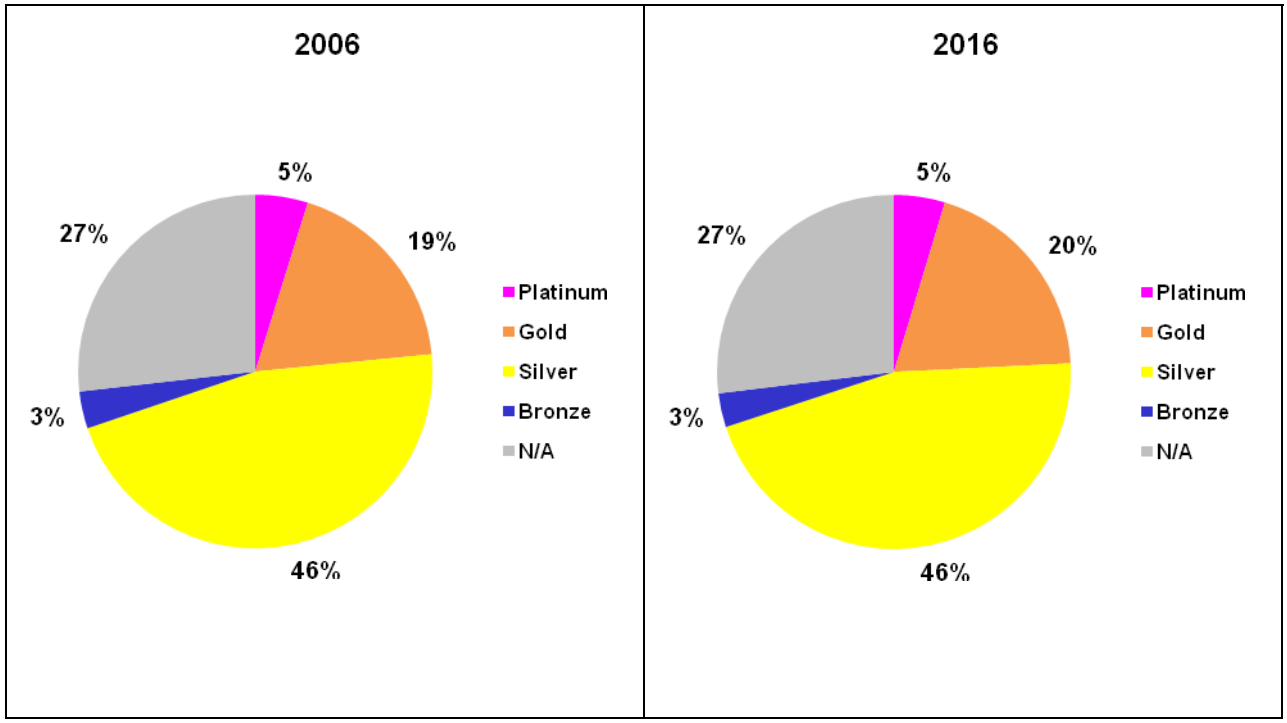


Figure 52: Upper Shore – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 26: Upper Shore – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	25	0	-24
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	18	0	-18
Accountants and Auditors	13-2011	Bronze	BA degree	16	0	-16
Lawyers	23-1011	Platinum	First professional degree	14	0	-13
Writers and Authors	27-3043		BA degree	12	0	-12
Pharmacists	29-1051	Platinum	First professional degree	6	0	-6
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	5	0	-5
Computer Support Specialists	15-1041	Gold	Associate degree	5	0	-4
Librarians	25-4021	Gold	Master's degree	5	0	-4
Rehabilitation Counselors	21-1015	Gold	Master's degree	5	0	-4
Civil Engineers	17-2051		BA degree	3	0	-3
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	4	0	-3
Mechanical Engineers	17-2141	Gold	BA degree	3	0	-3
Mechanical Drafters	17-3013	Gold	Certificate	3	0	-3
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	2	0	-2
Interior Designers	27-1025		Associate degree	3	0	-2
Public Relations Specialists	27-3031	Gold	BA degree	3	0	-2
Education Administrators, Postsecondary	11-9033	Platinum	BA or higher degree, plus experience	3	0	-2
Financial Managers	11-3031	Gold	BA or higher degree, plus experience	3	0	-2
Computer Programmers	15-1021	Gold	BA degree	1	0	-1

Western Maryland WIA

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 56,980 (or 49.1 percent of total employment) in 2006 to 63,190 (or 49.3 percent of total employment) in 2016 (*see* Figure 53).
- Overall, employment in identified green occupations is projected to increase by 10.9 percent between 2006 and 2016, as compared to a 10.3 percent increase in total employment (*see* Figure 54).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Community and Social Services*, 2) *Personal Care and Service*, 3) *Legal*, 4) *Protective Service*, and 5) *Building and Grounds Cleaning and Maintenance* occupations (*see* Table 27).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 10 percent of the total employment in green occupations in both 2006 and 2016 (*see* Figure 55).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 25 percent of total employment in green occupations in 2006 and are projected to comprise 26 percent in 2016 (*see* Figure 56).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Rehabilitation Counselors*, 3*) Computer Support Specialists*, 4) *Lawyers*, and 5) *Automotive Service Technicians and Mechanics* (*see* Table 28).
- Seventeen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 28).
- Thirteen of the 14 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 28).

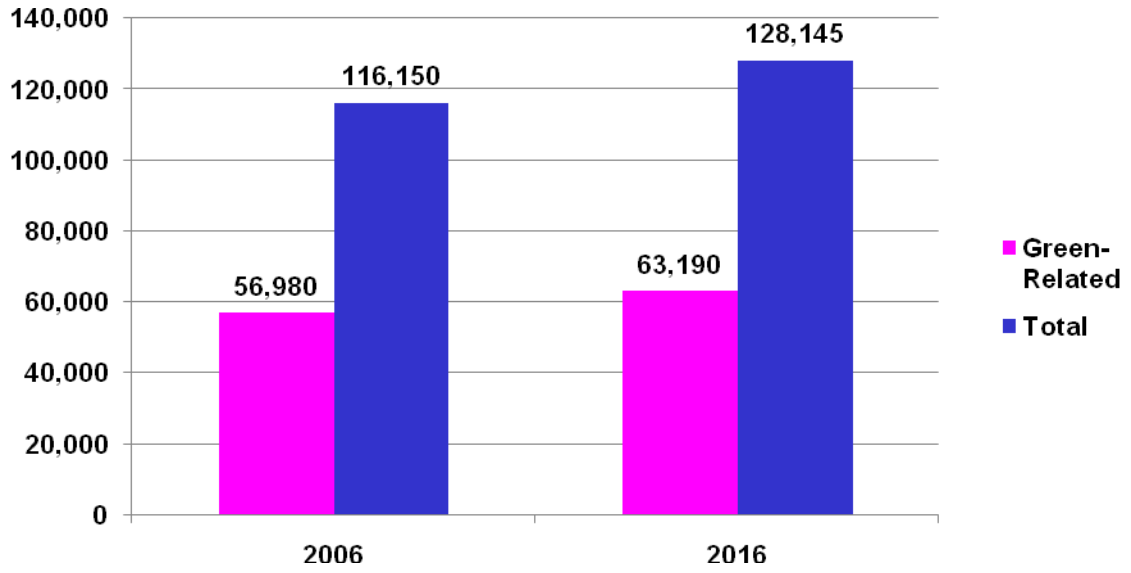


Figure 53: Western Maryland – Green-Related Occupational Employment, 2006 to 2016

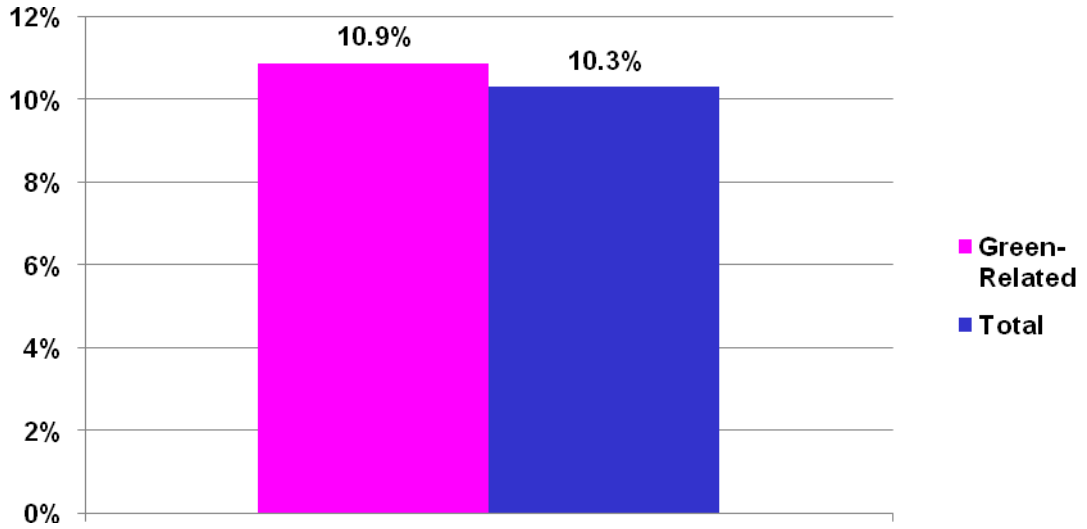


Figure 54: Western Maryland – Projected Green-Related Occupational Employment Growth, 2006 to 2016

Table 27: Western Maryland – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2006 Emp.	Projected 2016 Emp.	% Change
Community and Social Services Occupations	21-0000	275	380	38.2%
Personal Care and Service Occupations	39-0000	160	220	37.5%
Legal Occupations	23-0000	300	400	33.3%
Protective Service Occupations	33-0000	2,330	2,850	22.3%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	970	1,185	22.2%
Architecture and Engineering Occupations	17-0000	470	570	21.3%
Computer and Mathematical Occupations	15-0000	430	520	20.9%
Education, Training, and Library Occupations	25-0000	745	890	19.5%
Business and Financial Operations Occupations	13-0000	2,000	2,380	19.0%
Food Preparation and Serving Related Occupations	35-0000	2,650	3,145	18.7%
Healthcare Practitioners and Technical Occupations	29-0000	2,985	3,495	17.1%
Sales and Related Occupations	41-0000	11,935	13,645	14.3%
Construction and Extraction Occupations	47-0000	5,360	6,000	11.9%
Life, Physical, and Social Science Occupations	19-0000	55	60	9.1%
Office and Administrative Support Occupations	43-0000	14,990	16,215	8.2%
Transportation and Material Moving Occupations	53-0000	3,175	3,430	8.0%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	215	230	7.0%
Management Occupations	11-0000	3,025	3,025	0.0%
Installation, Maintenance, and Repair Occupations	49-0000	3,020	2,965	-1.8%
Production Occupations	51-0000	1,890	1,585	-16.1%

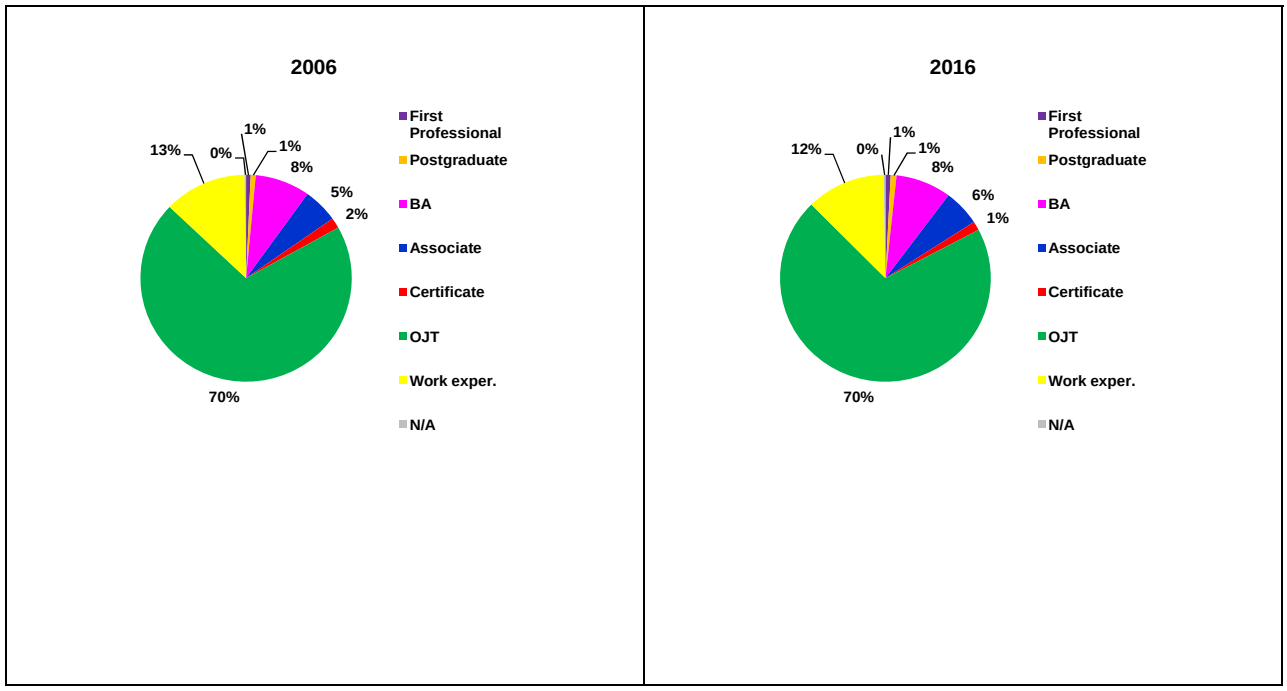


Figure 55: Western Maryland – Green-Related Occupational Employment, Required Degree Levels, 2006 to 2016

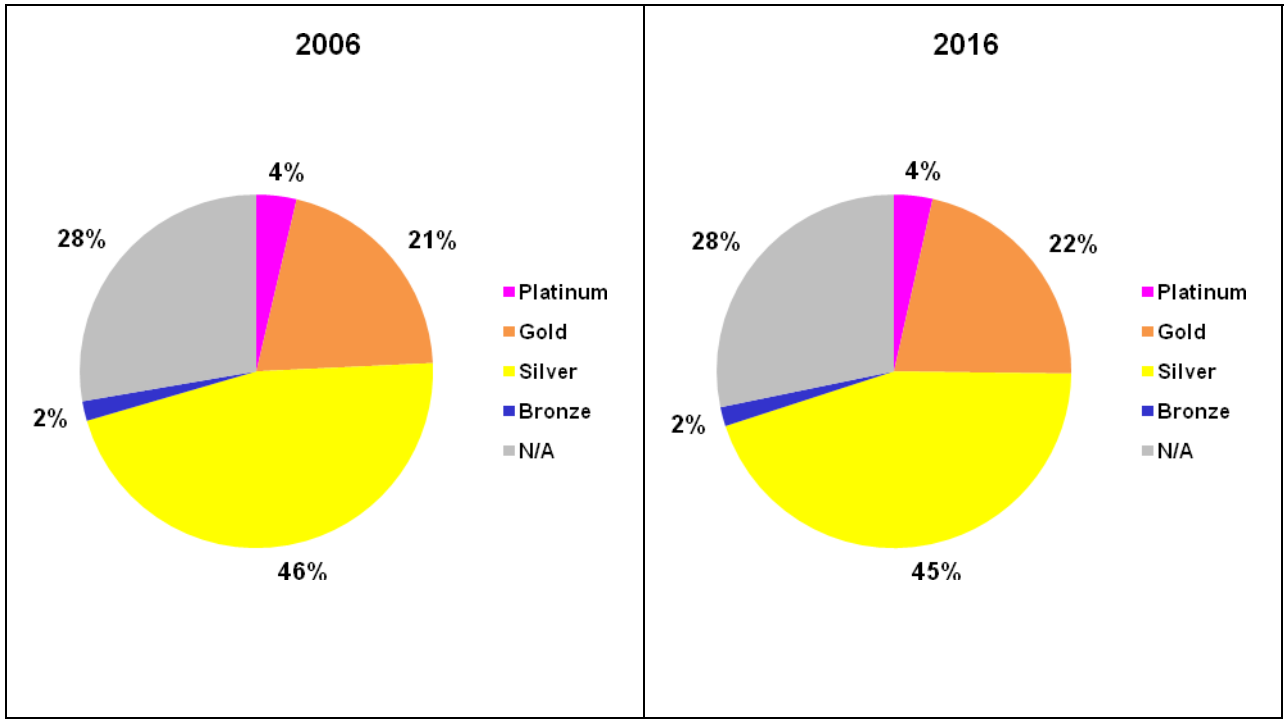


Figure 56: Western Maryland – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2006 to 2016

Table 28: Western Maryland – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	18	0	-18
Rehabilitation Counselors	21-1015	Gold	Master's degree	16	0	-16
Computer Support Specialists	15-1041	Gold	Associate degree	11	0	-10
Lawyers	23-1011	Platinum	First professional degree	10	0	-10
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	16	6	-10
Pharmacists	29-1051	Platinum	First professional degree	9	0	-9
Financial Managers	11-3031	Gold	BA or higher degree, plus experience	6	0	-6
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	6	0	-6
Civil Engineers	17-2051		BA degree	5	0	-5
Architects, Except Landscape and Naval	17-1011		BA degree	4	0	-4
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	4	0	-4
Surveyors	17-1022		BA degree	5	0	-4
Librarians	25-4021	Gold	Master's degree	5	0	-4
Financial Analysts	13-2051		BA degree	3	0	-3
Education Administrators, Postsecondary	11-9033	Platinum	BA or higher degree, plus experience	3	0	-3
Public Relations Specialists	27-3031	Gold	BA degree	2	0	-2
Interior Designers	27-1025		Associate degree	1	0	-1
Industrial Engineers	17-2112	Gold	BA degree	2	0	-1
Mechanical Engineers	17-2141	Gold	BA degree	1	0	-1
Meeting and Convention Planners	13-1121	Gold	BA degree	1	0	-1

4.3. Virginia

Statewide

Current and Projected Employment

In Virginia, 214 occupations were identified as green jobs through the MARC LMI Green Jobs Survey at the six-digit SOC level. As shown in Figure 57, the Virginia Employment Commission estimates that combined statewide employment in these green occupations was 2,186,471 in 2008, which is equivalent 54.5 percent of total estimated employment. Projected statewide employment for 2018 is expected to be 2,522,153, or 54.7 percent of total projected employment.

Figure 58 compares the aggregate projected growth rate for these 214 green occupations to the projected growth rate for total employment. As this graph indicates, between 2008 and 2018 aggregate statewide employment in these green occupations is projected to increase by 15.4 percent, in contrast to a 14.9 percent increase in total statewide employment. Table 29, breaks these data down by major occupation category and ranks them according to projected employment growth. As these data show: 1) *Computer and Mathematical*, 2) *Healthcare Support*, 3) *Life, Physical, and Social Science*, 4) *Business and Financial Operations*, and 5) *Community and Social Services* occupations are projected to experience the largest percentage employment increases over the period.

Education and Core Employability Skill Levels

The pie charts in Figure 59 break down estimated 2008, and projected 2016, employment in the identified green occupations according to the education or training level typically required. As these data indicate, jobs that require a BA degree or above are estimated to have accounted for 26 percent of the total employment in these occupations in 2008, and are projected to account for 27 percent in 2018. The pie charts in Figure 60 provide a comparable breakdown by CRC level for 2008 and 2018 employment. As the data show, green jobs that require core employability skills at the gold CRC level or above are estimated to comprise 28 percent of total employment in these occupation in both 2008 and 2018.

Gap Analysis

Table 30 presents the "top 20" gaps identified for the state of Virginia. According to these data, the largest estimated gaps are determined to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Computer Systems Analysts*, 3) *Computer Software Engineers, Systems Software*, 4) *Computer Software Engineers, Applications*, and 5) *Network and Computer Systems Administrators*. As with the data presented earlier for the state of Maryland, an important feature of the data presented in Table 30 is the very high education and skills levels required for these occupations. Nineteen out of the top 20 gaps are in occupations that typically require a BA degree or above, while 9 out of the 11 occupations for which data are available require a gold CRC or above.

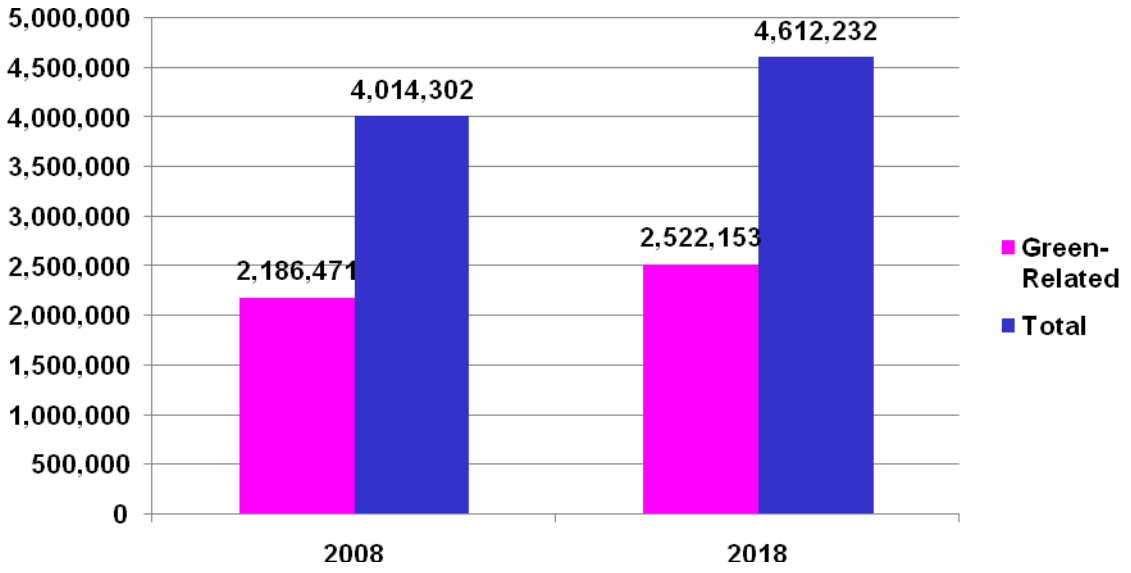


Figure 57: Virginia Statewide – Green-Related Occupational Employment, 2008 to 2018

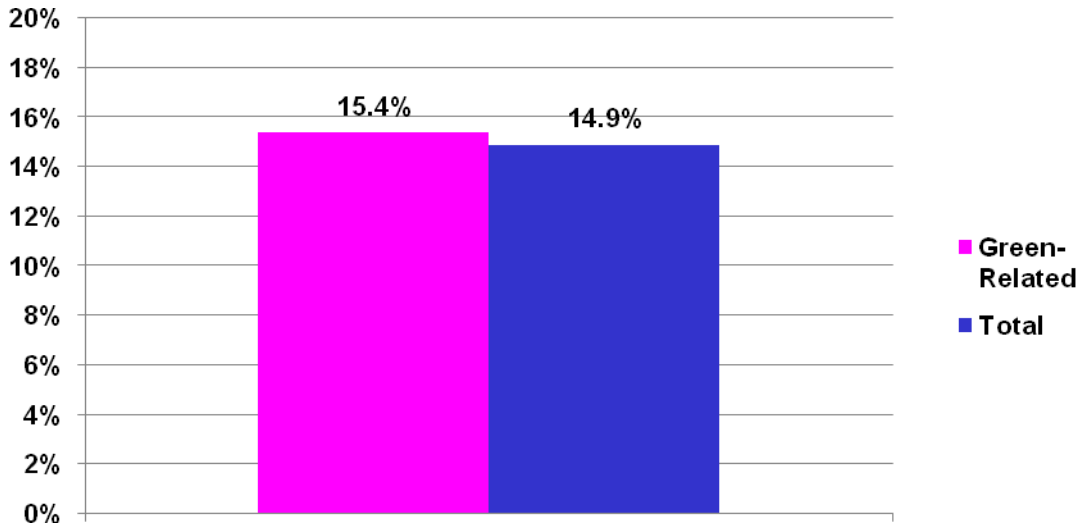


Figure 58: Virginia Statewide – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 29: Virginia Statewide – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Computer and Mathematical Occupations	15-0000	130,205	177,825	36.6%
Healthcare Support Occupations	31-0000	9,758	13,128	34.5%
Life, Physical, and Social Science Occupations	19-0000	22,061	28,328	28.4%
Business and Financial Operations Occupations	13-0000	198,218	248,410	25.3%
Community and Social Services Occupations	21-0000	14,810	18,408	24.3%
Healthcare Practitioners and Technical Occupations	29-0000	72,237	88,926	23.1%
Protective Service Occupations	33-0000	12,410	14,989	20.8%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	30,918	37,042	19.8%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	49,836	59,297	19.0%
Education, Training, and Library Occupations	25-0000	33,902	40,050	18.1%
Personal Care and Service Occupations	39-0000	35,815	41,934	17.1%
Food Preparation and Serving Related Occupations	35-0000	160,302	186,883	16.6%
Architecture and Engineering Occupations	17-0000	62,662	71,990	14.9%
Construction and Extraction Occupations	47-0000	175,099	201,121	14.9%
Office and Administrative Support Occupations	43-0000	408,660	462,014	13.1%
Installation, Maintenance, and Repair Occupations	49-0000	125,168	141,492	13.0%
Management Occupations	11-0000	186,110	206,382	10.9%
Transportation and Material Moving Occupations	53-0000	58,282	63,462	8.9%
Sales and Related Occupations	41-0000	318,010	341,109	7.3%
Production Occupations	51-0000	51,438	51,825	0.8%
Farming, Fishing, and Forestry Occupations	45-0000	30,570	27,538	-9.9%

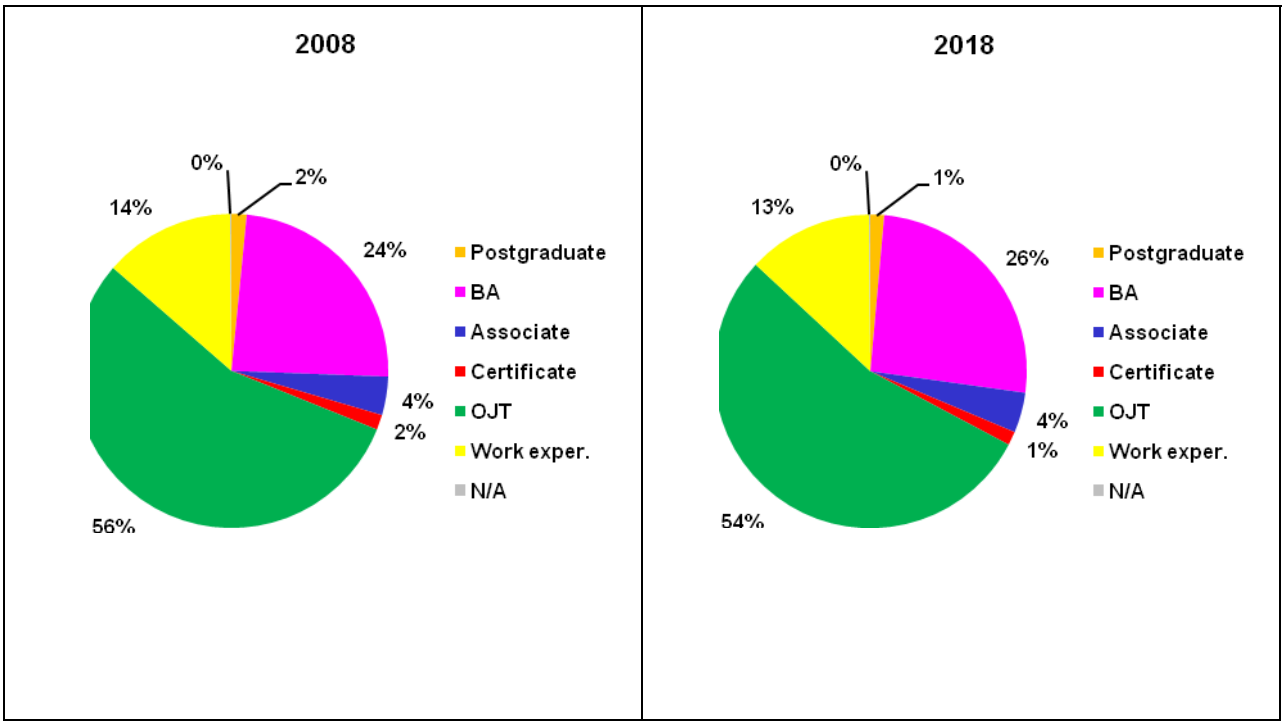


Figure 59: Virginia Statewide – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

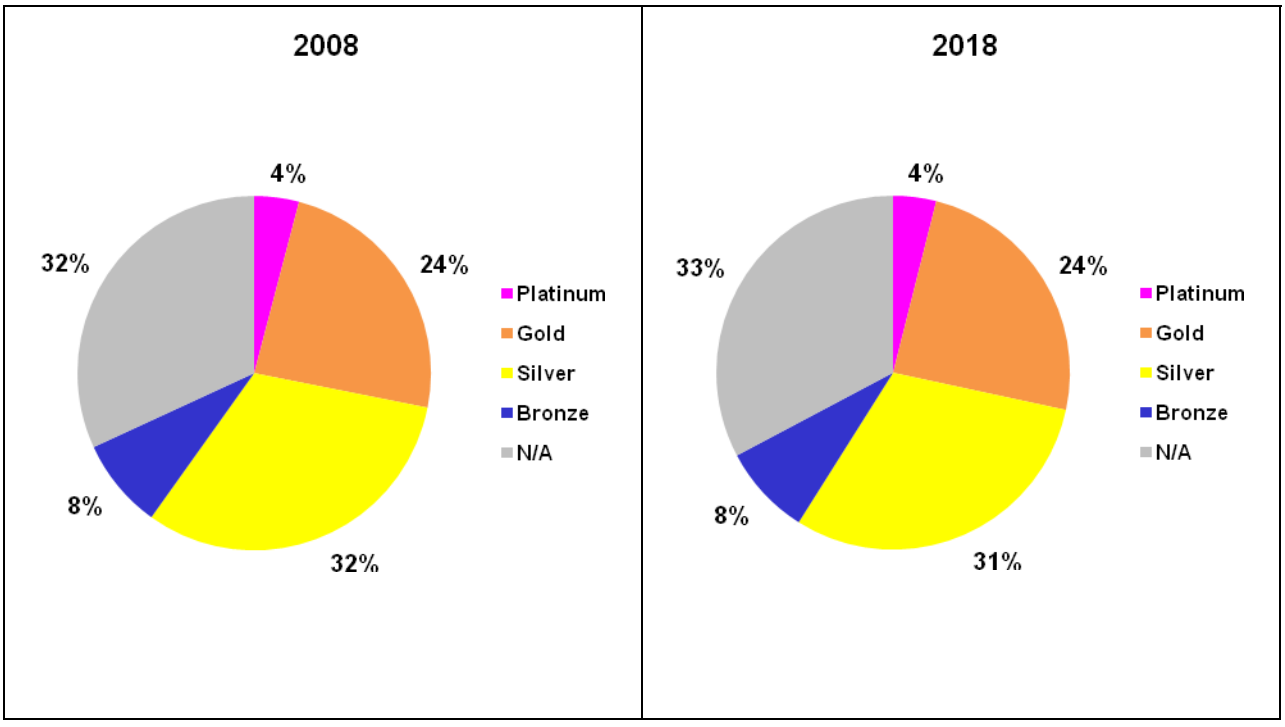


Figure 60: Virginia Statewide – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 30: Virginia Statewide –Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	1,373	7	-1,366
Computer Systems Analysts	15-1051		BA degree	1,933	733	-1,200
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	1,473	306	-1,167
Computer Software Engineers, Applications	15-1031		BA degree	1,630	830	-800
Network and Computer Systems Administrators	15-1071		BA degree	1,029	690	-339
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus experience	500	188	-312
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	492	185	-307
Accountants and Auditors	13-2011	Bronze	BA degree	1,680	1,407	-273
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	539	270	-269
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	370	230	-140
Civil Engineers	17-2051		BA degree	457	318	-139
Operations Research Analysts	15-2031	Gold	Master's degree	304	166	-138
Computer and Information Systems Managers	11-3021	Platinum	BA or higher degree, plus work experience	552	417	-135
Physical Therapists	29-1123		Master's degree	182	58	-124
Electrical Engineers	17-2071	Gold	BA degree	298	176	-122
Mechanical Engineers	17-2141	Gold	BA degree	254	153	-101
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	99	0	-99
Surveyors	17-1022		BA degree	94	0	-94
Personal Financial Advisors	13-2052		BA degree	203	109	-94
Environmental Engineers	17-2081		BA degree	100	7	-93

WIA I (Southwestern Virginia)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 35,031 (or 49.5 percent of total employment) in 2008 to 38,720 (or 49.0 percent of total employment) in 2018 (*see* Figure 61).
- Overall, employment in identified green occupations is projected to increase by 10.5 percent between 2008 and 2018, as compared to an 11.6 percent increase in total employment (*see* Figure 62).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Healthcare Support*, 2) *Life, Physical, and Social Science*, 3) *Community and Social Services*, 4) *Computer and Mathematical*, and 5) *Healthcare Practitioners and Technical* occupations (*see* Table 31).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 11 percent of the total employment in green occupations in both 2008 and 2018 (*see* Figure 63).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 21 percent of total employment in green occupations in both 2008 and 2018 (*see* Figure 64).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Automotive Service Technicians and Mechanics*, 2) *Accountants and Auditors*, 3*) Occupational Health and Safety Specialists*, 4) *Civil Engineers*, and 5) *Education Administrators, Elementary and Secondary School* (*see* Table 32).
- Eighteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 32).
- Nine of the 12 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 32).

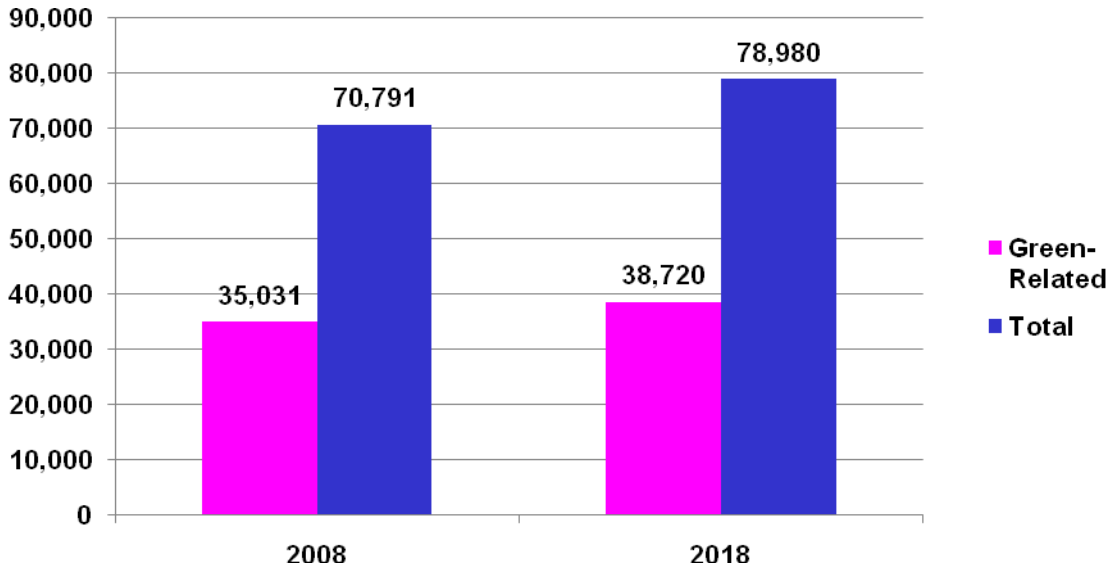


Figure 61: WIA I– Green-Related Occupational Employment, 2008 to 2018

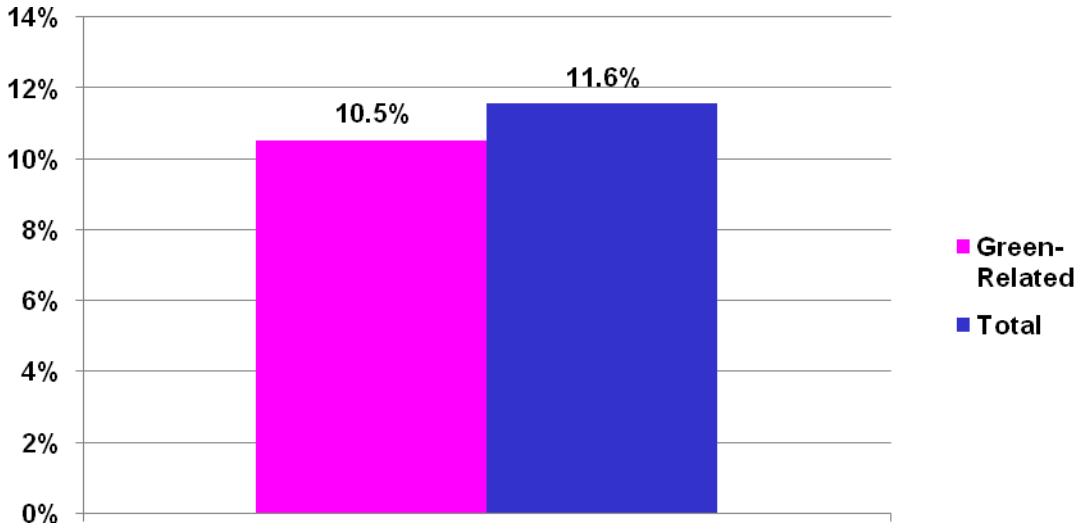


Figure 62: WIA I – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 31: WIA I – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Healthcare Support Occupations	31-0000	89	121	36.0%
Life, Physical, and Social Science Occupations	19-0000	49	65	32.7%
Community and Social Services Occupations	21-0000	681	851	25.0%
Computer and Mathematical Occupations	15-0000	159	196	23.3%
Healthcare Practitioners and Technical Occupations	29-0000	1,558	1,919	23.2%
Personal Care and Service Occupations	39-0000	529	642	21.4%
Architecture and Engineering Occupations	17-0000	552	655	18.7%
Education, Training, and Library Occupations	25-0000	890	1,051	18.1%
Business and Financial Operations Occupations	13-0000	967	1,136	17.5%
Food Preparation and Serving Related Occupations	35-0000	2,714	3,161	16.5%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	605	704	16.4%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	152	173	13.8%
Office and Administrative Support Occupations	43-0000	6,505	7,203	10.7%
Installation, Maintenance, and Repair Occupations	49-0000	2,644	2,924	10.6%
Production Occupations	51-0000	905	977	8.0%
Sales and Related Occupations	41-0000	6,782	7,238	6.7%
Transportation and Material Moving Occupations	53-0000	2,080	2,218	6.6%
Protective Service Occupations	33-0000	184	194	5.4%
Management Occupations	11-0000	2,074	2,171	4.7%
Construction and Extraction Occupations	47-0000	4,912	5,121	4.3%

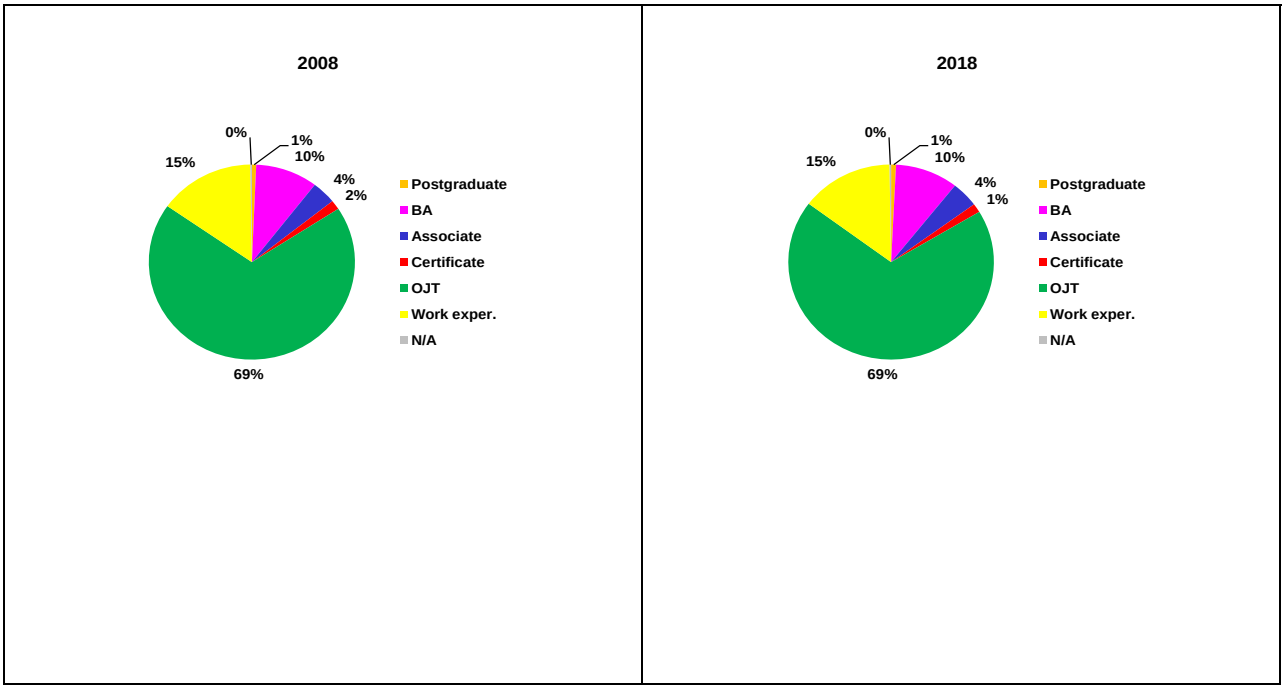


Figure 63: WIA I – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

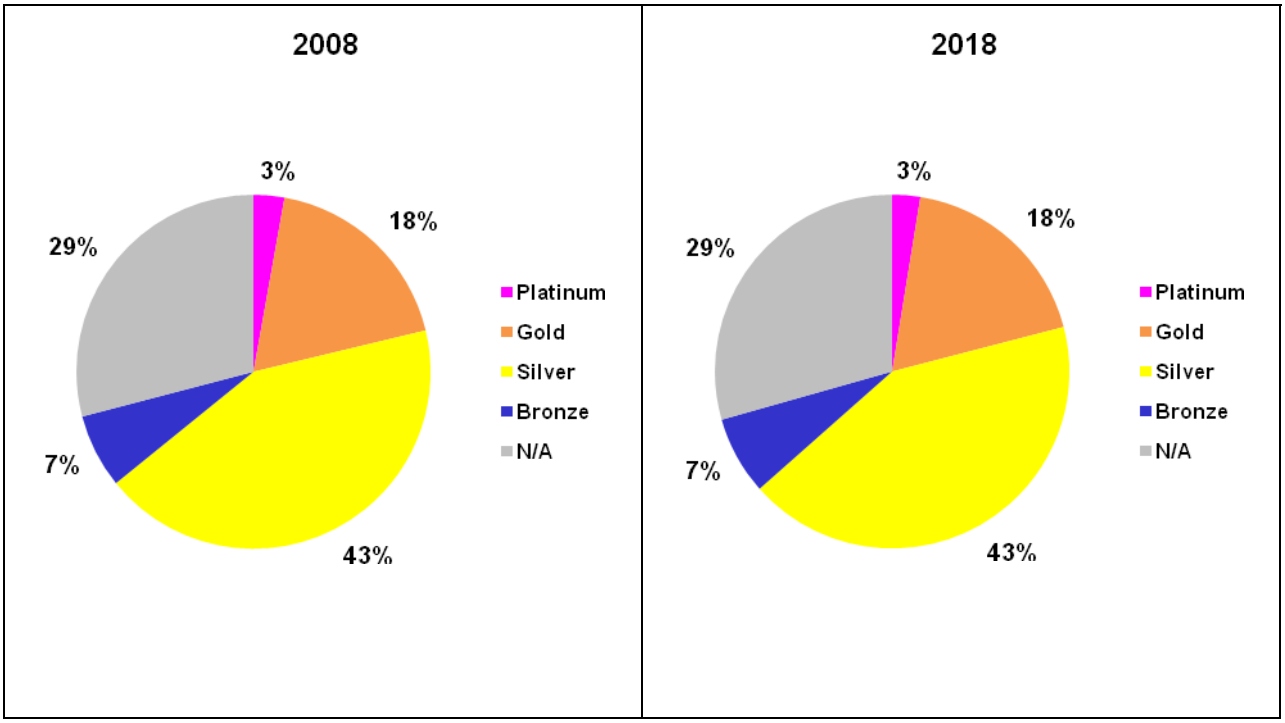


Figure 64: WIA I – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 32: WIA I – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	12	0	-12
Accountants and Auditors	13-2011	Bronze	BA degree	11	0	-11
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	8	0	-8
Civil Engineers	17-2051		BA degree	6	0	-6
Education Administrators, Elementary and Secondary School	11-9032	Gold	BA or higher degree, plus work experience	6	0	-6
Educational, Vocational, and School Counselors	21-1012	Silver	Master's degree	6	0	-6
Surveyors	17-1022		BA degree	5	0	-5
Business Operations Specialists, All Other	13-1199		BA degree	5	0	-5
Physical Therapists	29-1123		Master's degree	4	0	-4
Market Research Analysts	19-3021	Gold	BA degree	3	0	-3
Mechanical Engineers	17-2141	Gold	BA degree	3	0	-3
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	3	0	-3
Chief Executives	11-1011		BA or higher degree, plus work experience	5	2	-3
Education Administrators, Postsecondary	11-9033	Platinum	BA or higher degree, plus work experience	3	0	-3
Medical and Clinical Laboratory Technicians	29-2012	Gold	Associate degree	2	0	-2
Tax Examiners, Collectors, and Revenue Agents	13-2081		BA degree	2	0	-2
Graphic Designers	27-1024	Gold	BA degree	2	0	-2
Computer Software Engineers, Applications	15-1031		BA degree	1	0	-1
Marketing Managers	11-2021		BA or higher degree, plus work experience	1	0	-1
Engineering Managers	11-9041	Platinum	BA or higher degree, plus work experience	1	0	-1

WIA II (New River/Mount Rogers)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 71,661 (or 47.3 percent of total employment) in 2008 to 79,905 (or 47.8 percent of total employment) in 2018 (*see* Figure 65).
- Overall, employment in identified green occupations is projected to increase by 11.5 percent between 2008 and 2018, as compared to a 10.5 percent increase in total employment (*see* Figure 66).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Healthcare Support*, 2) *Community and Social Services*, 3) *Computer and Mathematical*, 4) *Healthcare Practitioners and Technical*, and 5) *Personal Care and Service* occupations (*see* Table 33).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 15 percent of the total employment in green occupations in 2008 and are projected to account for 16 percent in 2018 (*see* Figure 67).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 23 percent of total employment in green occupations in 2008 and are projected to comprise 22 percent in 2018 (*see* Figure 68).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Automotive Service Technicians and Mechanics*, 3)*Physical Therapists*, 4) *Human Resources, Training, and Labor Relations Specialists, All Other*, and 5) *Training and Development Specialists* (*see* Table 34).
- Ten out of the 14 negative gaps are in occupations that typically require a BA degree or above (*see* Table 34).
- Five of the eight "top 20" gap occupations (although in this instance, only 14 occupations were actually found to have a negative gap – a possible shortage of trained workers) for which data are available require a gold CRC or above (*see* Table 34).

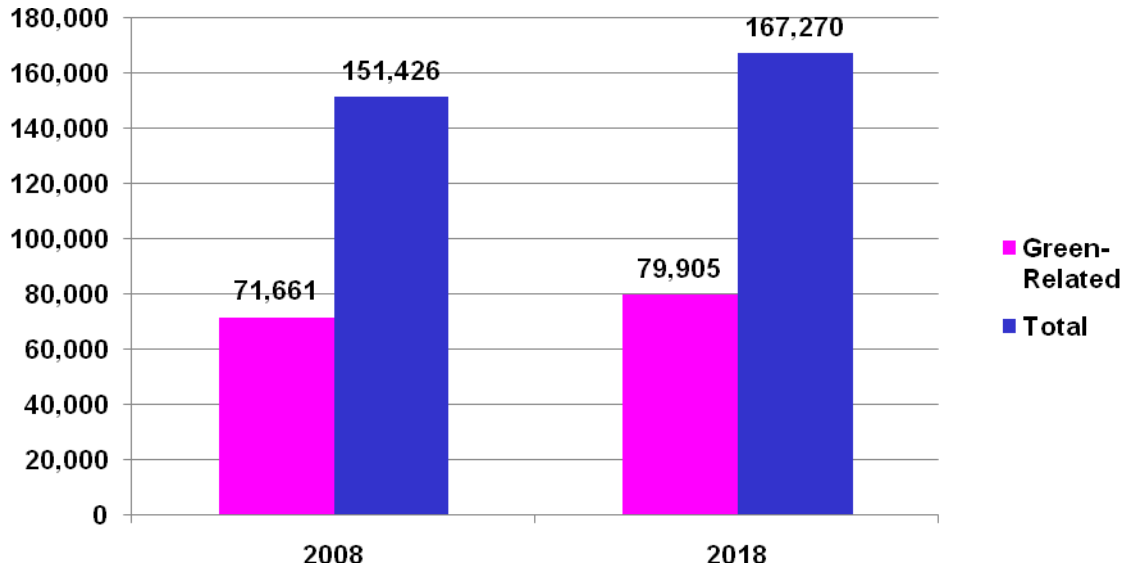


Figure 65: WIA II – Green-Related Occupational Employment, 2008 to 2018

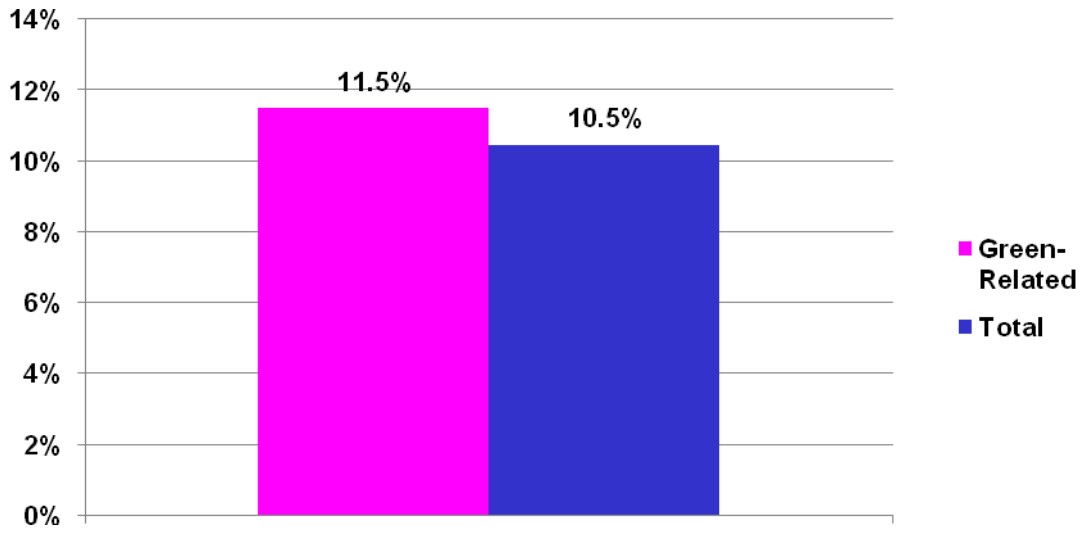


Figure 66: WIA II – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 33: WIA II – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Healthcare Support Occupations	31-0000	259	353	36.3%
Community and Social Services Occupations	21-0000	747	962	28.8%
Computer and Mathematical Occupations	15-0000	1,135	1,459	28.5%
Healthcare Practitioners and Technical Occupations	29-0000	2,652	3,278	23.6%
Personal Care and Service Occupations	39-0000	1,107	1,315	18.8%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	661	781	18.2%
Business and Financial Operations Occupations	13-0000	3,419	4,033	18.0%
Life, Physical, and Social Science Occupations	19-0000	547	645	17.9%
Education, Training, and Library Occupations	25-0000	1,245	1,468	17.9%
Food Preparation and Serving Related Occupations	35-0000	6,036	7,065	17.0%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	1,728	1,993	15.3%
Construction and Extraction Occupations	47-0000	4,887	5,604	14.7%
Office and Administrative Support Occupations	43-0000	15,222	17,227	13.2%
Protective Service Occupations	33-0000	72	80	11.1%
Transportation and Material Moving Occupations	53-0000	2,581	2,807	8.8%
Installation, Maintenance, and Repair Occupations	49-0000	4,751	5,099	7.3%
Sales and Related Occupations	41-0000	13,504	14,353	6.3%
Management Occupations	11-0000	4,475	4,713	5.3%
Architecture and Engineering Occupations	17-0000	1,826	1,910	4.6%
Farming, Fishing, and Forestry Occupations	45-0000	69	71	2.9%
Production Occupations	51-0000	4,738	4,689	-1.0%

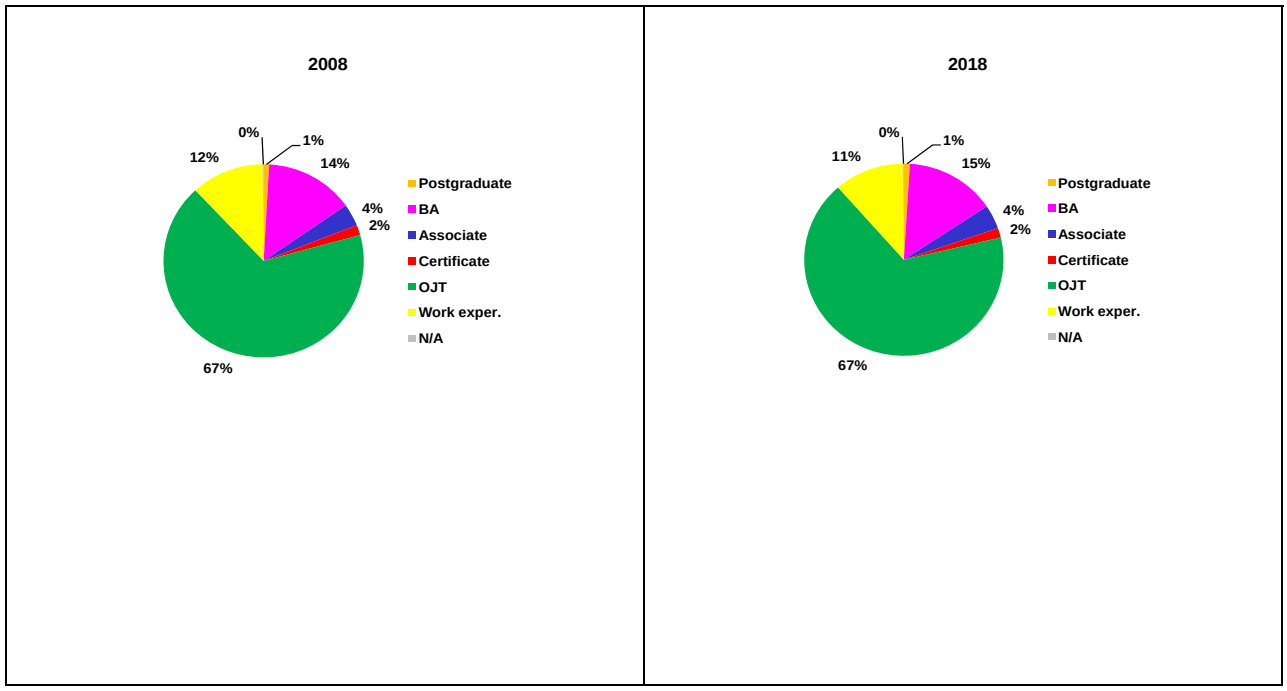


Figure 67: WIA II – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

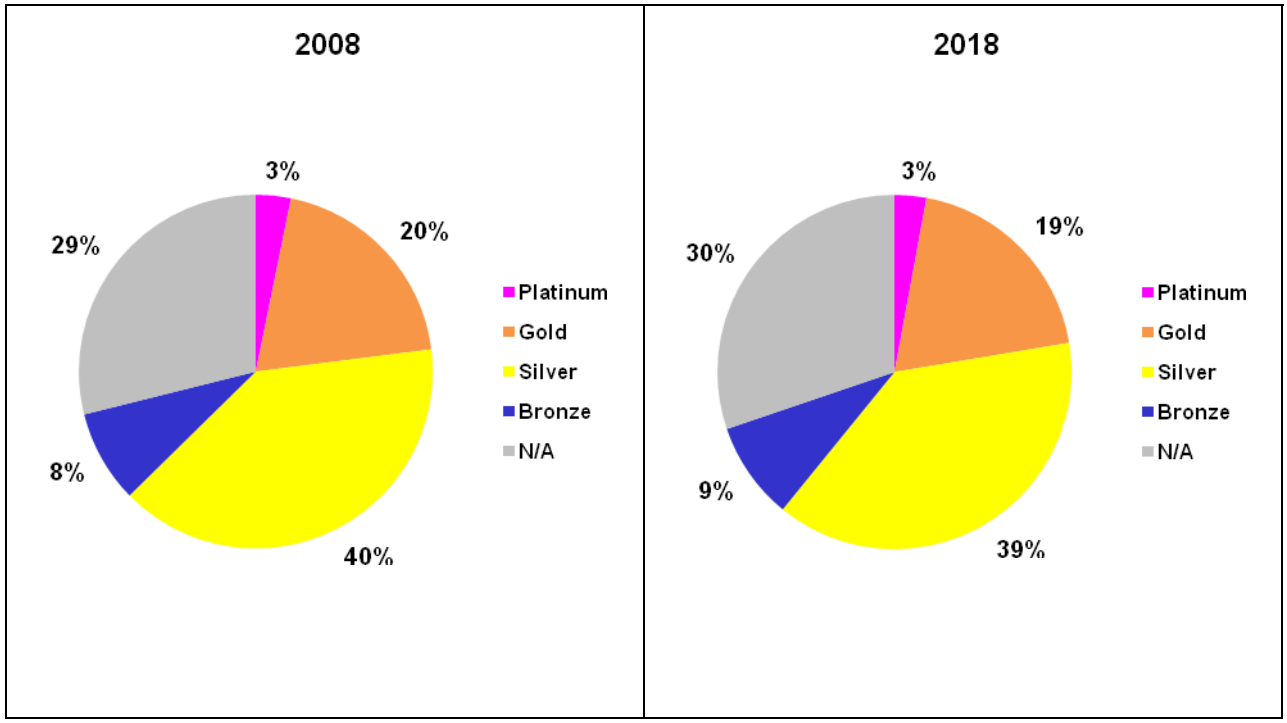


Figure 68: WIA II – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 34: WIA II – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	26	0	-26
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	25	10	-15
Physical Therapists	29-1123		Master's degree	11	0	-11
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	9	0	-9
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	8	0	-8
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	5	0	-5
Surveyors	17-1022		BA degree	5	0	-5
Education, Training, and Library Workers, All Other	25-9099	Silver	BA degree	4	0	-4
Purchasing Managers	11-3061	Silver	BA or higher degree, plus work experience	2	0	-2
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022		Certificate	2	0	-2
Broadcast Technicians	27-4012		Associate degree	1	0	-1
Zoologists and Wildlife Biologists	19-1023		BA degree	1	0	-1
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	1	0	-1
Mechanical Drafters	17-3013	Gold	Certificate	1	0	-1

WIA III (Western Virginia)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 85,795 (or 49.4 percent of total employment) in 2008 to 96,126 (or 49.5 percent of total employment) in 2018 (*see* Figure 69).
- Overall, employment in identified green occupations is projected to increase by 12.0 percent between 2008 and 2018, as compared to an 11.7 percent increase in total employment (*see* Figure 70).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Community and Social Services*, 2) *Healthcare Support*, 3) *Computer and Mathematical*, 4) *Life, Physical, and Social Science*, and 5) *Healthcare Practitioners and Technical* occupations (*see* Table 35).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 15 percent of the total employment in green occupations in both 2008 and 2018 (*see* Figure 71).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 24 percent of total employment in green occupations in both 2008 and 2018 (*see* Figure 72).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Automotive Service Technicians and Mechanics*, 3)*Education Administrators, Elementary and Secondary School*, 4) *Training and Development Specialists*, and 5) *Human Resources, Training, and Labor Relations Specialists, All Other* (*see* Table 36).
- Seventeen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 36).
- Nine of the 11 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 36).

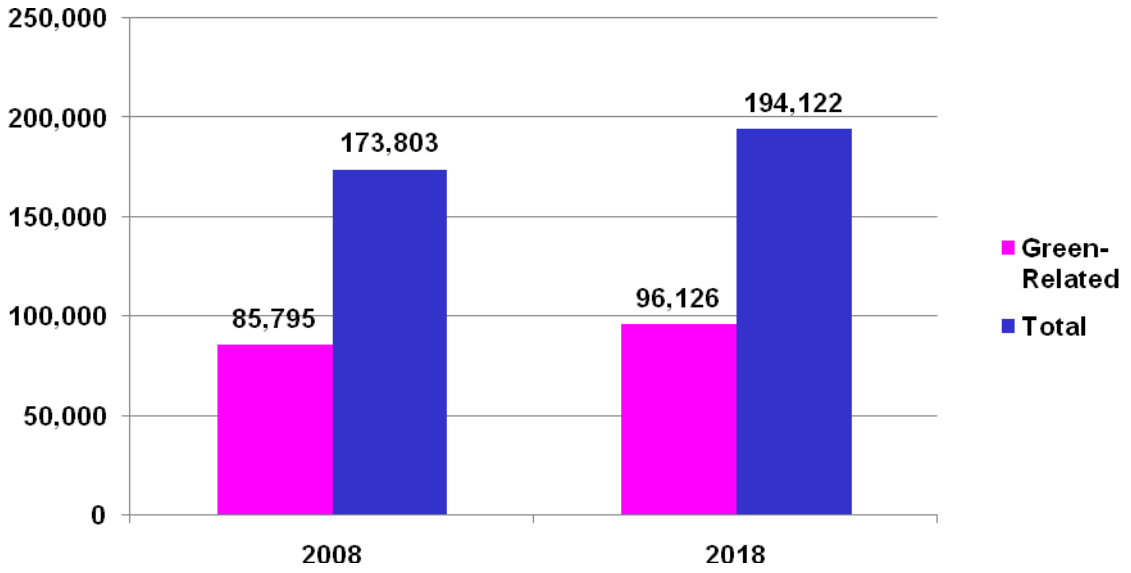


Figure 69: WIA III – Green-Related Occupational Employment, 2008 to 2018

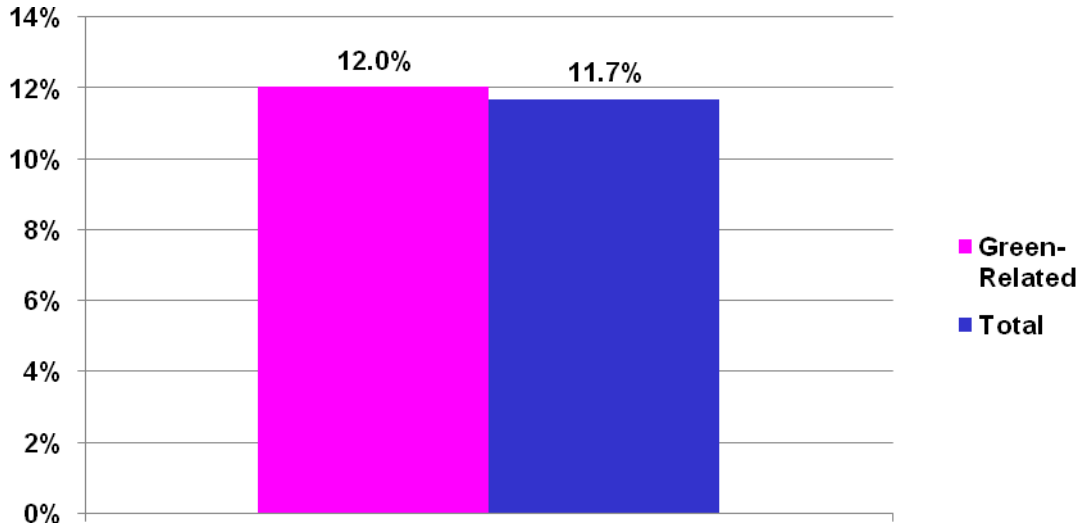


Figure 70: WIA III – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 35: WIA III – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Community and Social Services Occupations	23-0000	659	959	45.5%
Healthcare Support Occupations	31-0000	377	502	33.2%
Computer and Mathematical Occupations	17-0000	1,316	1,671	27.0%
Life, Physical, and Social Science Occupations	21-0000	343	422	23.0%
Healthcare Practitioners and Technical Occupations	29-0000	4,519	5,536	22.5%
Business and Financial Operations Occupations	15-0000	5,370	6,426	19.7%
Education, Training, and Library Occupations	25-0000	1,494	1,761	17.9%
Food Preparation and Serving Related Occupations	33-0000	6,276	7,393	17.8%
Personal Care and Service Occupations	37-0000	837	979	17.0%
Building and Grounds Cleaning and Maintenance Occupations	35-0000	1,299	1,517	16.8%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	1,044	1,196	14.6%
Construction and Extraction Occupations	45-0000	7,736	8,862	14.6%
Office and Administrative Support Occupations	41-0000	20,266	22,531	11.2%
Installation, Maintenance, and Repair Occupations	47-0000	5,767	6,311	9.4%
Transportation and Material Moving Occupations	51-0000	3,600	3,865	7.4%
Sales and Related Occupations	39-0000	14,794	15,774	6.6%
Management Occupations	13-0000	5,605	5,926	5.7%
Architecture and Engineering Occupations	19-0000	1,493	1,563	4.7%
Production Occupations	49-0000	2,875	2,820	-1.9%
Farming, Fishing, and Forestry Occupations	43-0000	125	112	-10.4%

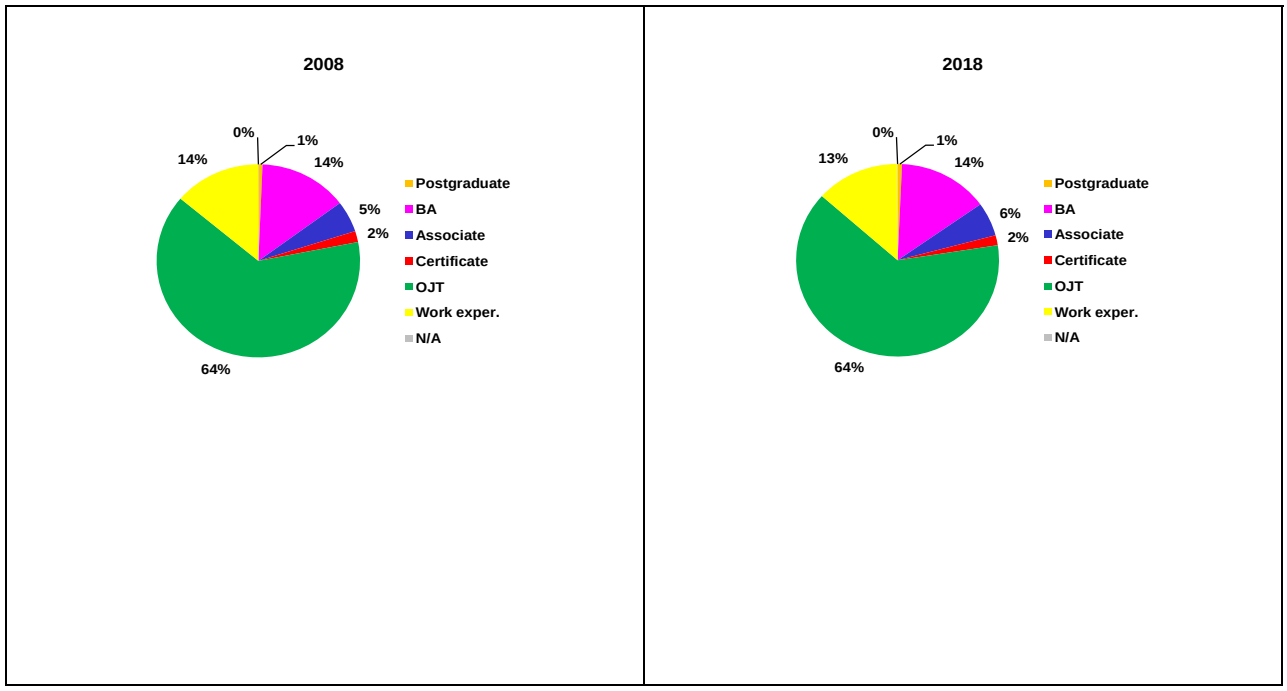


Figure 71: WIA III – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

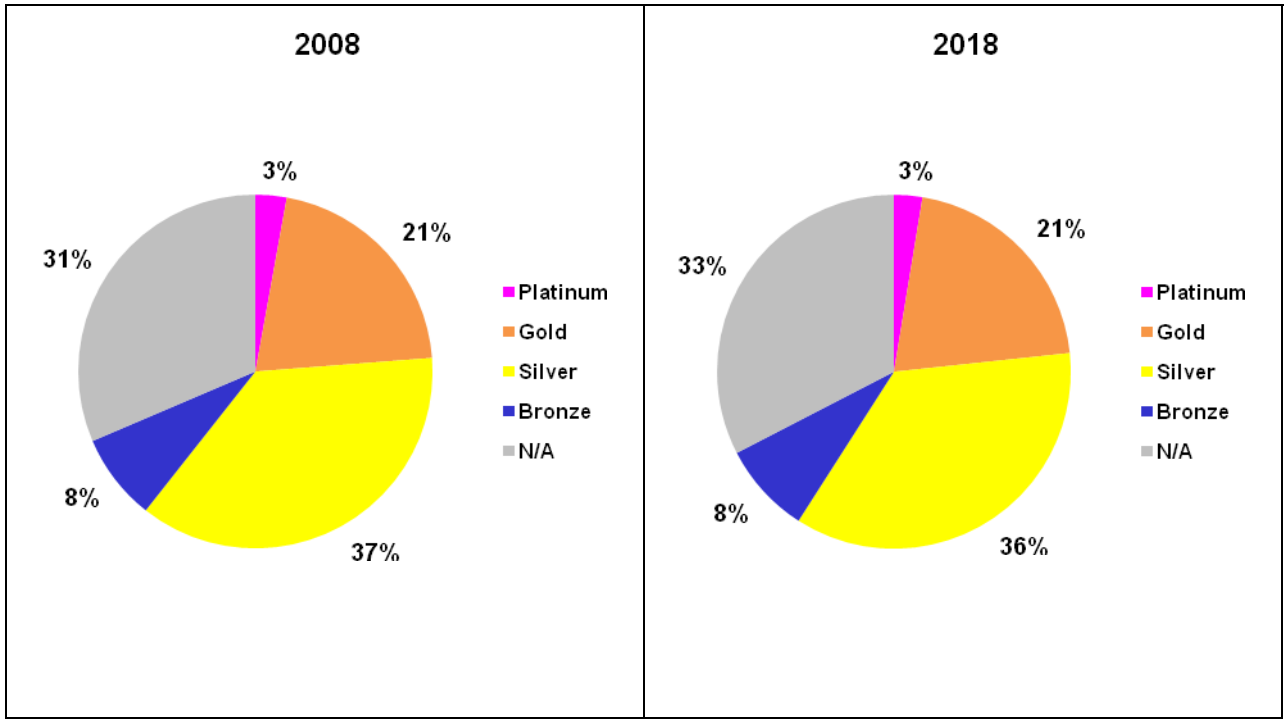


Figure 72: WIA III – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 36: WIA III – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	26	0	-26
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	25	0	-25
Education Administrators, Elementary and Secondary School	11-9032	Gold	BA or higher degree, plus work experience	18	0	-18
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	16	0	-16
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	13	0	-13
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	11	1	-10
Physical Therapists	29-1123		Master's degree	9	0	-9
Electrical Engineers	17-2071	Gold	BA degree	8	0	-8
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	15	7	-8
Medical and Clinical Laboratory Technicians	29-2012	Gold	Associate degree	7	0	-7
Mechanical Engineers	17-2141	Gold	BA degree	7	0	-7
Educational, Vocational, and School Counselors	21-1012	Silver	Master's degree	7	0	-7
Personal Financial Advisors	13-2052		BA degree	8	1	-7
Civil Engineers	17-2051		BA degree	6	0	-6
Computer Software Engineers, Applications	15-1031		BA degree	9	3	-6
Education Administrators, Preschool and Child Care Center/Program	11-9031		BA or higher degree, plus work experience	4	0	-4
Broadcast Technicians	27-4012		Associate degree	3	0	-3
Surveyors	17-1022		BA degree	3	0	-3
Architects, Except Landscape and Naval	17-1011		BA degree	3	0	-3
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	3	0	-3

WIA IV (Shenandoah Valley)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 112,522 (or 49.6 percent of total employment) in 2008 to 125,795 (or 49.6 percent of total employment) in 2018 (*see* Figure 73).
- Overall, employment in identified green occupations is projected to increase by 11.8 percent between 2008 and 2018, as compared to an 11.7 percent increase in total employment (*see* Figure 74).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Healthcare Support*, 2) *Computer and Mathematical*, 3) *Healthcare Practitioners and Technical*, 4) *Community and Social Services*, and 5) *Business and Financial Operations* occupations (*see* Table 37).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 13 percent of the total employment in green occupations in both 2008 and 2018 (*see* Figure 75).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 24 percent of total employment in green occupations in both 2008 and 2018 (*see* Figure 76).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Physical Therapists*, 3)*Education Administrators, Elementary and Secondary School*, 4) *Automotive Service Technicians and Mechanics*, and 5) *Graphic Designers* (*see* Table 38).
- Twelve out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 38).
- Six of the eight "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 38).

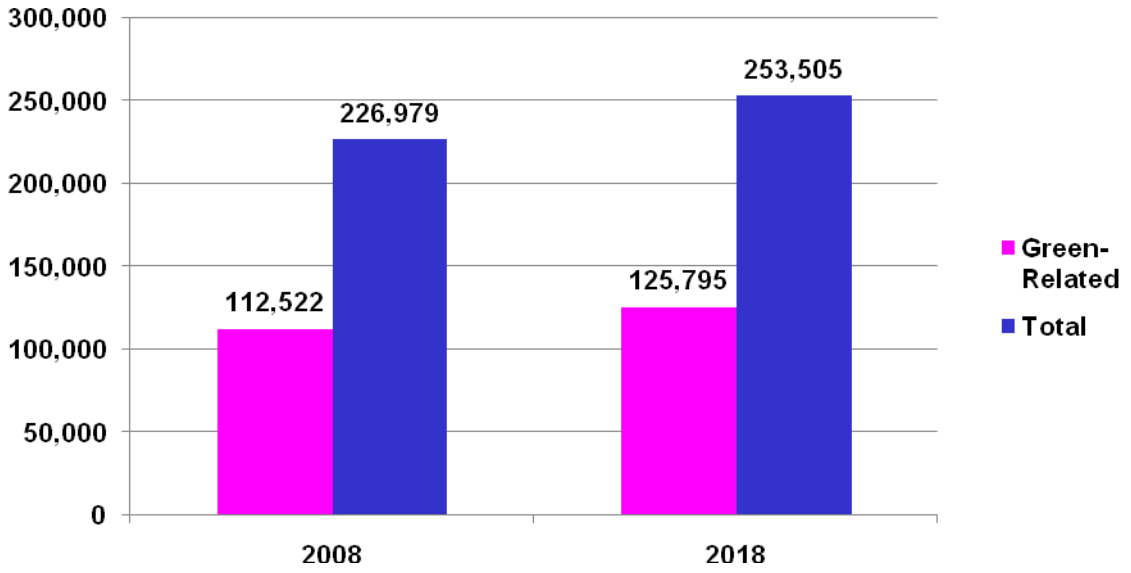


Figure 73: WIA IV – Green-Related Occupational Employment, 2008 to 2018

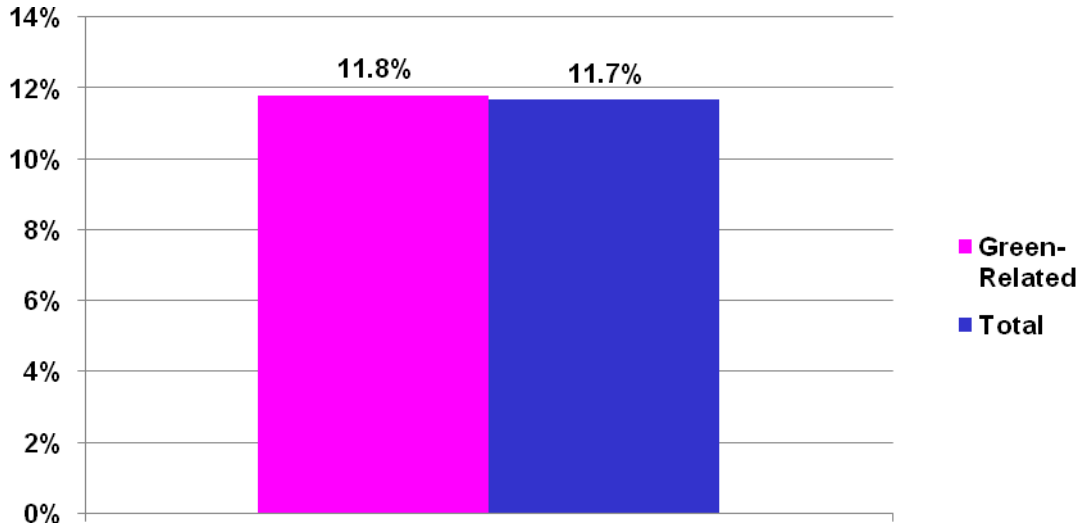


Figure 74: WIA IV – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 37: WIA IV – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Healthcare Support Occupations	31-0000	387	522	34.9%
Computer and Mathematical Occupations	15-0000	1,072	1,335	24.5%
Healthcare Practitioners and Technical Occupations	29-0000	4,561	5,621	23.2%
Community and Social Services Occupations	21-0000	879	1,061	20.7%
Business and Financial Operations Occupations	13-0000	5,047	6,073	20.3%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	2,879	3,418	18.7%
Education, Training, and Library Occupations	25-0000	1,891	2,234	18.1%
Life, Physical, and Social Science Occupations	19-0000	542	634	17.0%
Food Preparation and Serving Related Occupations	35-0000	10,672	12,453	16.7%
Personal Care and Service Occupations	39-0000	2,082	2,424	16.4%
Construction and Extraction Occupations	47-0000	10,169	11,824	16.3%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	1,123	1,286	14.5%
Architecture and Engineering Occupations	17-0000	1,575	1,749	11.0%
Office and Administrative Support Occupations	43-0000	22,438	24,753	10.3%
Transportation and Material Moving Occupations	53-0000	5,044	5,508	9.2%
Installation, Maintenance, and Repair Occupations	49-0000	8,218	8,962	9.1%
Protective Service Occupations	33-0000	224	243	8.5%
Sales and Related Occupations	41-0000	20,781	22,393	7.8%
Farming, Fishing, and Forestry Occupations	45-0000	198	208	5.1%
Management Occupations	11-0000	6,712	7,044	4.9%
Production Occupations	51-0000	6,028	6,050	0.4%

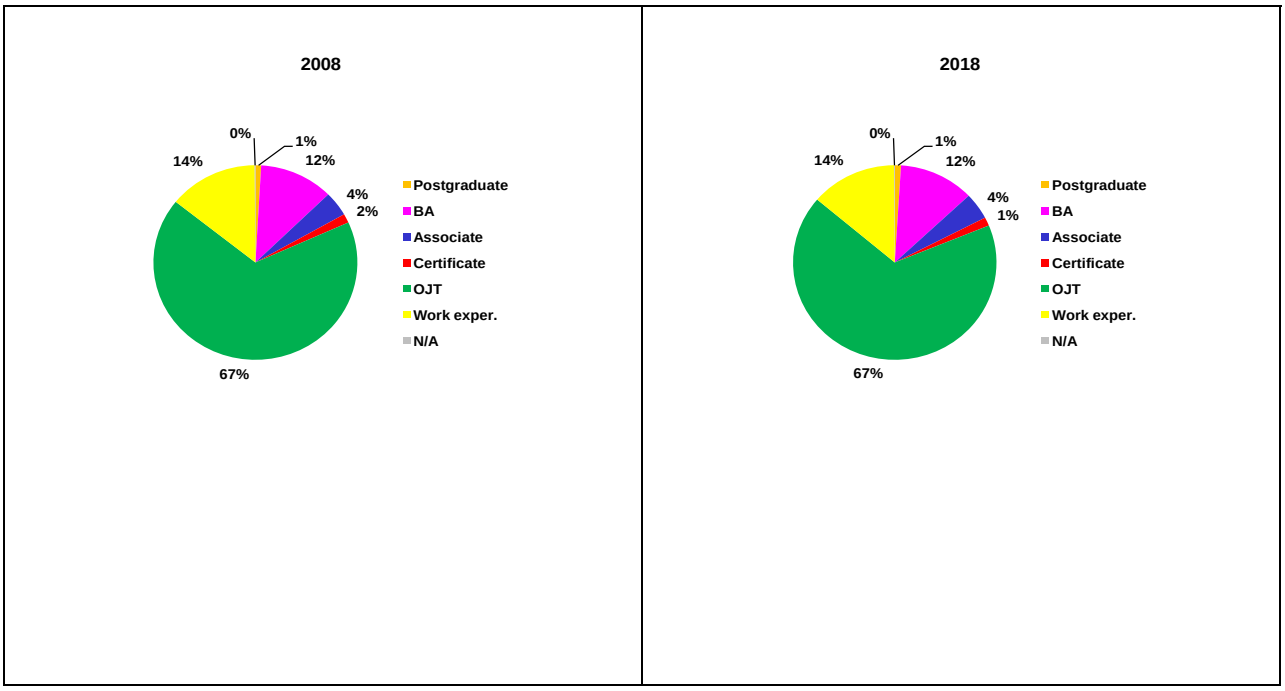


Figure 75: WIA IV – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

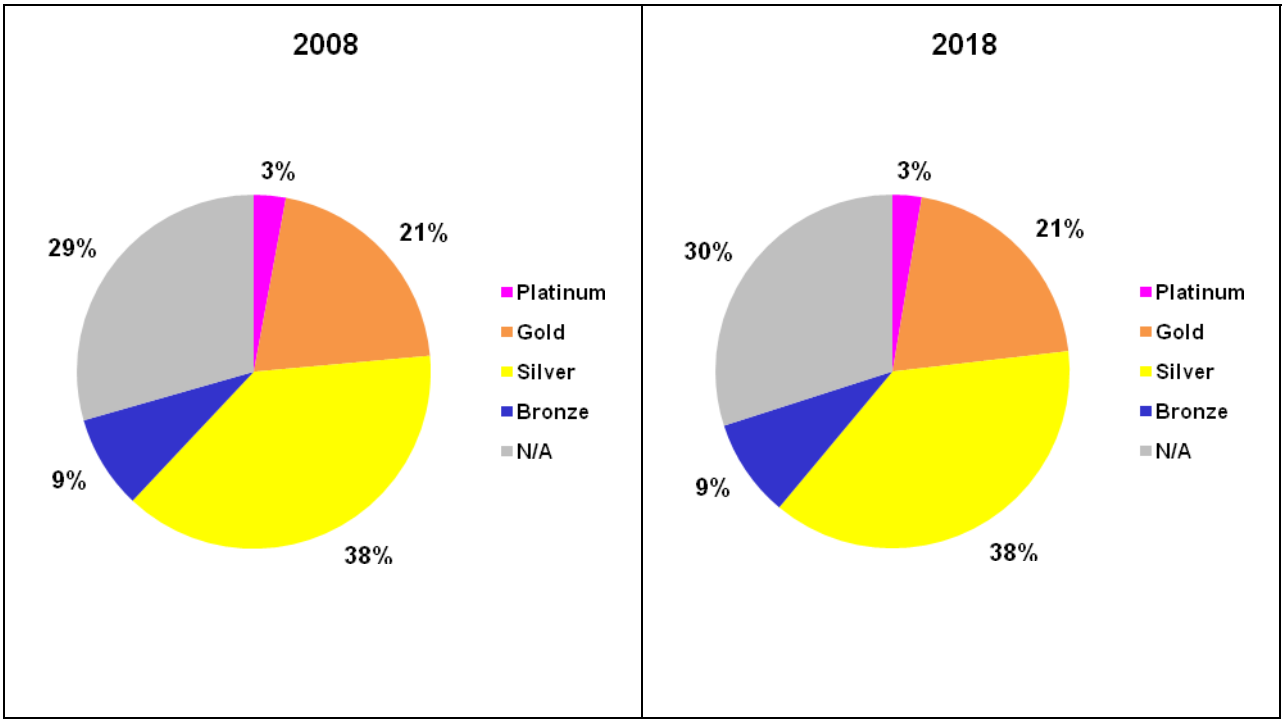


Figure 76: WIA IV – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 38: WIA IV – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	32	0	-32
Physical Therapists	29-1123		Master's degree	15	0	-15
Education Administrators, Elementary and Secondary School	11-9032	Gold	BA or higher degree, plus work experience	20	7	-13
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	30	17	-13
Graphic Designers	27-1024	Gold	BA degree	10	0	-10
Medical and Clinical Laboratory Technicians	29-2012	Gold	Associate degree	7	0	-7
Computer Software Engineers, Applications	15-1031		BA degree	13	6	-7
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	5	0	-5
Electronic Home Entertainment Equipment Installers and Repairers	49-2097		Certificate	5	0	-5
Architects, Except Landscape and Naval	17-1011		BA degree	4	0	-4
Urban and Regional Planners	19-3051		Master's degree	4	0	-4
Broadcast Technicians	27-4012		Associate degree	3	0	-3
Surveyors	17-1022		BA degree	3	0	-3
Education Administrators, All Other	11-9039		BA or higher degree, plus work experience	4	1	-3
Education Administrators, Postsecondary	11-9033	Platinum	BA or higher degree, plus work experience	5	2	-3
Purchasing Managers	11-3061	Silver	BA or higher degree, plus work experience	3	0	-3
Architectural and Civil Drafters	17-3011	Gold	Certificate	4	1	-3
Agricultural and Food Science Technicians	19-4011		Associate degree	2	0	-2
Interior Designers	27-1025		Associate degree	2	0	-2
Life, Physical, and Social Science Technicians, All Other	19-4099		Associate degree	2	0	-2

WIA VI (Piedmont Workforce Network)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 81,077 (or 48.9 percent of total employment) in 2008 to 92,557 (or 48.9 percent of total employment) in 2018 (*see* Figure 77).
- Overall, employment in identified green occupations is projected to increase by 14.2 percent between 2008 and 2018, as compared to a 14.1 percent increase in total employment (*see* Figure 78).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Computer and Mathematical*, 2) *Healthcare Support*, 3) *Community and Social Services*, 4) *Life, Physical, and Social Science*, and 5) *Business and Financial Operations* occupations (*see* Table 39).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 20 percent of the total employment in green occupations in 2008 and are projected to account for 21 percent in 2018 (*see* Figure 79).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 26 percent of total employment in green occupations in 2008 and are projected to comprise 25 percent in 2018 (*see* Figure 80).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) Public Relations Specialists, 3)*Automotive Service Technicians and Mechanics*, 4) *Training and Development Specialists*, and 5*) Physical Therapists* (*see* Table 40).
- Seventeen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 40).
- Nine of the 10 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 40).

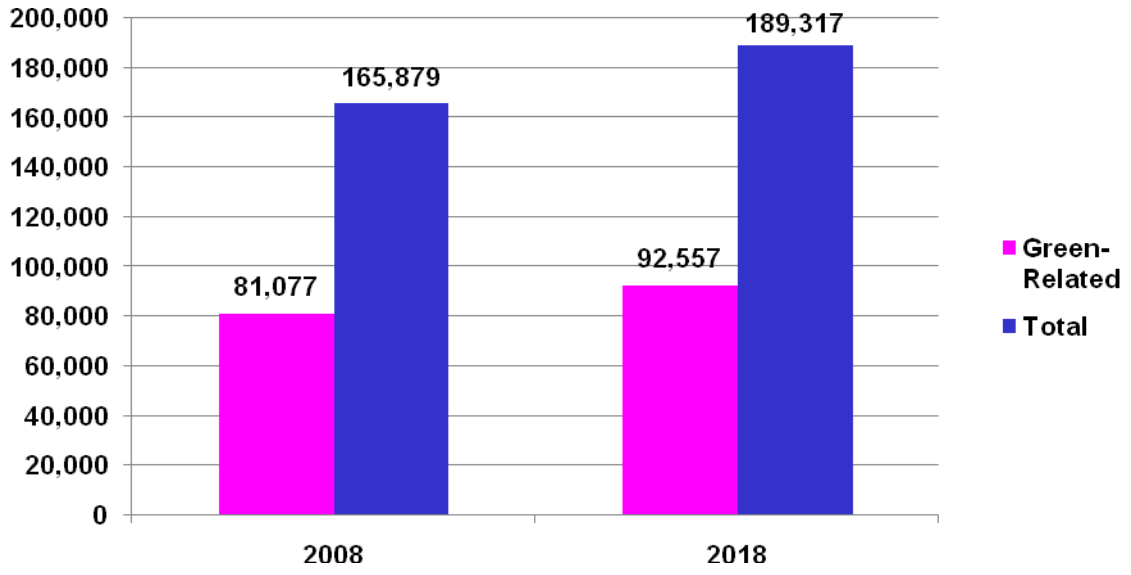


Figure 77: WIA VI – Green-Related Occupational Employment, 2008 to 2018

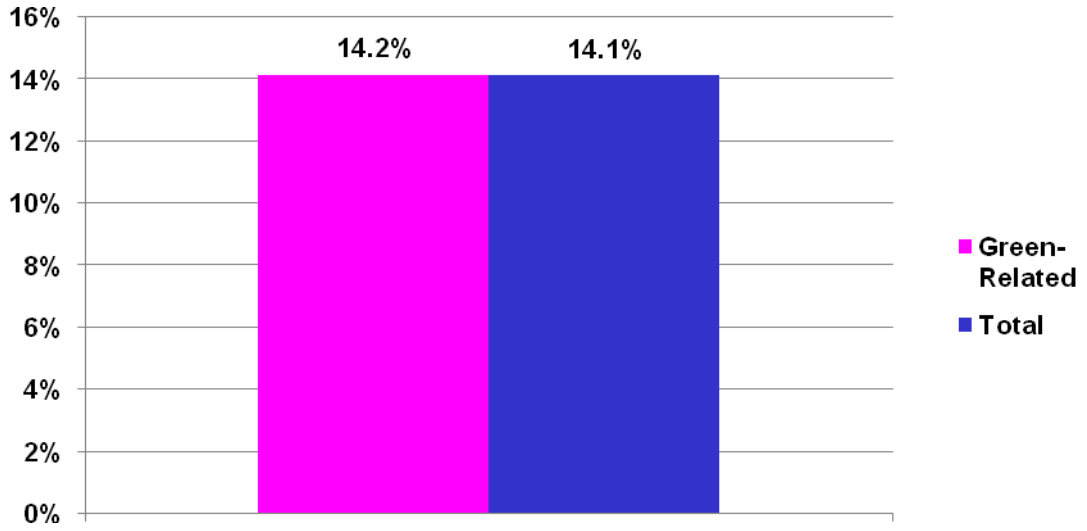


Figure 78: WIA VI – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 39: WIA VI – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Computer and Mathematical Occupations	15-0000	2,700	3,591	33.0%
Healthcare Support Occupations	31-0000	337	438	30.0%
Community and Social Services Occupations	21-0000	619	781	26.2%
Life, Physical, and Social Science Occupations	19-0000	693	873	26.0%
Business and Financial Operations Occupations	13-0000	5,283	6,637	25.6%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	1,355	1,702	25.6%
Healthcare Practitioners and Technical Occupations	29-0000	477	596	24.9%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	2,534	2,995	18.2%
Education, Training, and Library Occupations	25-0000	1,732	2,047	18.2%
Protective Service Occupations	33-0000	529	621	17.4%
Construction and Extraction Occupations	47-0000	8,807	10,287	16.8%
Food Preparation and Serving Related Occupations	35-0000	7,526	8,748	16.2%
Personal Care and Service Occupations	39-0000	1,472	1,705	15.8%
Architecture and Engineering Occupations	17-0000	2,203	2,484	12.8%
Installation, Maintenance, and Repair Occupations	49-0000	4,462	5,017	12.4%
Office and Administrative Support Occupations	43-0000	18,232	20,330	11.5%
Management Occupations	11-0000	5,932	6,453	8.8%
Transportation and Material Moving Occupations	53-0000	1,741	1,873	7.6%
Sales and Related Occupations	41-0000	12,591	13,503	7.2%
Production Occupations	51-0000	1,443	1,487	3.0%
Farming, Fishing, and Forestry Occupations	45-0000	409	389	-4.9%

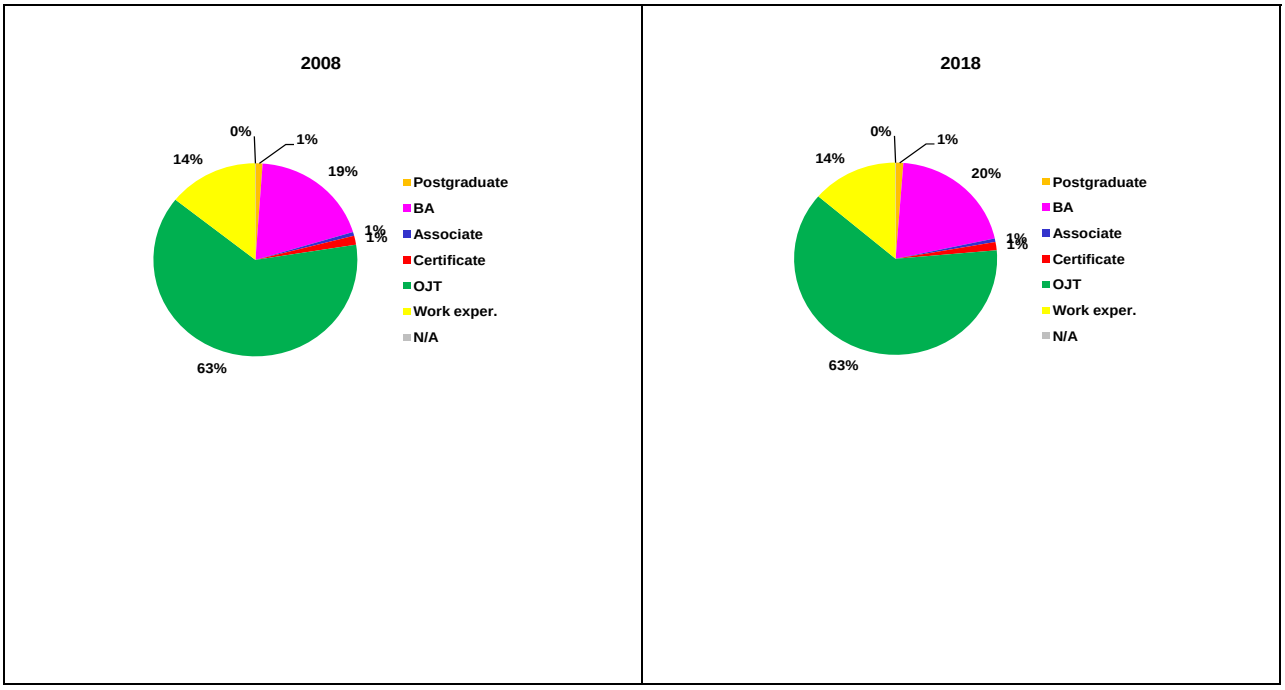


Figure 79: WIA VI – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

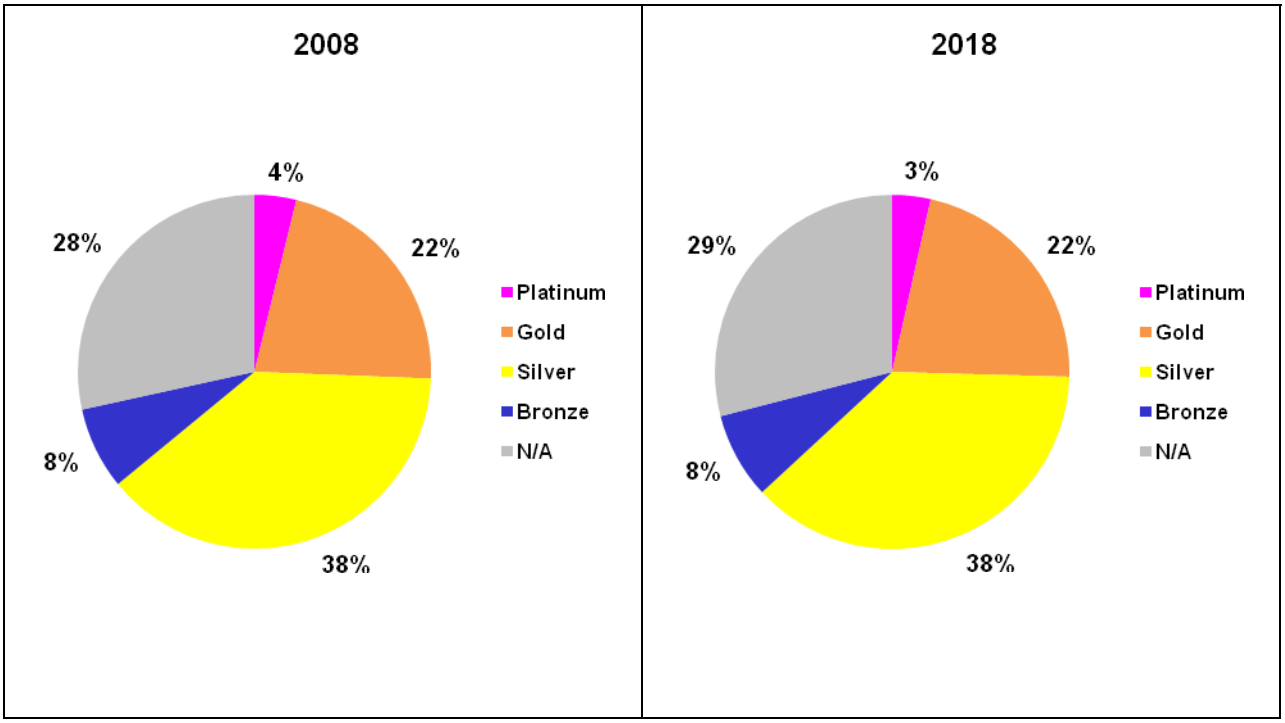


Figure 80: WIA VI – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 40: WIA VI – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	35	0	-35
Public Relations Specialists	27-3031	Gold	BA degree	32	0	-32
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	26	0	-26
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	24	0	-24
Physical Therapists	29-1123		Master's degree	15	0	-15
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	11	0	-11
Graphic Designers	27-1024	Gold	BA degree	13	3	-10
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	10	0	-10
Surveyors	17-1022		BA degree	9	0	-9
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	8	0	-8
Computer Software Engineers, Applications	15-1031		BA degree	33	26	-7
Writers and Authors	27-3043		BA degree	11	4	-7
Computer Systems Analysts	15-1051		BA degree	46	40	-6
Personal Financial Advisors	13-2052		BA degree	6	0	-6
Interior Designers	27-1025		Associate degree	5	0	-5
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	19	14	-5
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	5	0	-5
Network and Computer Systems Administrators	15-1071		BA degree	30	26	-4
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	3	0	-3
Marketing Managers	11-2021		BA or higher degree, plus work experience	3	0	-3

WIA VII (Region 2000)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 55,730 (or 50.3 percent of total employment) in 2008 to 61,901 (or 50.4 percent of total employment) in 2018 (*see* Figure 81).
- Overall, employment in identified green occupations is projected to increase by 11.1 percent between 2008 and 2018, as compared to an 11.0 percent increase in total employment (*see* Figure 82).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Healthcare Support*, 2) *Life, Physical, and Social Science*, 3) *Community and Social Services*, 4) *Computer and Mathematical*, and 5) *Arts, Design, Entertainment, Sports, and Media* occupations (*see* Table 41).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 14 percent of the total employment in green occupations in 2008 and are projected to account for 15 percent in 2018 (*see* Figure 83).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 25 percent of total employment in green occupations in 2008 and are projected to comprise 24 percent in 2018 (*see* Figure 84).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Civil Engineers*, 2) *Mechanical Engineers*, 3) *Automotive Service Technicians and Mechanics*, 4) *Physical Therapists*, and 5) *Surveyors* (*see* Table 42).
- Sixteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 42).
- Nine of the 10 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 42).

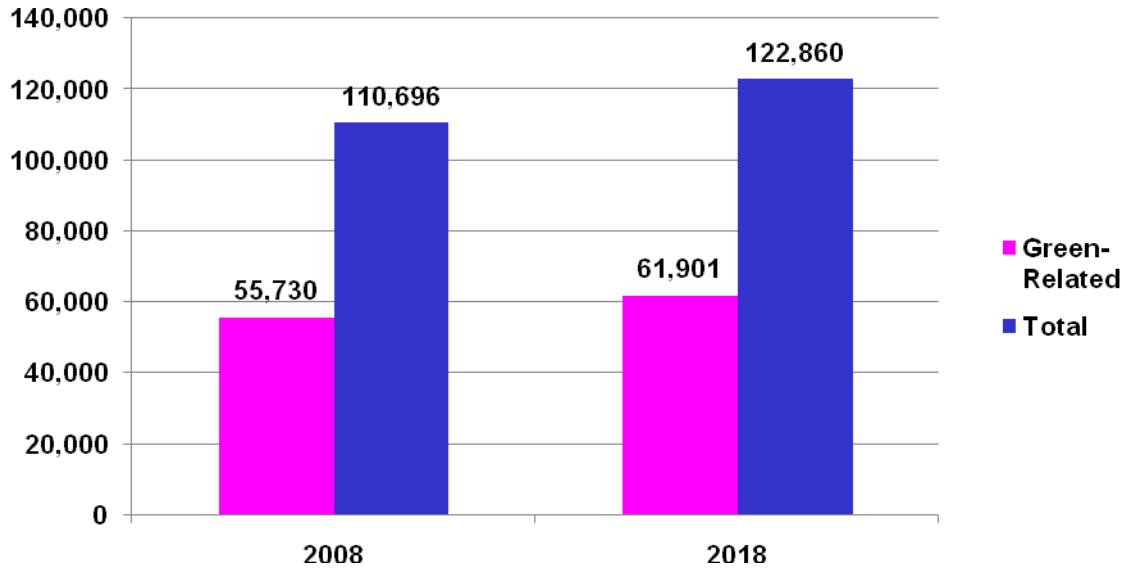


Figure 81: WIA VII – Green-Related Occupational Employment, 2008 to 2018

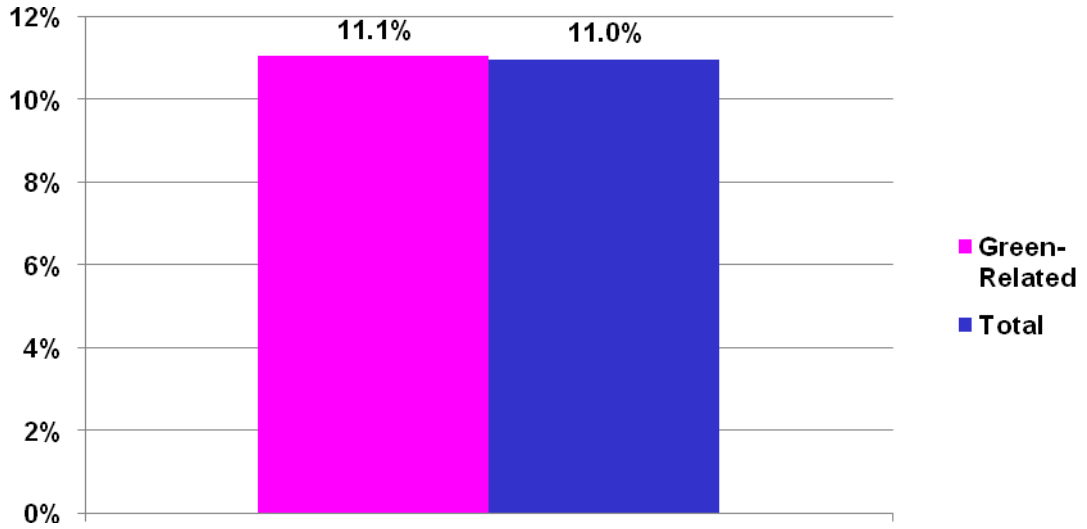


Figure 82: WIA VII – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 41: WIA VII – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Healthcare Support Occupations	31-0000	191	259	35.6%
Life, Physical, and Social Science Occupations	19-0000	259	330	27.4%
Community and Social Services Occupations	21-0000	409	519	26.9%
Computer and Mathematical Occupations	15-0000	874	1,090	24.7%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	317	383	20.8%
Healthcare Practitioners and Technical Occupations	29-0000	3,116	3,764	20.8%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	1,005	1,195	18.9%
Personal Care and Service Occupations	39-0000	561	660	17.6%
Education, Training, and Library Occupations	25-0000	1,037	1,217	17.4%
Food Preparation and Serving Related Occupations	35-0000	4,832	5,619	16.3%
Business and Financial Operations Occupations	13-0000	2,601	3,022	16.2%
Construction and Extraction Occupations	47-0000	6,079	7,035	15.7%
Architecture and Engineering Occupations	17-0000	2,342	2,657	13.5%
Protective Service Occupations	33-0000	42	47	11.9%
Transportation and Material Moving Occupations	53-0000	1,672	1,829	9.4%
Office and Administrative Support Occupations	43-0000	11,536	12,488	8.3%
Installation, Maintenance, and Repair Occupations	49-0000	3,303	3,553	7.6%
Sales and Related Occupations	41-0000	9,780	10,413	6.5%
Management Occupations	11-0000	2,971	3,135	5.5%
Production Occupations	51-0000	2,582	2,503	-3.1%
Farming, Fishing, and Forestry Occupations	45-0000	221	183	-17.2%

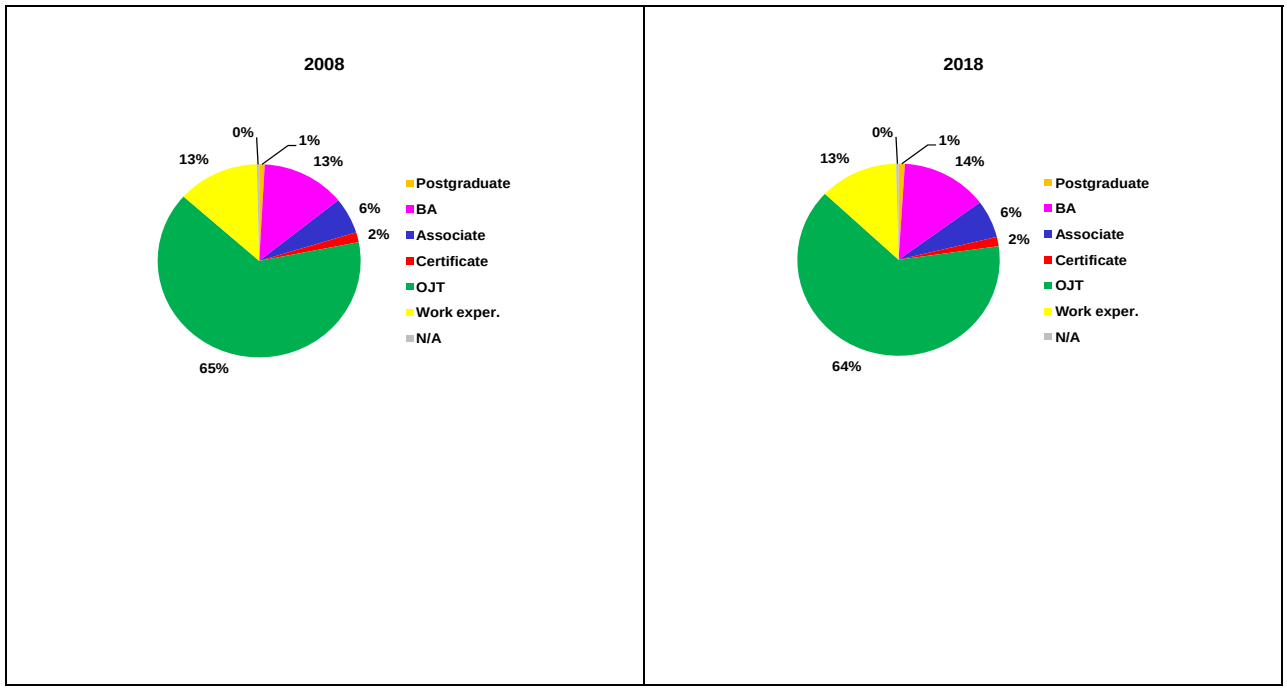


Figure 83: WIA VII – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

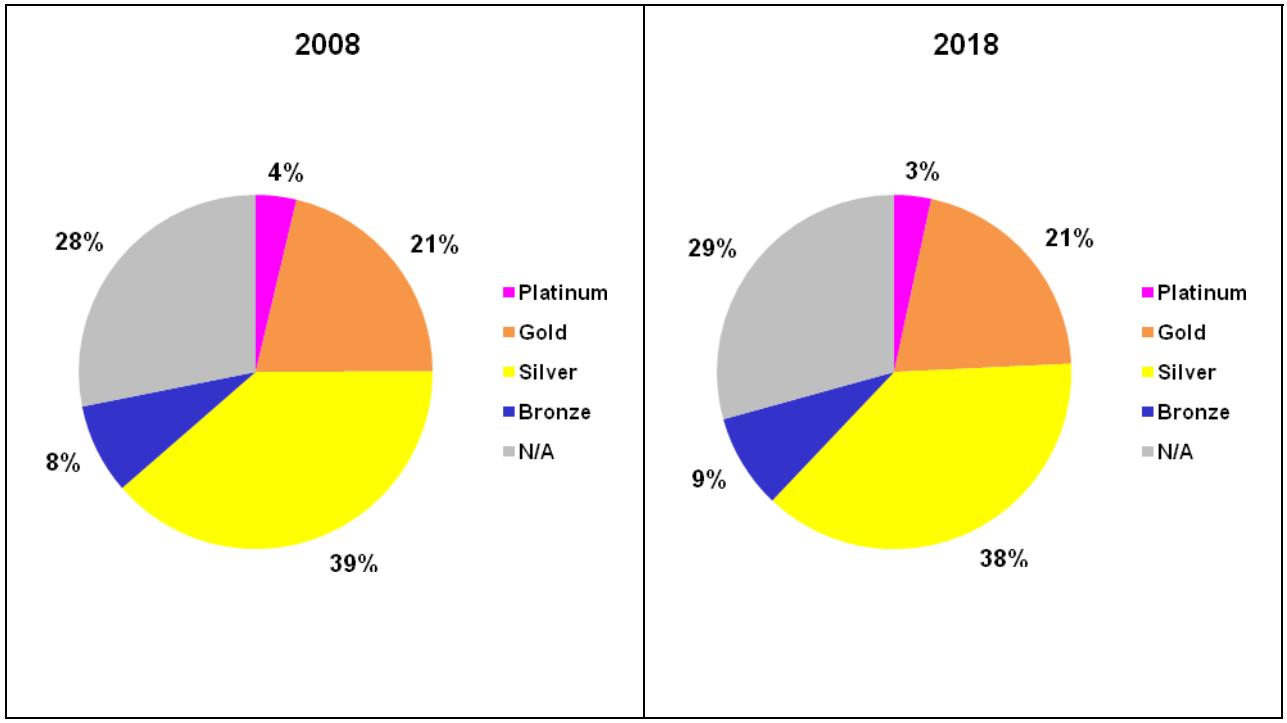


Figure 84: WIA VII – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 42: WIA VII – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Civil Engineers	17-2051		BA degree	33	0	-33
Mechanical Engineers	17-2141	Gold	BA degree	12	0	-12
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	16	4	-12
Physical Therapists	29-1123		Master's degree	10	0	-10
Surveyors	17-1022		BA degree	9	0	-9
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	9	1	-8
Architects, Except Landscape and Naval	17-1011		BA degree	7	0	-7
Business Operations Specialists, All Other	13-1199		BA degree	10	3	-7
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	7	0	-7
Personal Financial Advisors	13-2052		BA degree	6	0	-6
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	5	0	-5
Electrical Engineers	17-2071	Gold	BA degree	4	0	-4
Computer Software Engineers, Applications	15-1031		BA degree	8	5	-3
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	8	5	-3
Computer Systems Analysts	15-1051		BA degree	14	11	-3
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	3	0	-3
Marketing Managers	11-2021		BA or higher degree, plus work experience	4	1	-3
Architectural and Civil Drafters	17-3011	Gold	Certificate	5	2	-3
Urban and Regional Planners	19-3051		Master's degree	2	0	-2
Mechanical Drafters	17-3013	Gold	Certificate	2	0	-2

Virginia – WIA VIII (South Central)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 27,917 (or 45.7 percent of total employment) in 2008 to 31,159 (or 45.6 percent of total employment) in 2018 (*see* Figure 85).
- Overall, employment in identified green occupations is projected to increase by 11.6 percent between 2008 and 2018, as compared to an 11.9 percent increase in total employment (*see* Figure 86).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Healthcare Support*, 2) *Community and Social Services*, 3) *Healthcare Practitioners and Technical*, 4) *Computer and Mathematical*, and 5) *Life, Physical, and Social Science* occupations (*see* Table 43).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 11 percent of the total employment in green occupations in both 2008 and 2018 (*see* Figure 87).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 23 percent of total employment in green occupations in both 2008 and 2018 (*see* Figure 88).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Education Administrators, Elementary and Secondary School*, 2) *Registered Nurses*, 3)*Accountants and Auditors*, 4) *Educational, Vocational, and School Counselors*, and 5)*Business Operations Specialists, All Other* (*see* Table 44).
- Sixteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 44).
- Ten of the 14 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 44).

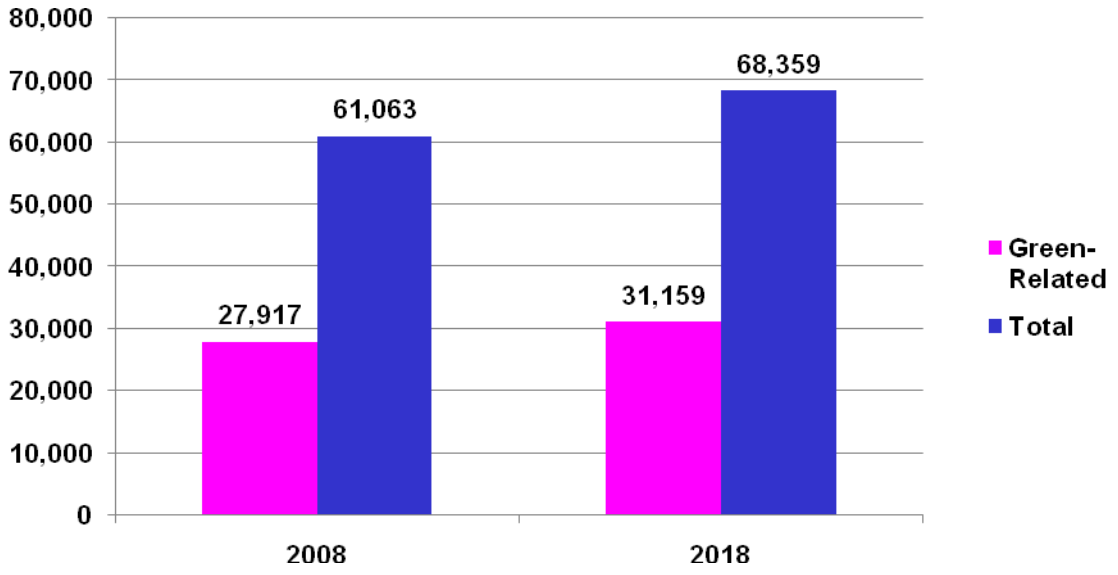


Figure 85: WIA VIII – Green-Related Occupational Employment, 2008 to 2018

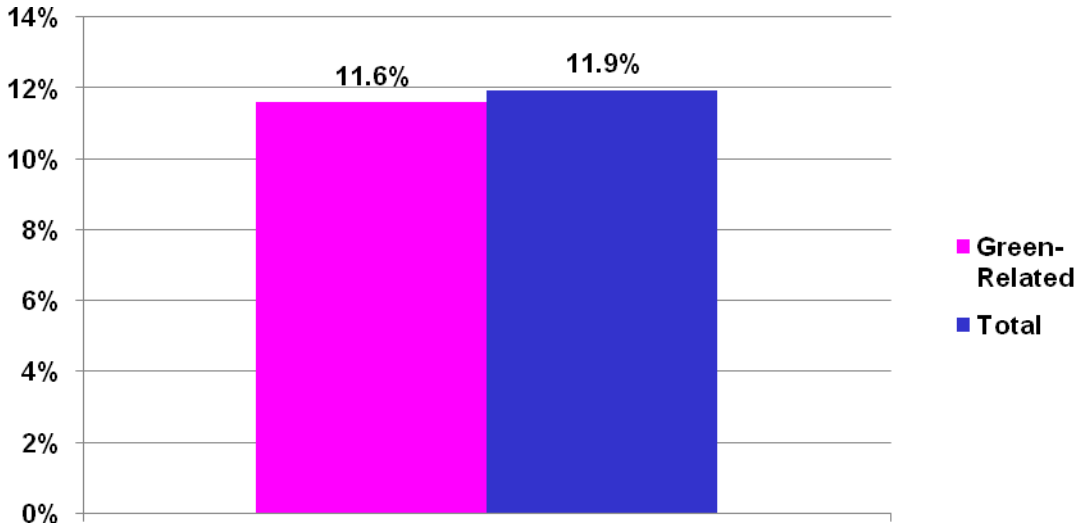


Figure 86: WIA VIII – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 43: WIA VIII – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Healthcare Support Occupations	31-0000	160	217	35.6%
Community and Social Services Occupations	21-0000	323	415	28.5%
Healthcare Practitioners and Technical Occupations	29-0000	1,200	1,499	24.9%
Computer and Mathematical Occupations	15-0000	212	262	23.6%
Life, Physical, and Social Science Occupations	19-0000	91	109	19.8%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	890	1,056	18.7%
Education, Training, and Library Occupations	25-0000	690	816	18.3%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	121	143	18.2%
Business and Financial Operations Occupations	13-0000	1,019	1,194	17.2%
Food Preparation and Serving Related Occupations	35-0000	2,842	3,305	16.3%
Personal Care and Service Occupations	39-0000	304	352	15.8%
Construction and Extraction Occupations	47-0000	2,261	2,566	13.5%
Installation, Maintenance, and Repair Occupations	49-0000	2,124	2,378	12.0%
Office and Administrative Support Occupations	43-0000	5,813	6,426	10.5%
Architecture and Engineering Occupations	17-0000	198	218	10.1%
Transportation and Material Moving Occupations	53-0000	1,703	1,850	8.6%
Sales and Related Occupations	41-0000	4,553	4,895	7.5%
Protective Service Occupations	33-0000	134	142	6.0%
Management Occupations	11-0000	1,623	1,689	4.1%
Production Occupations	51-0000	1,147	1,191	3.8%
Farming, Fishing, and Forestry Occupations	45-0000	509	436	-14.3%

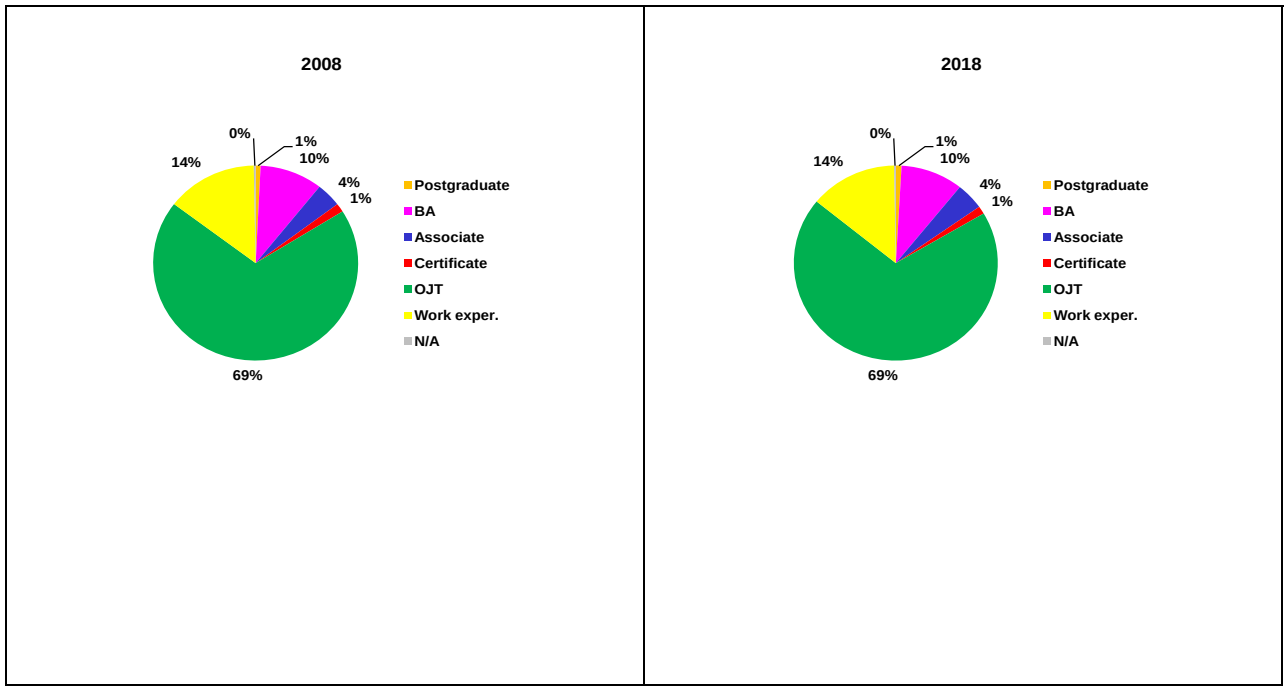


Figure 87: WIA VIII – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

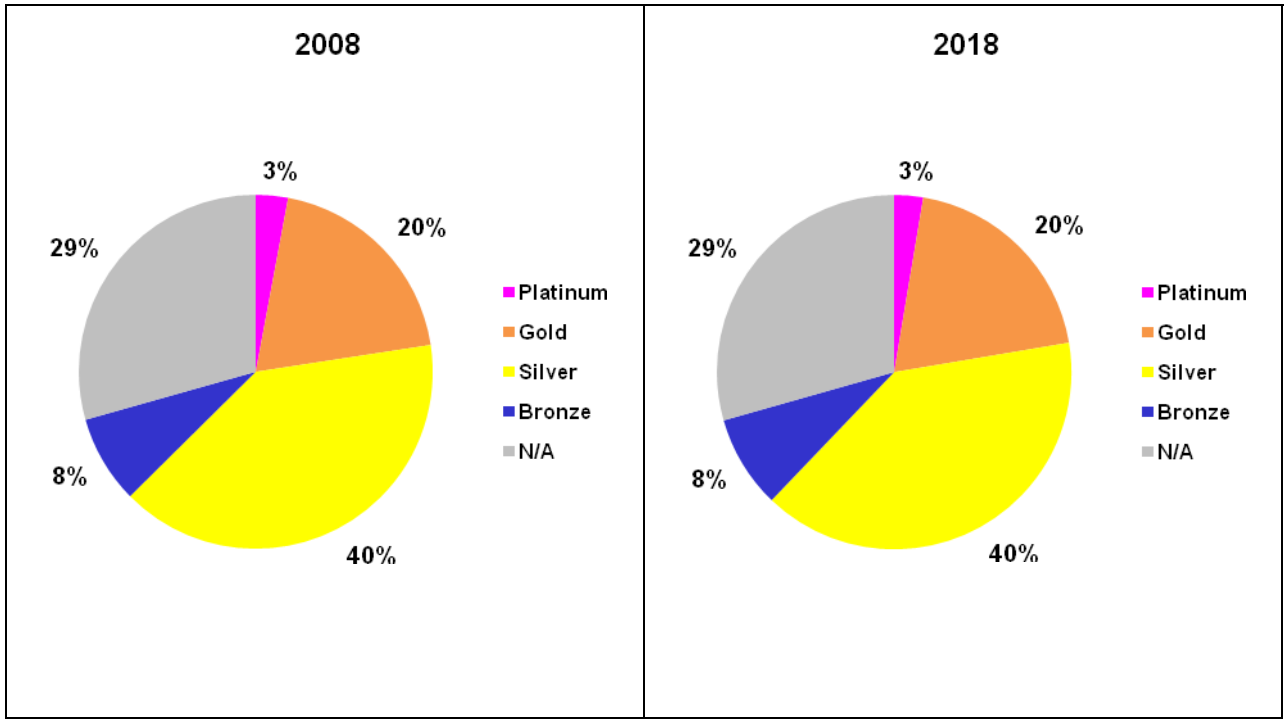


Figure 88: WIA VIII – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 44: WIA VIII – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Education Administrators, Elementary and Secondary School	11-9032	Gold	BA or higher degree, plus work experience	9	0	-9
Registered Nurses	29-1111		Associate degree	45	38	-7
Accountants and Auditors	13-2011	Bronze	BA degree	8	1	-7
Educational, Vocational, and School Counselors	21-1012	Silver	Master's degree	7	0	-7
Business Operations Specialists, All Other	13-1199		BA degree	5	0	-5
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	4	0	-4
Physical Therapists	29-1123		Master's degree	4	0	-4
Graphic Designers	27-1024	Gold	BA degree	3	0	-3
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	3	0	-3
Medical and Clinical Laboratory Technicians	29-2012	Gold	Associate degree	2	0	-2
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	2	0	-2
Surveyors	17-1022		BA degree	2	0	-2
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	2	0	-2
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	6	4	-2
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022		Certificate	2	0	-2
Civil Engineers	17-2051		BA degree	1	0	-1
Electrical Engineers	17-2071	Gold	BA degree	1	0	-1
Education Administrators, Postsecondary	11-9033	Platinum	BA or higher degree, plus work experience	1	0	-1
Engineering Managers	11-9041	Platinum	BA or higher degree, plus work experience	1	0	-1
Purchasing Managers	11-3061	Silver	BA or higher degree, plus work experience	1	0	-1

WIA IX (Capital Region Workforce Partnership)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 299,983 (or 52.7 percent of total employment) in 2008 to 339,722 (or 52.6 percent of total employment) in 2018 (*see* Figure 89).
- Overall, employment in identified green occupations is projected to increase by 13.2 percent between 2008 and 2018, as compared to a 13.5 percent increase in total employment (*see* Figure 90).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Healthcare Support*, 2) *Life, Physical, and Social Science*, 3) *Community and Social Services*, 4) *Computer and Mathematical*, and 5) *Healthcare Practitioners and Technical* occupations (*see* Table 45).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 24 percent of the total employment in green occupations in 2008 and are projected to account for 25 percent in 2018 (*see* Figure 91).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 29 percent of total employment in green occupations in 2008 and are projected to comprise 28 percent in 2018 (*see* Figure 92).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Computer Software Engineers, Applications*, 3) *Accountants and Auditors*, 4) *Automotive Service Technicians and Mechanics*, and 5)*Civil Engineers* (*see* Table 46).
- Sixteen out of the 18 negative gaps are in occupations that typically require a BA degree or above (*see* Table 46).
- Nine of the 11 "top 20" gap occupations (although in this instance, only 18 occupations were actually found to have a negative gap – a possible shortage of trained workers) for which data are available require a gold CRC or above (*see* Table 46).

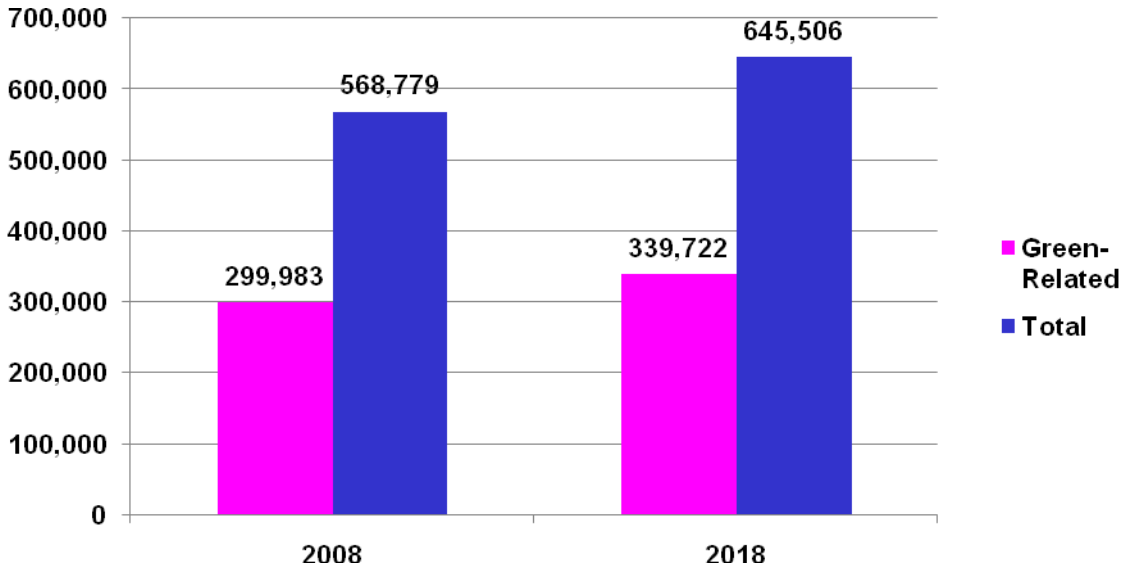


Figure 89: WIA IX – Green-Related Occupational Employment, 2008 to 2018

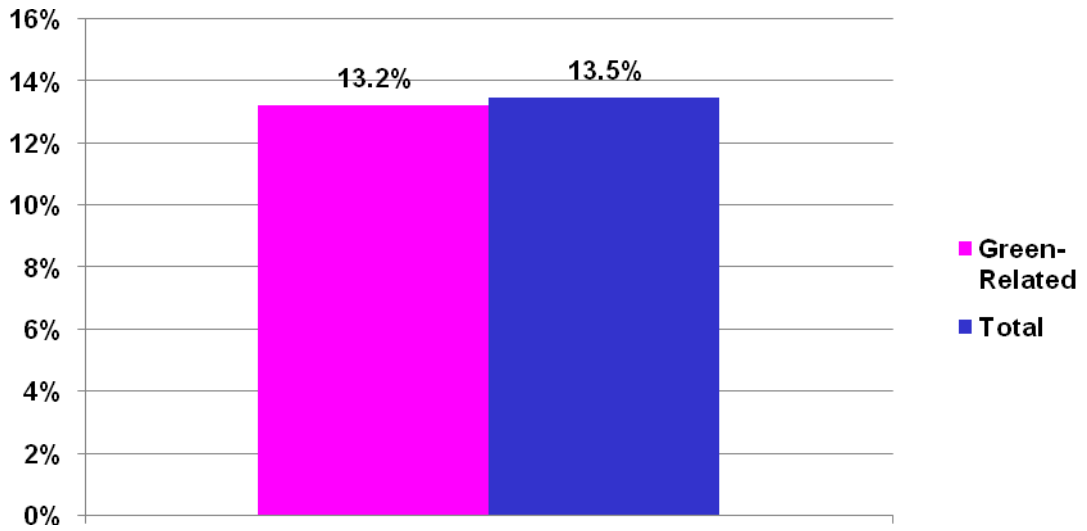


Figure 90: WIA IX – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 45: WIA IX – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Healthcare Support Occupations	31-0000	1,326	1,806	36.2%
Life, Physical, and Social Science Occupations	19-0000	2,469	3,138	27.1%
Community and Social Services Occupations	21-0000	2,357	2,959	25.5%
Computer and Mathematical Occupations	15-0000	13,099	16,183	23.5%
Healthcare Practitioners and Technical Occupations	29-0000	13,385	16,365	22.3%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	5,565	6,718	20.7%
Personal Care and Service Occupations	39-0000	5,179	6,142	18.6%
Education, Training, and Library Occupations	25-0000	3,480	4,127	18.6%
Business and Financial Operations Occupations	13-0000	30,045	35,552	18.3%
Construction and Extraction Occupations	47-0000	24,336	28,609	17.6%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	4,386	5,144	17.3%
Food Preparation and Serving Related Occupations	35-0000	21,519	25,099	16.6%
Architecture and Engineering Occupations	17-0000	7,730	8,813	14.0%
Office and Administrative Support Occupations	43-0000	63,695	70,222	10.2%
Transportation and Material Moving Occupations	53-0000	8,000	8,734	9.2%
Installation, Maintenance, and Repair Occupations	49-0000	18,660	20,261	8.6%
Management Occupations	11-0000	24,063	26,019	8.1%
Protective Service Occupations	33-0000	854	923	8.1%
Sales and Related Occupations	41-0000	44,111	47,221	7.1%
Farming, Fishing, and Forestry Occupations	45-0000	135	140	3.7%
Production Occupations	51-0000	5,589	5,547	-0.8%

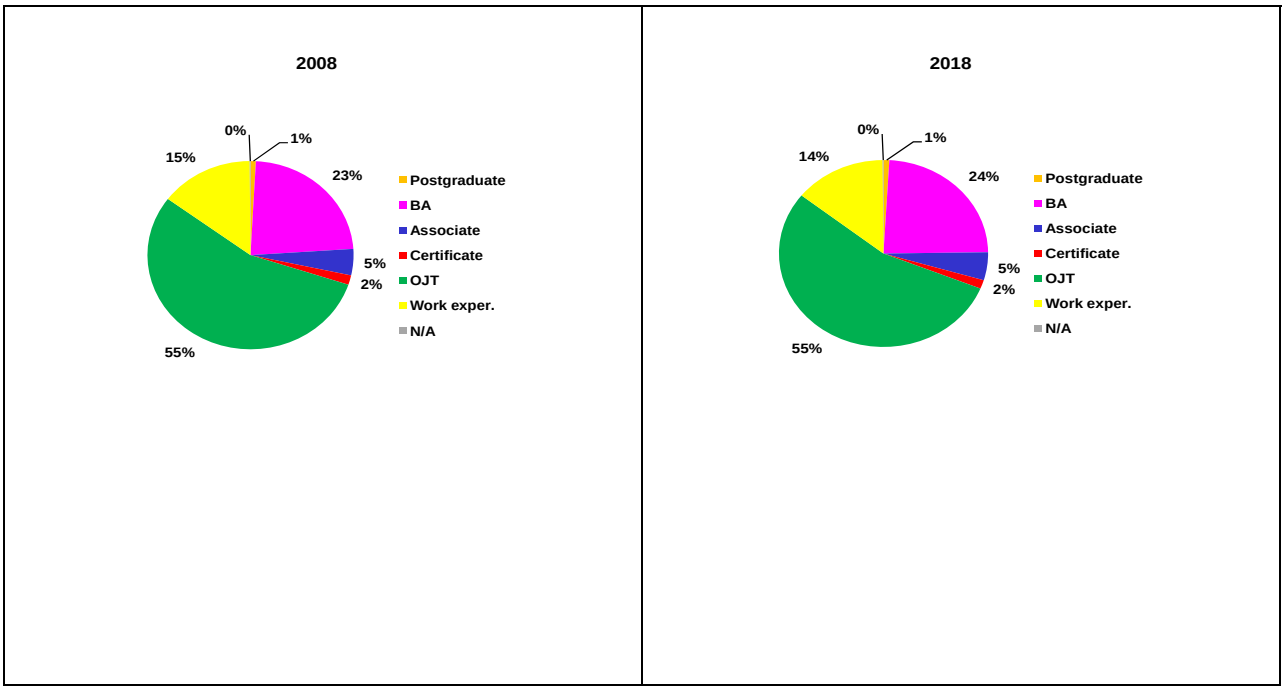


Figure 91: WIA IX – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

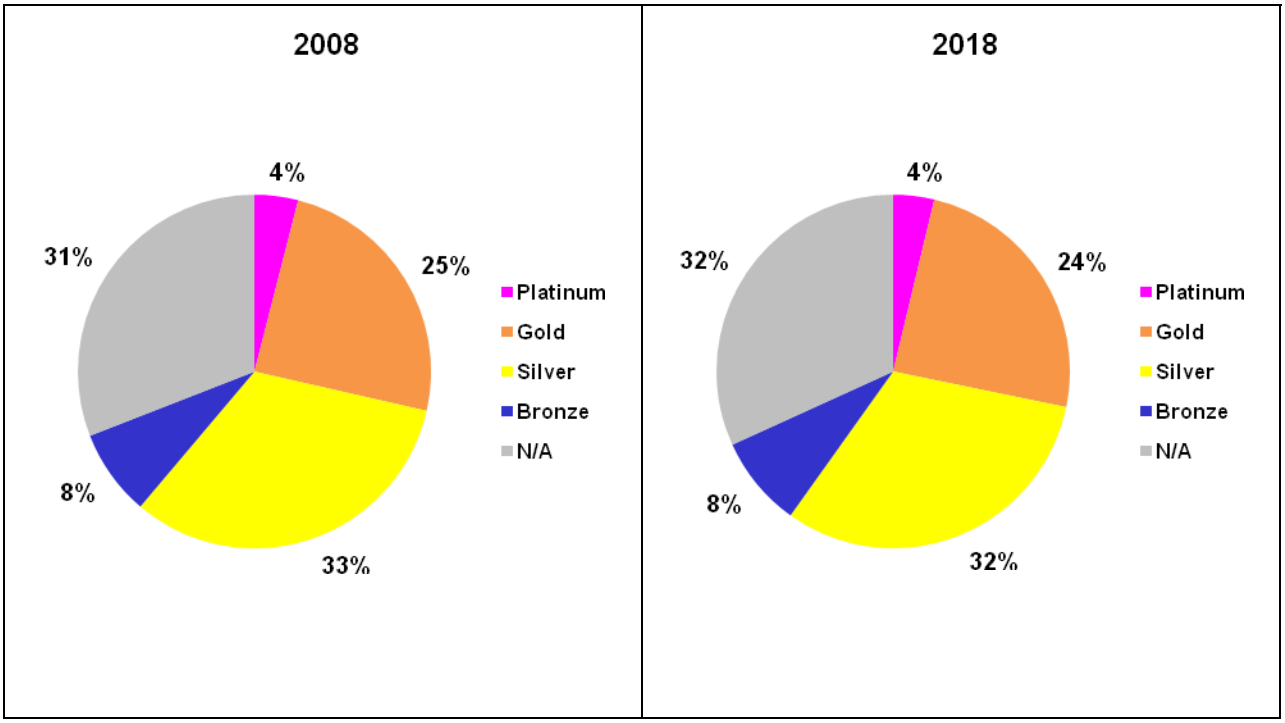


Figure 92: WIA IX – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 46: WIA IX – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	147	0	-147
Computer Software Engineers, Applications	15-1031		BA degree	149	13	-136
Accountants and Auditors	13-2011	Bronze	BA degree	298	182	-116
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	88	17	-71
Civil Engineers	17-2051		BA degree	66	0	-66
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	65	2	-63
Public Relations Specialists	27-3031	Gold	BA degree	61	0	-61
Computer Systems Analysts	15-1051		BA degree	157	101	-56
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	94	41	-53
Personal Financial Advisors	13-2052		BA degree	50	1	-49
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	84	44	-40
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	62	33	-29
Architects, Except Landscape and Naval	17-1011		BA degree	25	0	-25
Mechanical Engineers	17-2141	Gold	BA degree	42	17	-25
Market Research Analysts	19-3021	Gold	BA degree	99	77	-22
Operations Research Analysts	15-2031	Gold	Master's degree	18	0	-18
Medical and Clinical Laboratory Technicians	29-2012	Gold	Associate degree	31	14	-17
Environmental Engineers	17-2081		BA degree	17	0	-17

WIAs XI and XII (Northern Virginia and Alexandria/Arlington)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 719,646 (or 57.4 percent of total employment) in 2008 to 874,181 (or 58.0 percent of total employment) in 2018 (*see* Figure 93).
- Overall, employment in identified green occupations is projected to increase by 21.5 percent between 2008 and 2018, as compared to a 20.2 percent increase in total employment (*see* Figure 94).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Computer and Mathematical*, 2) *Healthcare Support*, 3) *Business and Financial Operations*, 4) *Life, Physical, and Social Science*, and 5) *Healthcare Practitioners and Technical* occupations (*see* Table 47).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 39 percent of the total employment in green occupations in 2008 and are projected to account for 41 percent in 2018 (*see* Figure 95).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 33 percent of total employment in green occupations in 2008 and are projected to comprise 34 percent in 2018 (*see* Figure 96).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Management Analysts*, 2) *Computer Systems Analysts*, 3)*Computer Software Engineers, Systems Software*, 4) *Business Operations Specialists, All Other*, and 5)*Accountants and Auditors* (*see* Table 48).
- Nineteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 48).
- Eleven of the 14 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 48).

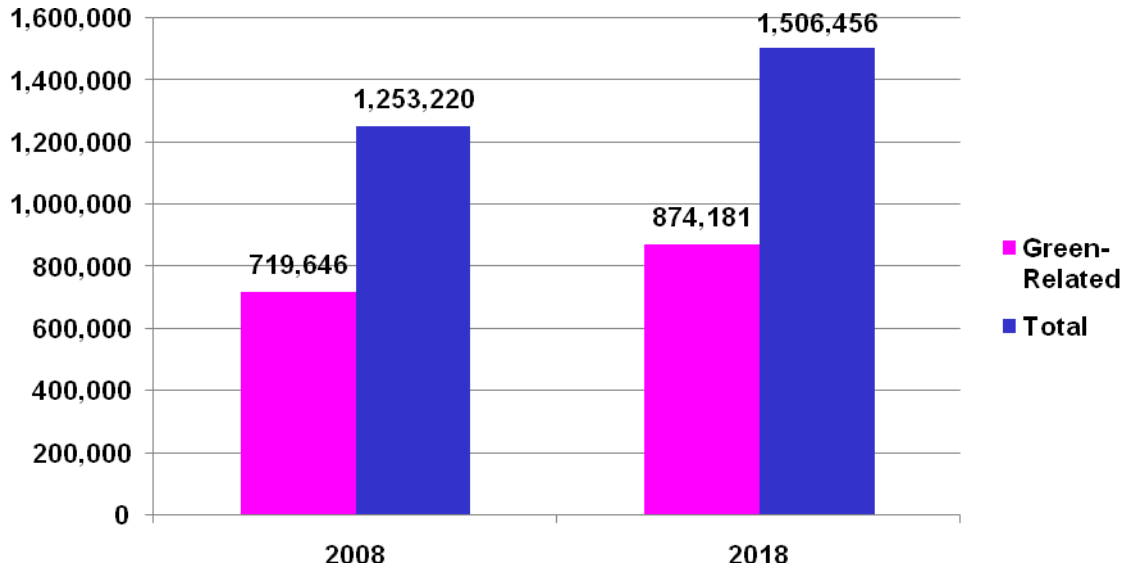


Figure 93: WIA XI & XII – Green-Related Occupational Employment, 2008 to 2018

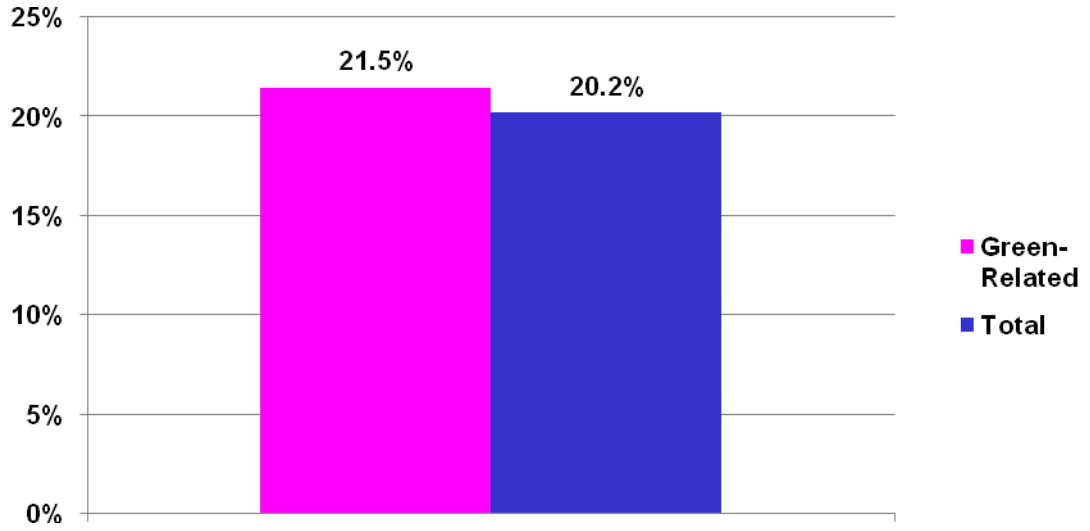


Figure 94: WIA XI & XII – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 47: WIA XI & XII – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Computer and Mathematical Occupations	15-0000	89,314	124,294	39.2%
Healthcare Support Occupations	31-0000	2,458	3,363	36.8%
Business and Financial Operations Occupations	13-0000	96,058	125,703	30.9%
Life, Physical, and Social Science Occupations	19-0000	11,181	14,407	28.9%
Healthcare Practitioners and Technical Occupations	29-0000	15,239	19,186	25.9%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	14,571	17,935	23.1%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	17,059	20,791	21.9%
Community and Social Services Occupations	21-0000	3,749	4,549	21.3%
Installation, Maintenance, and Repair Occupations	49-0000	33,058	40,010	21.0%
Office and Administrative Support Occupations	43-0000	117,868	139,614	18.4%
Education, Training, and Library Occupations	25-0000	7,942	9,360	17.9%
Construction and Extraction Occupations	47-0000	46,774	55,106	17.8%
Food Preparation and Serving Related Occupations	35-0000	44,460	52,286	17.6%
Architecture and Engineering Occupations	17-0000	25,542	29,624	16.0%
Management Occupations	11-0000	79,568	92,232	15.9%
Protective Service Occupations	33-0000	598	691	15.6%
Personal Care and Service Occupations	39-0000	12,233	14,128	15.5%
Transportation and Material Moving Occupations	53-0000	8,258	9,309	12.7%
Sales and Related Occupations	41-0000	88,409	96,040	8.6%
Farming, Fishing, and Forestry Occupations	45-0000	39	42	7.7%
Production Occupations	51-0000	5,268	5,511	4.6%

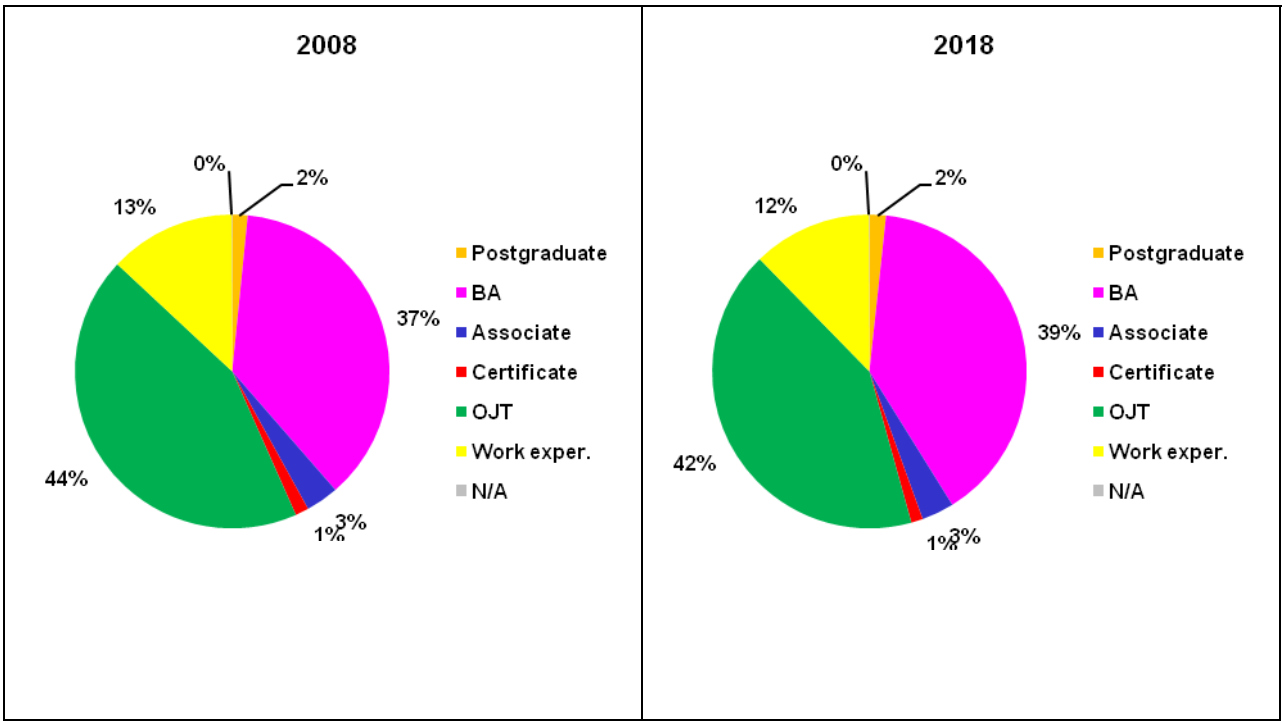


Figure 95: WIA XI & XII – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

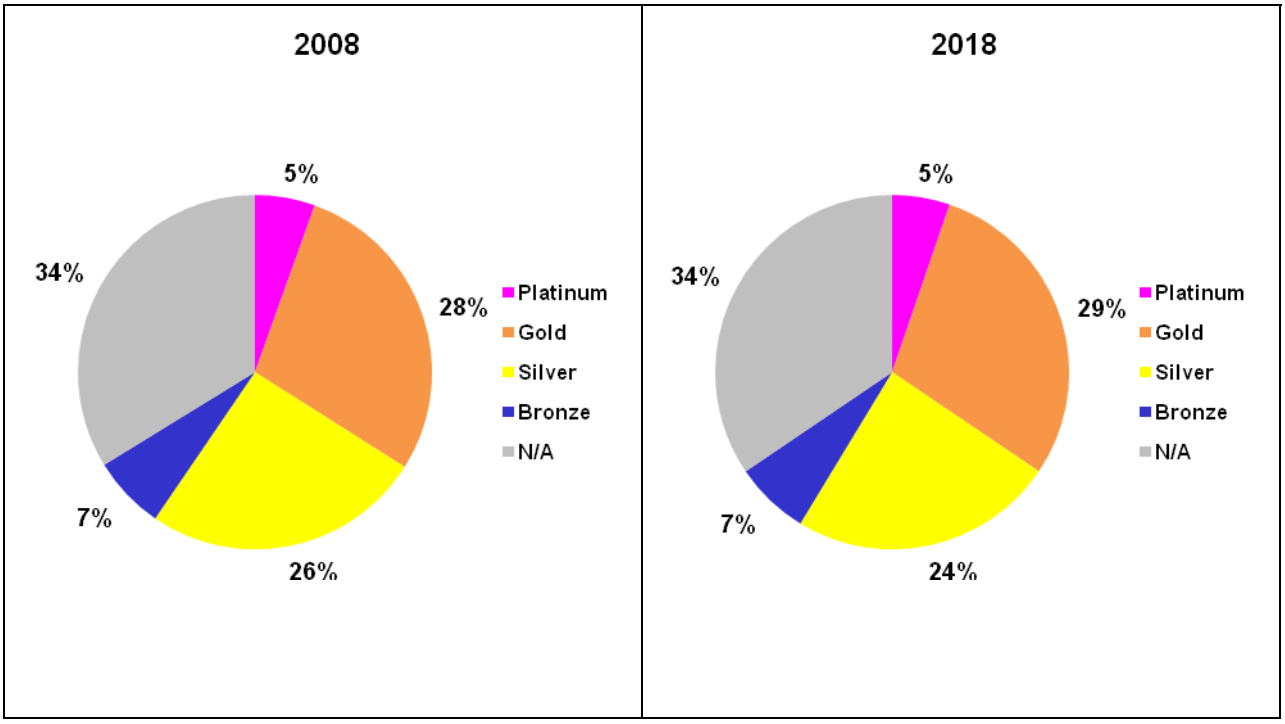


Figure 96: WIA XI & XII – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 48: WIA XI & XII – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Management Analysts	13-1111	Gold	BA or higher degree, plus work experience	2,011	709	-1,302
Computer Systems Analysts	15-1051		BA degree	1,363	107	-1,256
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	1,107	111	-996
Business Operations Specialists, All Other	13-1199		BA degree	690	0	-690
Accountants and Auditors	13-2011	Bronze	BA degree	846	238	-608
Network and Computer Systems Administrators	15-1071		BA degree	724	164	-560
Computer Software Engineers, Applications	15-1031		BA degree	1,157	709	-448
General and Operations Managers	11-1021	Platinum	BA or higher degree, plus work experience	791	347	-444
Computer and Information Systems Managers	11-3021	Platinum	BA or higher degree, plus work experience	399	56	-343
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	267	9	-258
Public Relations Specialists	27-3031	Gold	BA degree	271	25	-246
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	211	7	-204
Civil Engineers	17-2051		BA degree	206	32	-174
Operations Research Analysts	15-2031	Gold	Master's degree	233	86	-147
Market Research Analysts	19-3021	Gold	BA degree	296	152	-144
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	192	52	-140
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	124	0	-124
Electrical Engineers	17-2071	Gold	BA degree	156	44	-112
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	133	24	-109
Construction Managers	11-9021	Silver	BA degree	149	52	-97

WIA XIII (Bay Consortium)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 76,614 (or 47.3 percent of total employment) in 2008 to 88,140 (or 47.2 percent of total employment) in 2018 (*see* Figure 97).
- Overall, employment in identified green occupations is projected to increase by 15.0 percent between 2008 and 2018, as compared to a 15.2 percent increase in total employment (*see* Figure 98).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Computer and Mathematical*, 2) *Healthcare Support*, 3) *Business and Financial Operations*, 4) *Healthcare Practitioners and Technical*, and 5) *Life, Physical, and Social Science* occupations (*see* Table 49).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 20 percent of the total employment in green occupations in 2008 and are projected to account for 21 percent in 2018 (*see* Figure 99).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 27 percent of total employment in green occupations in 2008 and 2018 (*see* Figure 100).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Computer Systems Analysts*, 2) *Computer Software Engineers, Applications*, 3)*Business Operations Specialists, All Other*, 4) *Computer Software Engineers, Systems Software*, and 5) *Accountants and Auditors* (*see* Table 50).
- Seventeen out of the 20 top gaps are in occupations that typically require a BA degree or above (*see* Table 50).
- Ten of the 13 “top 20” gap occupations for which data are available require a gold CRC or above (*see* Table 50).

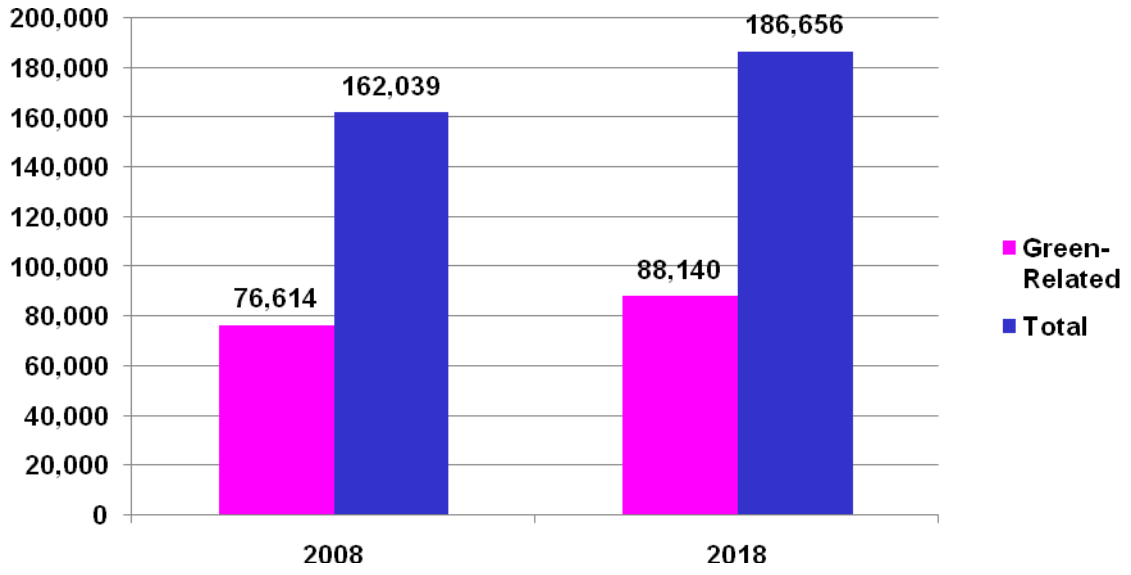


Figure 97: WIA XIII – Green-Related Occupational Employment, 2008 to 2018

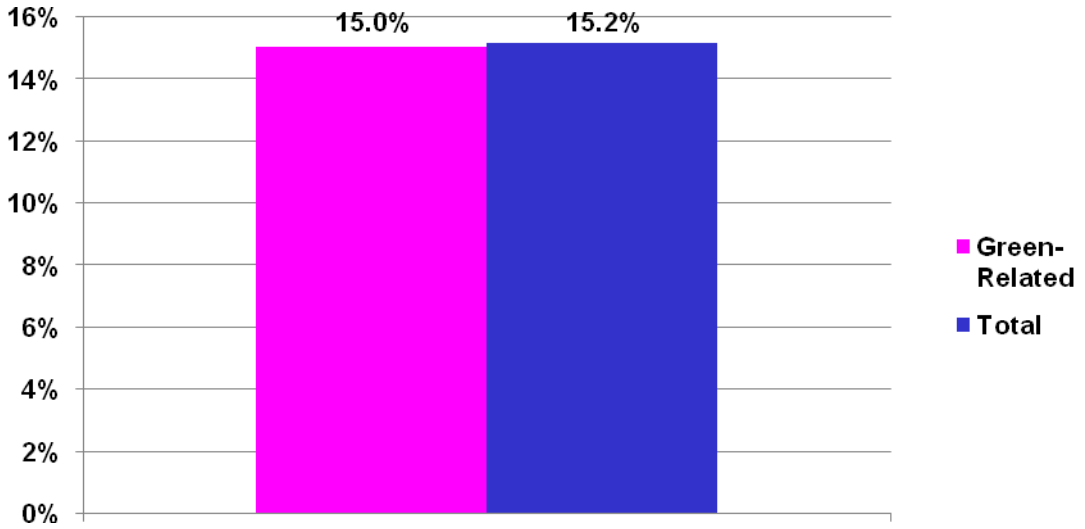


Figure 98: WIA XIII – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 49: WIA XIII – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Computer and Mathematical Occupations	15-0000	3,158	4,299	36.1%
Healthcare Support Occupations	31-0000	393	534	35.9%
Business and Financial Operations Occupations	13-0000	5,313	6,752	27.1%
Healthcare Practitioners and Technical Occupations	29-0000	2,209	2,774	25.6%
Life, Physical, and Social Science Occupations	19-0000	459	562	22.4%
Community and Social Services Occupations	21-0000	709	852	20.2%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	1,828	2,181	19.3%
Food Preparation and Serving Related Occupations	35-0000	4,680	5,554	18.7%
Education, Training, and Library Occupations	25-0000	1,730	2,052	18.6%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	455	537	18.0%
Architecture and Engineering Occupations	17-0000	2,598	3,058	17.7%
Personal Care and Service Occupations	39-0000	1,277	1,503	17.7%
Construction and Extraction Occupations	47-0000	6,044	7,032	16.3%
Office and Administrative Support Occupations	43-0000	15,042	17,109	13.7%
Installation, Maintenance, and Repair Occupations	49-0000	4,814	5,380	11.8%
Management Occupations	11-0000	5,239	5,782	10.4%
Transportation and Material Moving Occupations	53-0000	2,983	3,244	8.7%
Protective Service Occupations	33-0000	216	234	8.3%
Sales and Related Occupations	41-0000	15,201	16,387	7.8%
Production Occupations	51-0000	1,823	1,885	3.4%
Farming, Fishing, and Forestry Occupations	45-0000	443	429	-3.2%

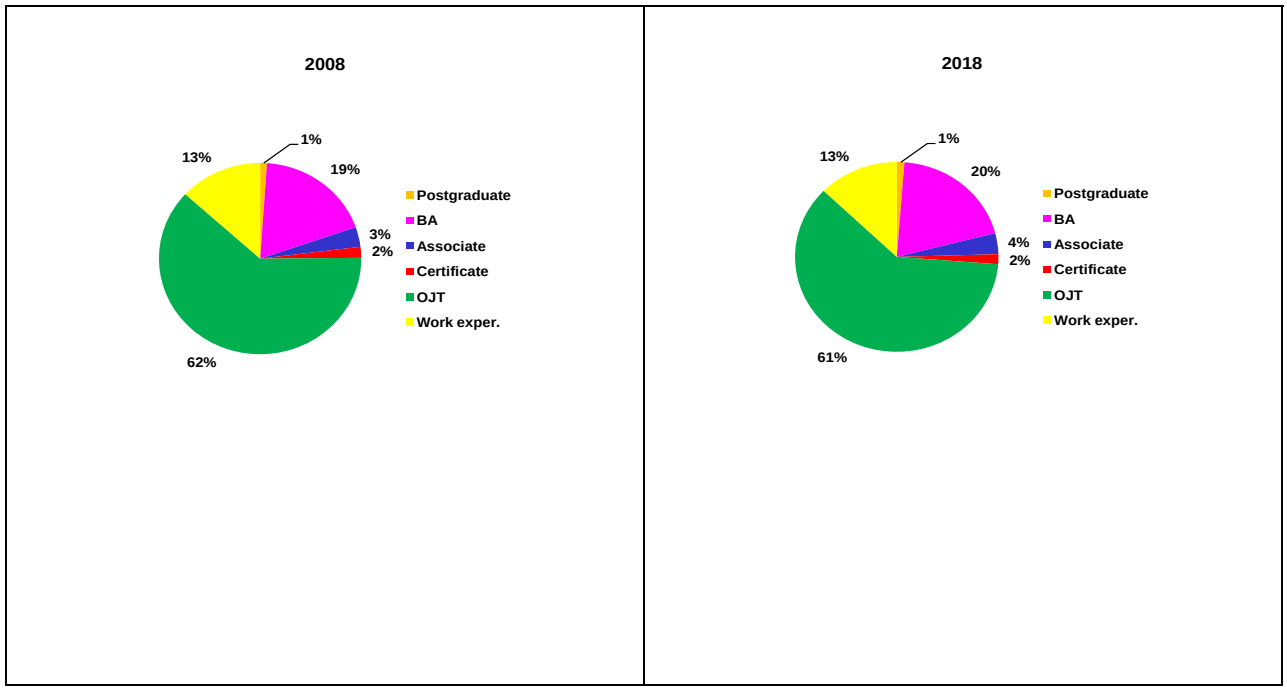


Figure 99: WIA XIII – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

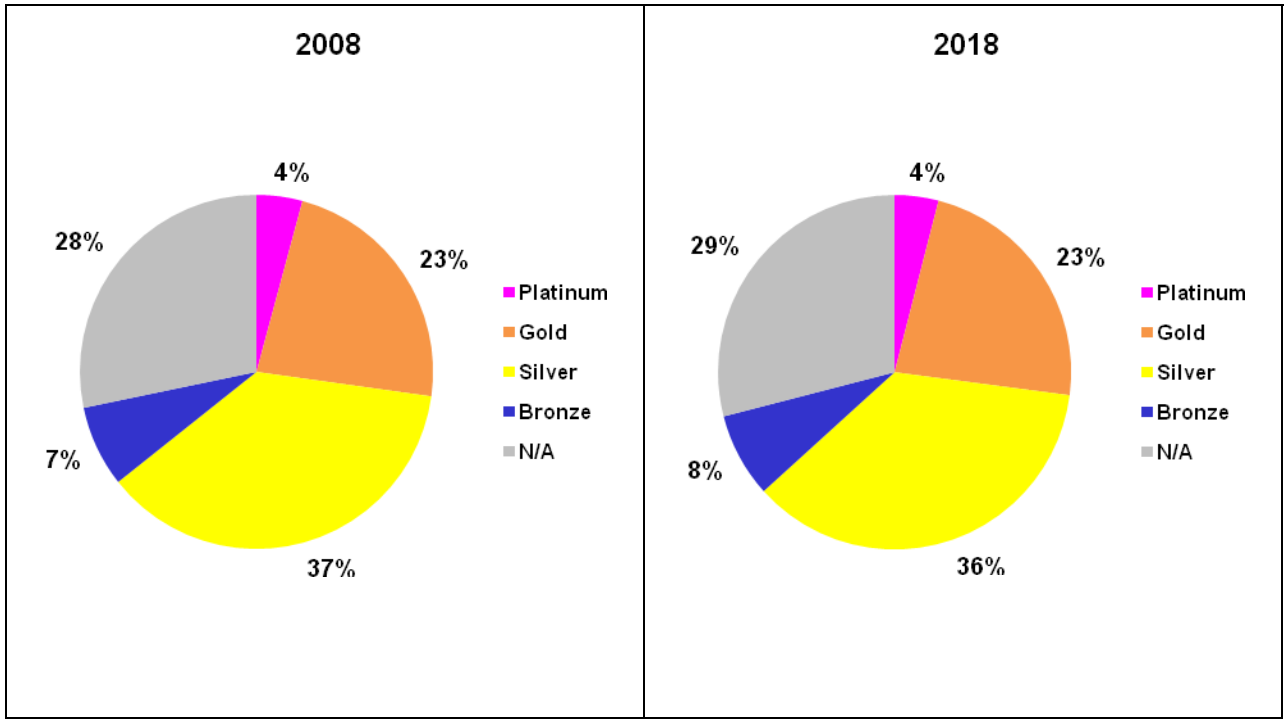


Figure 100: WIA XIII – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 50: WIA XIII – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Computer Systems Analysts	15-1051		BA degree	49	7	-42
Computer Software Engineers, Applications	15-1031		BA degree	41	0	-41
Business Operations Specialists, All Other	13-1199		BA degree	40	0	-40
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	34	0	-34
Accountants and Auditors	13-2011	Bronze	BA degree	33	0	-33
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	31	0	-31
Registered Nurses	29-1111		Associate degree	83	60	-23
Electrical Engineers	17-2071	Gold	BA degree	22	0	-22
Electronics Engineers, Except Computer	17-2072	Platinum	BA degree	22	0	-22
Network and Computer Systems Administrators	15-1071		BA degree	21	3	-18
Mechanical Engineers	17-2141	Gold	BA degree	18	0	-18
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	18	0	-18
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	16	0	-16
Civil Engineers	17-2051		BA degree	15	0	-15
Education Administrators, Elementary and Secondary School	11-9032	Gold	BA or higher degree, plus work experience	19	5	-14
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	11	0	-11
Operations Research Analysts	15-2031	Gold	Master's degree	11	0	-11
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	11	1	-10
Social Scientists and Related Workers, All Other	19-3099		Master's degree	10	0	-10
Educational, Vocational, and School Counselors	21-1012	Silver	Master's degree	10	0	-10

WIA XIV (Greater Peninsula)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 125,705 (or 49.4 percent of total employment) in 2008 to 141,107 (or 49.4 percent of total employment) in 2018 (*see* Figure 101).
- Overall, employment in identified green occupations is projected to increase by 12.3 percent between 2008 and 2018, as compared to a 12.2 percent increase in total employment (*see* Figure 102).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Healthcare Support*, 2) *Computer and Mathematical*, 3) *Life, Physical, and Social Science*, 4) *Community and Social Services*, and 5) *Personal Care and Service* occupations (*see* Table 51).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 22 percent of the total employment in green occupations in both 2008 and 2018 (*see* Figure 103).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 29 percent of total employment in green occupations in both 2008 and 2018 (*see* Figure 104).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Computer Software Engineers, Applications*, 3) *Computer Systems Analysts*, 4) *Mechanical Engineers*, and 5) *Training and Development Specialists* (*see* Table 52).
- Eighteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 52).
- Ten of the 12 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 52).

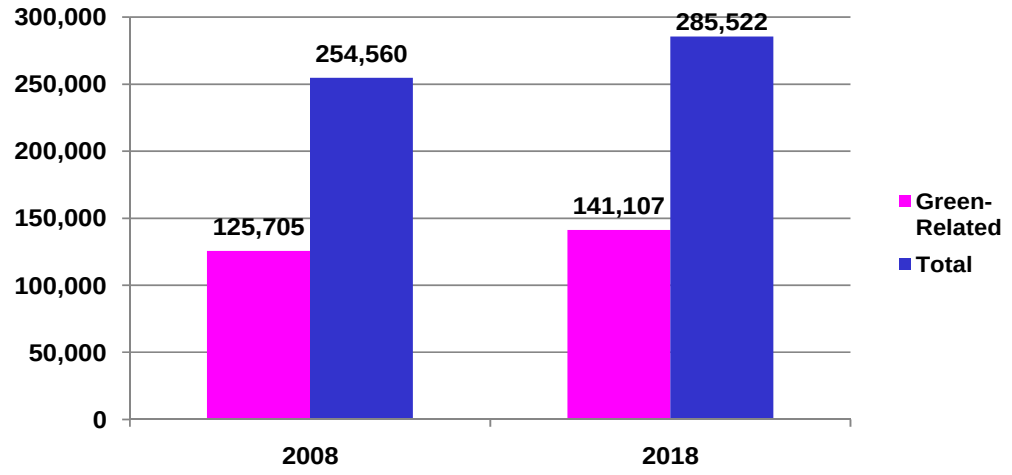


Figure 101: WIA XIV – Green-Related Occupational Employment, 2008 to 2018

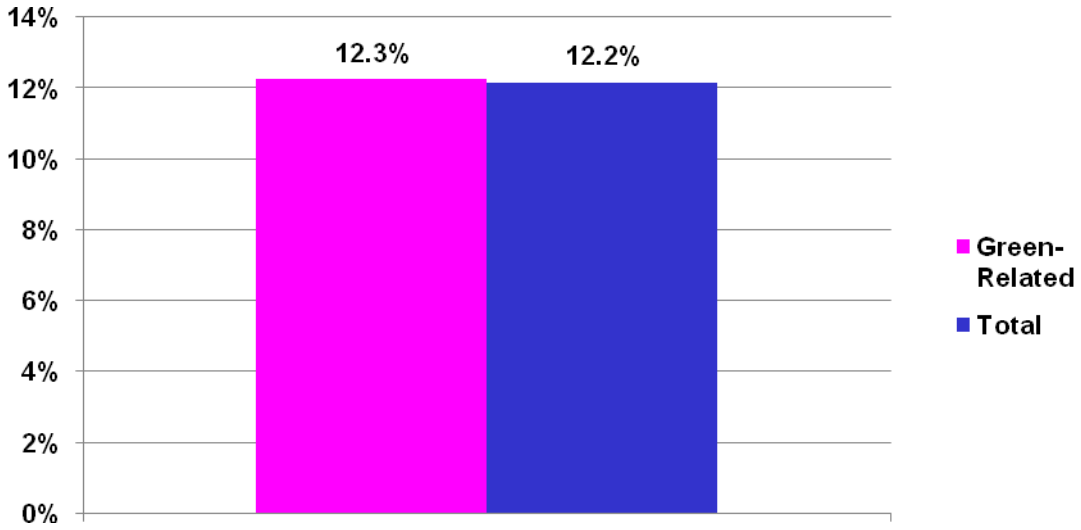


Figure 102: WIA XIV – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 51: WIA XIV – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Healthcare Support Occupations	31-0000	796	1,079	35.6%
Computer and Mathematical Occupations	15-0000	4,046	5,172	27.8%
Life, Physical, and Social Science Occupations	19-0000	861	1,063	23.5%
Community and Social Services Occupations	21-0000	735	903	22.9%
Personal Care and Service Occupations	39-0000	2,245	2,696	20.1%
Healthcare Practitioners and Technical Occupations	29-0000	4,320	5,169	19.7%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	1,160	1,386	19.5%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	3,672	4,360	18.7%
Education, Training, and Library Occupations	25-0000	2,403	2,811	17.0%
Protective Service Occupations	33-0000	262	303	15.6%
Food Preparation and Serving Related Occupations	35-0000	10,948	12,645	15.5%
Business and Financial Operations Occupations	13-0000	11,755	13,408	14.1%
Installation, Maintenance, and Repair Occupations	49-0000	7,998	9,109	13.9%
Office and Administrative Support Occupations	43-0000	24,300	27,255	12.2%
Construction and Extraction Occupations	47-0000	10,635	11,609	9.2%
Management Occupations	11-0000	8,857	9,590	8.3%
Architecture and Engineering Occupations	17-0000	3,990	4,284	7.4%
Sales and Related Occupations	41-0000	21,509	23,061	7.2%
Transportation and Material Moving Occupations	53-0000	1,857	1,985	6.9%
Production Occupations	51-0000	3,356	3,219	-4.1%

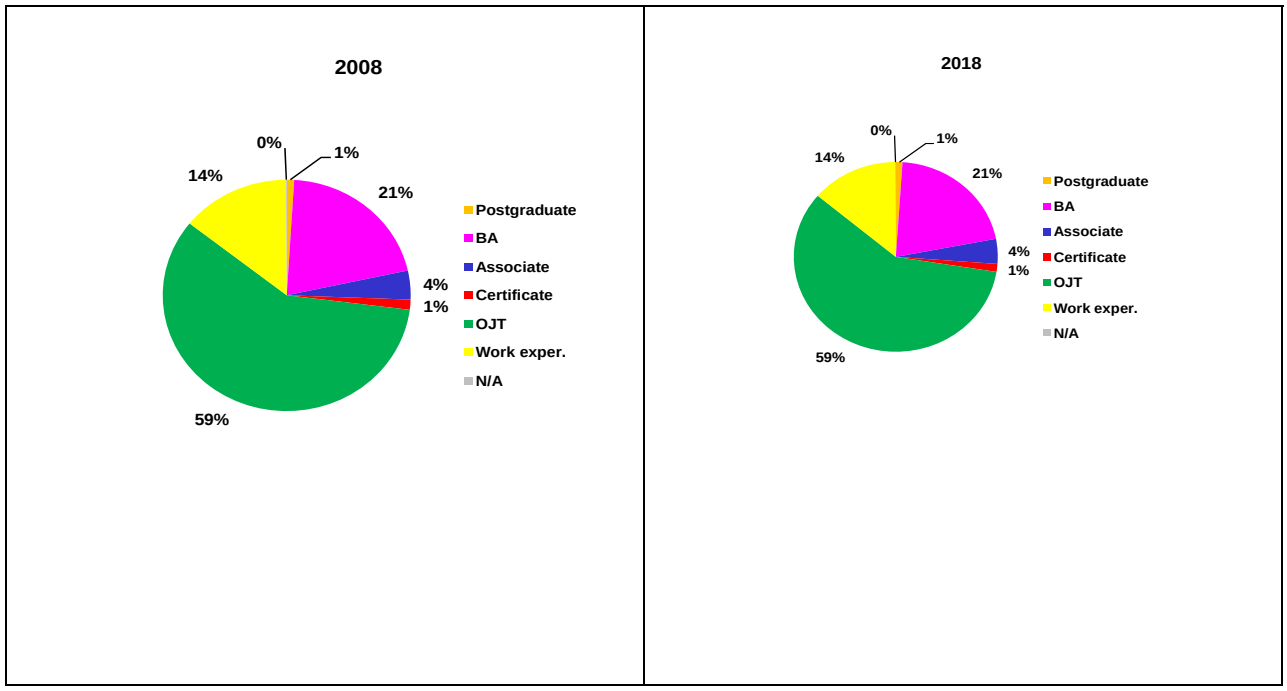


Figure 103: WIA XIV – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

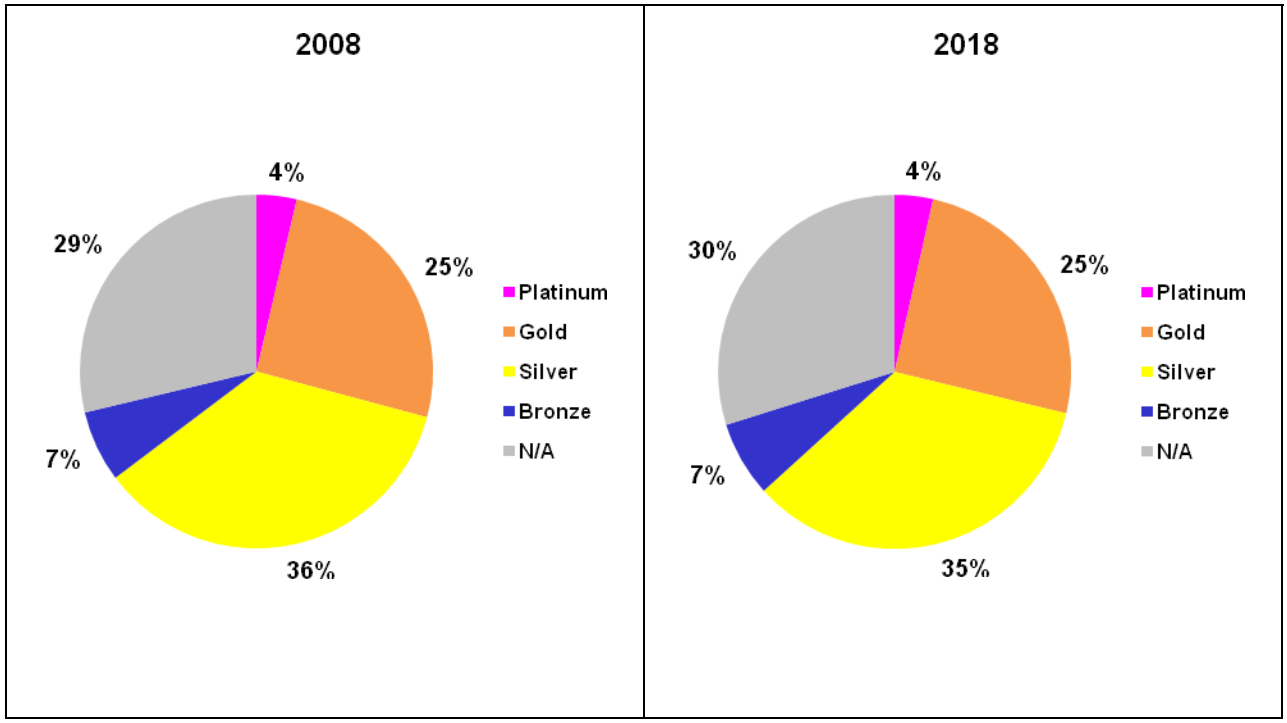


Figure 104: WIA XIV – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 52: WIA XIV – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	113	0	-113
Computer Software Engineers, Applications	15-1031		BA degree	51	16	-35
Computer Systems Analysts	15-1051		BA degree	51	16	-35
Mechanical Engineers	17-2141	Gold	BA degree	34	0	-34
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	27	0	-27
Civil Engineers	17-2051		BA degree	25	0	-25
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	38	13	-25
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	22	0	-22
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	13	0	-13
Physical Therapists	29-1123		Master's degree	13	0	-13
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	21	10	-11
Electrical Engineers	17-2071	Gold	BA degree	12	2	-10
Electronics Engineers, Except Computer	17-2072	Platinum	BA degree	11	2	-9
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	9	0	-9
Education, Training, and Library Workers, All Other	25-9099	Silver	BA degree	8	0	-8
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	8	0	-8
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	10	3	-7
Personal Financial Advisors	13-2052		BA degree	9	3	-6
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	13	7	-6
Environmental Engineers	17-2081		BA degree	5	0	-5

WIA XV (Crater Area)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 31,631 (or 43.8 percent of total employment) in 2008 to 35,085 (or 43.6 percent of total employment) in 2018 (*see* Figure 105).
- Overall, employment in identified green occupations is projected to increase by 10.9 percent between 2008 and 2018, as compared to an 11.2 percent increase in total employment (*see* Figure 106).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Healthcare Support*, 2) *Computer and Mathematical*, 3) *Healthcare Practitioners and Technical*, 4) *Community and Social Services*, and 5) *Arts, Design, Entertainment, Sports, and Media* occupations (*see* Table 53).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 15 percent of the total employment in green occupations in both 2008 and 2018 (*see* Figure 107).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 25 percent of total employment in green occupations in both 2008 and 2018 (*see* Figure 108).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Automotive Service Technicians and Mechanics*, 3) *Human Resources, Training, and Labor Relations Specialists, All Other*, 4) *Training and Development Specialists*, and 5) *Network and Computer Systems Administrators* (*see* Table 54).
- Fifteen out of the 19 negative gaps are in occupations that typically require a BA degree or above (*see* Table 54).
- Eleven of the 13 “top 20” gap occupations (although in this instance, only 19 occupations were actually found to have a negative gap – a possible shortage of trained workers) for which data are available require a gold CRC or above (*see* Table 54).

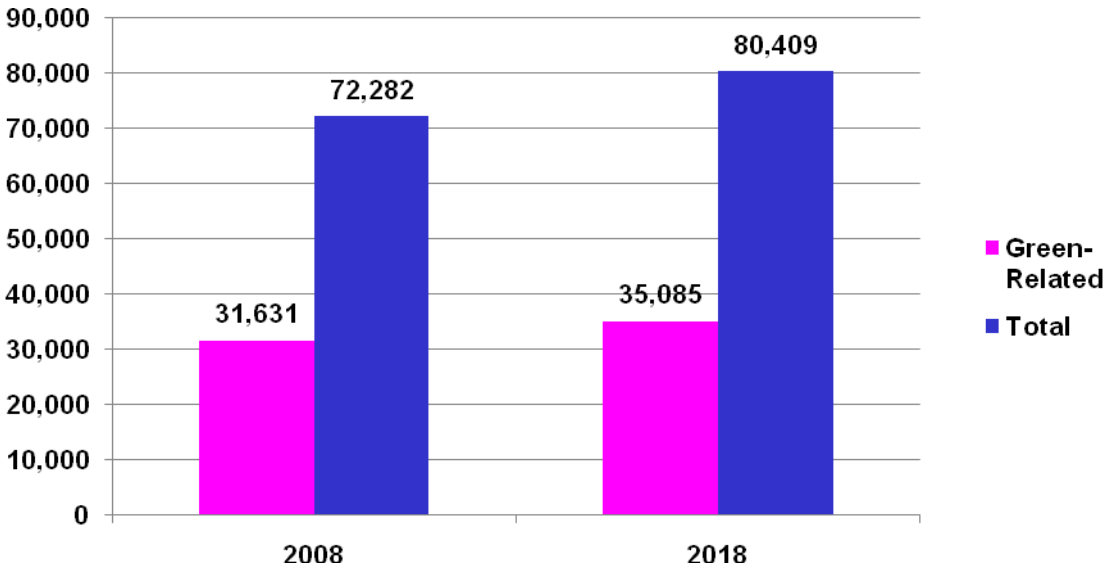


Figure 105: WIA XV – Green-Related Occupational Employment, 2008 to 2018

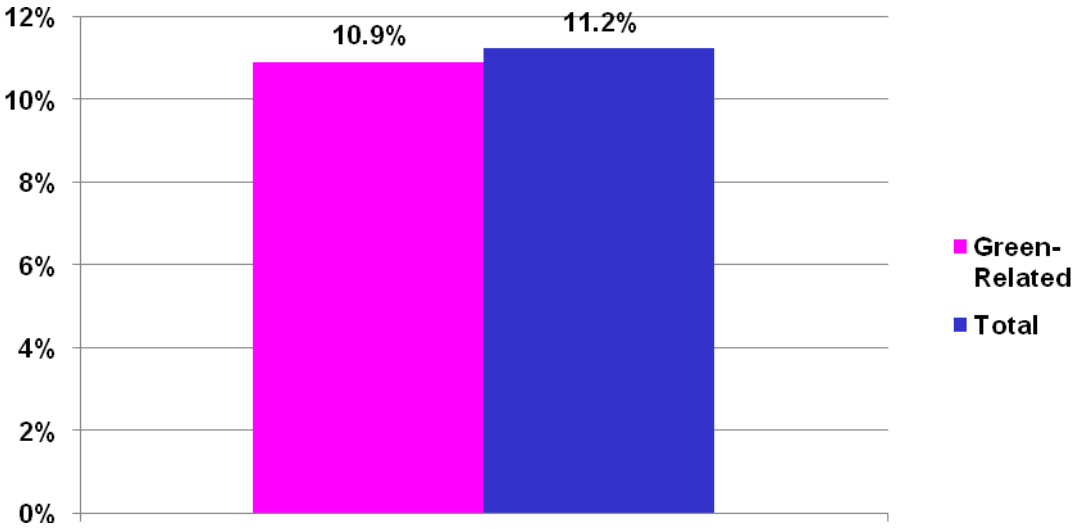


Figure 106: WIA XV – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 53: WIA XV – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Healthcare Support Occupations	31-0000	155	210	35.5%
Computer and Mathematical Occupations	15-0000	650	830	27.7%
Healthcare Practitioners and Technical Occupations	29-0000	1,739	2,166	24.6%
Community and Social Services Occupations	21-0000	327	406	24.2%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	92	110	19.6%
Education, Training, and Library Occupations	25-0000	625	739	18.2%
Personal Care and Service Occupations	39-0000	396	455	14.9%
Business and Financial Operations Occupations	13-0000	2,470	2,818	14.1%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	342	390	14.0%
Construction and Extraction Occupations	47-0000	1,477	1,670	13.1%
Food Preparation and Serving Related Occupations	35-0000	2,337	2,627	12.4%
Transportation and Material Moving Occupations	53-0000	2,569	2,847	10.8%
Installation, Maintenance, and Repair Occupations	49-0000	2,599	2,843	9.4%
Sales and Related Occupations	41-0000	5,461	5,927	8.5%
Architecture and Engineering Occupations	17-0000	332	360	8.4%
Office and Administrative Support Occupations	43-0000	6,785	7,310	7.7%
Life, Physical, and Social Science Occupations	19-0000	113	118	4.4%
Management Occupations	11-0000	1,905	1,970	3.4%
Production Occupations	51-0000	1,257	1,289	2.5%

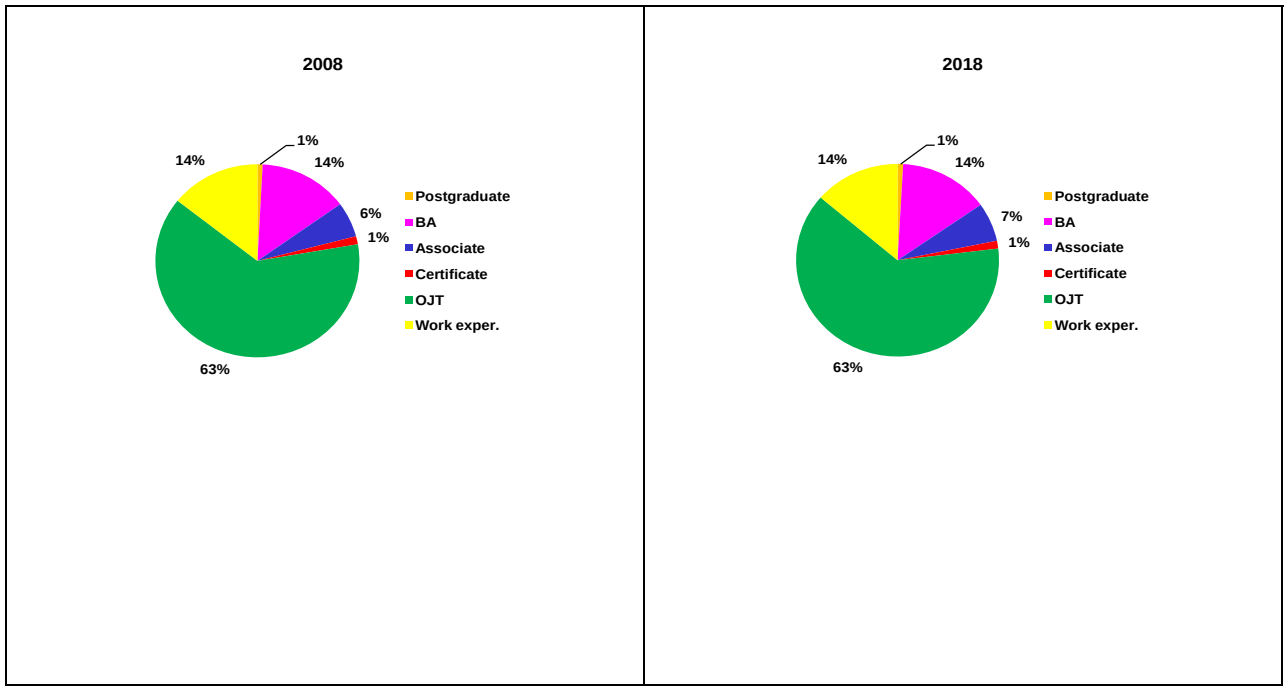


Figure 107: WIA XV – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

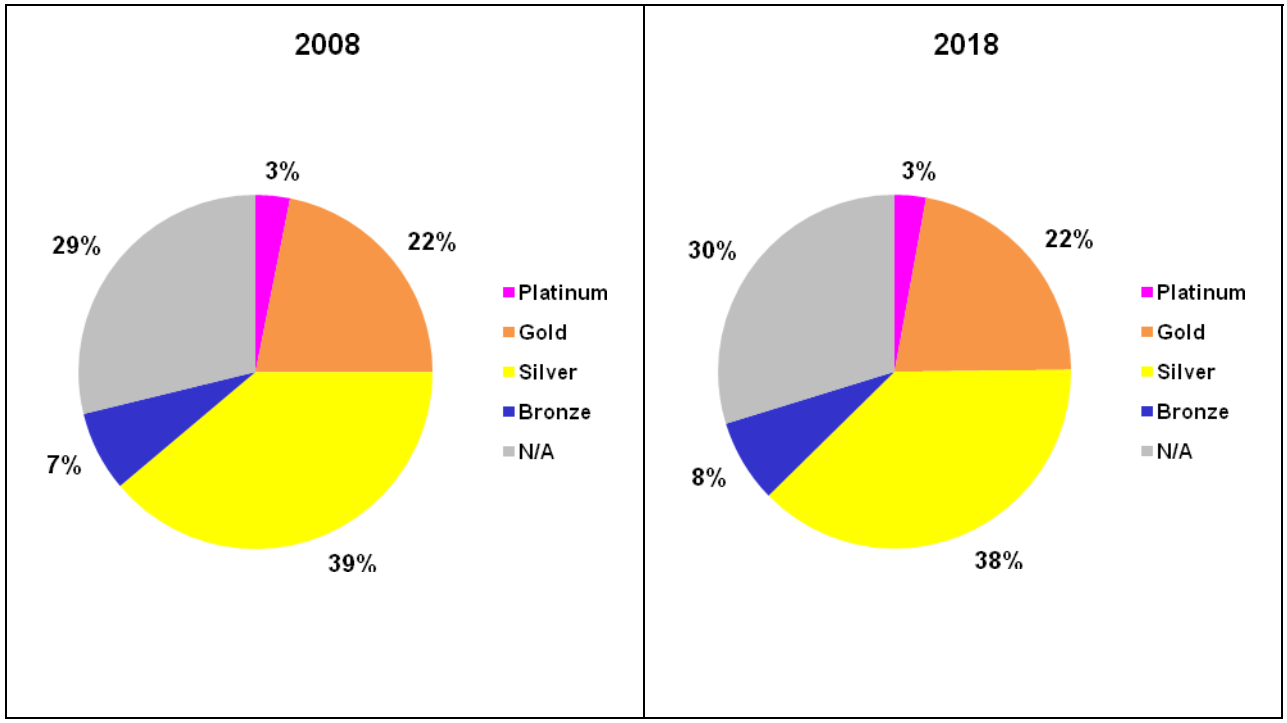


Figure 108: WIA XV – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 54: WIA XV – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	28	0	-28
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	11	0	-11
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	9	0	-9
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	8	0	-8
Network and Computer Systems Administrators	15-1071		BA degree	6	0	-6
Civil Engineers	17-2051		BA degree	4	0	-4
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	4	0	-4
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	4	0	-4
Physical Therapists	29-1123		Master's degree	4	0	-4
Computer Specialists, All Other	15-1099		Associate degree	10	7	-3
Medical and Clinical Laboratory Technicians	29-2012	Gold	Associate degree	3	0	-3
Electrical Engineers	17-2071	Gold	BA degree	3	0	-3
Mechanical Engineers	17-2141	Gold	BA degree	2	0	-2
Public Relations Specialists	27-3031	Gold	BA degree	2	0	-2
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	2	0	-2
Graphic Designers	27-1024	Gold	BA degree	1	0	-1
Computer and Information Systems Managers	11-3021	Platinum	BA or higher degree, plus work experience	1	0	-1
Management Analysts	13-1111	Gold	BA or higher degree, plus work experience	11	10	-1
Purchasing Managers	11-3061	Silver	BA or higher degree, plus work experience	1	0	-1

WIA XVI (Hampton Roads)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 277,562 (or 50.6 percent of total employment) in 2008 to 317,373 (or 50.6 percent of total employment) in 2018 (*see* Figure 109).
- Overall, employment in identified green occupations is projected to increase by 14.3 percent between 2008 and 2018, as compared to a 14.4 percent increase in total employment (*see* Figure 110).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1*) Computer and Mathematical*, 2) *Healthcare Support*, 3) *Life, Physical, and Social Science*, 4) *Healthcare Practitioners and Technical*, and 5) *Business and Financial Operations* occupations (*see* Table 55).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to have accounted for 19 percent of the total employment in green occupations in 2008 and are projected to account for 20 percent in 2018 (*see* Figure 111).
- Jobs that require core employability skills at the gold CRC level or above are estimated to have comprised 28 percent of total employment in green occupations in 2008 and are projected to comprise 27 percent in 2018 (*see* Figure 112).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Business Operations Specialists, All Other*, 2) *Computer Software Engineers, Applications*, 3) *Computer Software Engineers, Systems Software*, 4) *Civil Engineers*, and 5)*Medical and Clinical Laboratory Technicians* (*see* Table 56).
- Fifteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 56).
- Nine of the 9 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 56).

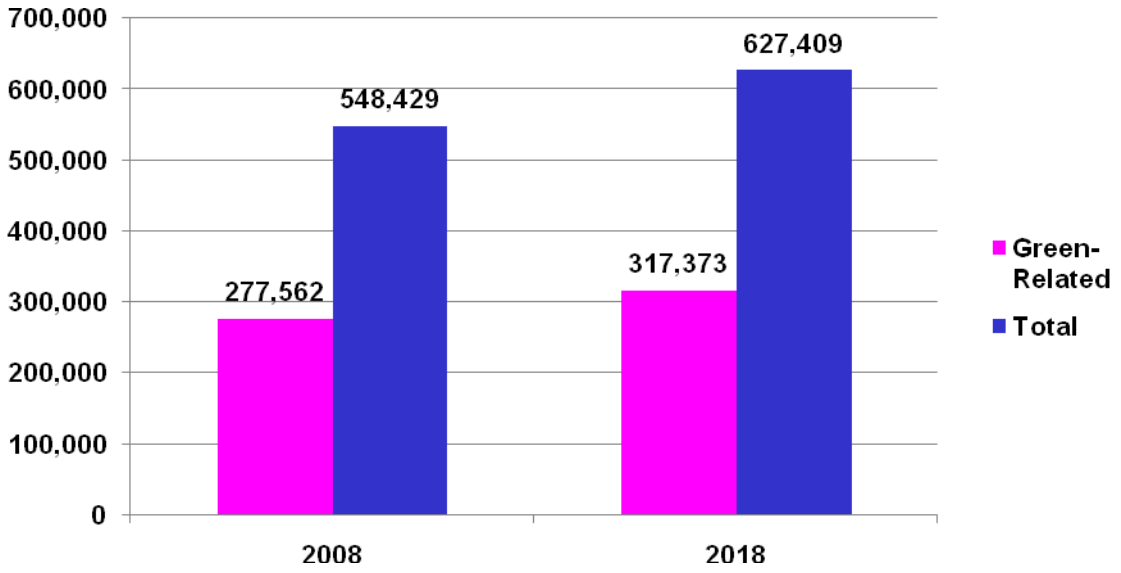


Figure 109: WIA XVI – Green-Related Occupational Employment, 2008 to 2018

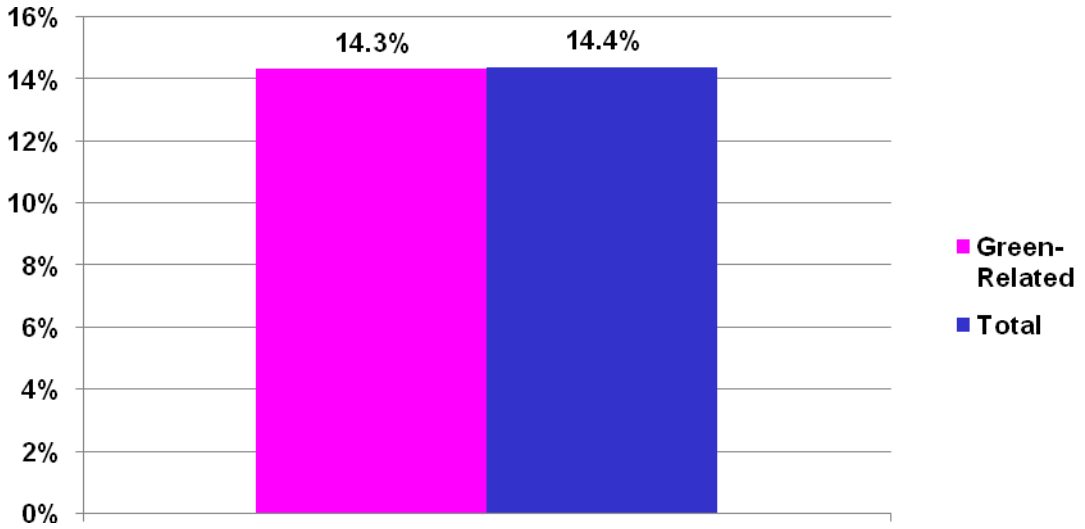


Figure 110: WIA XVI – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 55: WIA XVI – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Computer and Mathematical Occupations	15-0000	8,157	10,912	33.8%
Healthcare Support Occupations	31-0000	2,556	3,386	32.5%
Life, Physical, and Social Science Occupations	19-0000	1,787	2,189	22.5%
Healthcare Practitioners and Technical Occupations	29-0000	10,324	12,616	22.2%
Business and Financial Operations Occupations	13-0000	22,470	27,296	21.5%
Community and Social Services Occupations	21-0000	2,036	2,473	21.5%
Architecture and Engineering Occupations	17-0000	7,055	8,443	19.7%
Personal Care and Service Occupations	39-0000	2,673	3,167	18.5%
Education, Training, and Library Occupations	25-0000	5,411	6,378	17.9%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	5,501	6,461	17.5%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	3,851	4,515	17.2%
Food Preparation and Serving Related Occupations	35-0000	25,698	29,712	15.6%
Construction and Extraction Occupations	47-0000	25,476	29,386	15.3%
Office and Administrative Support Occupations	43-0000	58,106	65,632	13.0%
Installation, Maintenance, and Repair Occupations	49-0000	18,958	21,226	12.0%
Management Occupations	11-0000	18,672	20,655	10.6%
Transportation and Material Moving Occupations	53-0000	8,570	9,405	9.7%
Protective Service Occupations	33-0000	920	988	7.4%
Sales and Related Occupations	41-0000	44,684	47,730	6.8%
Farming, Fishing, and Forestry Occupations	45-0000	126	133	5.6%
Production Occupations	51-0000	4,531	4,670	3.1%

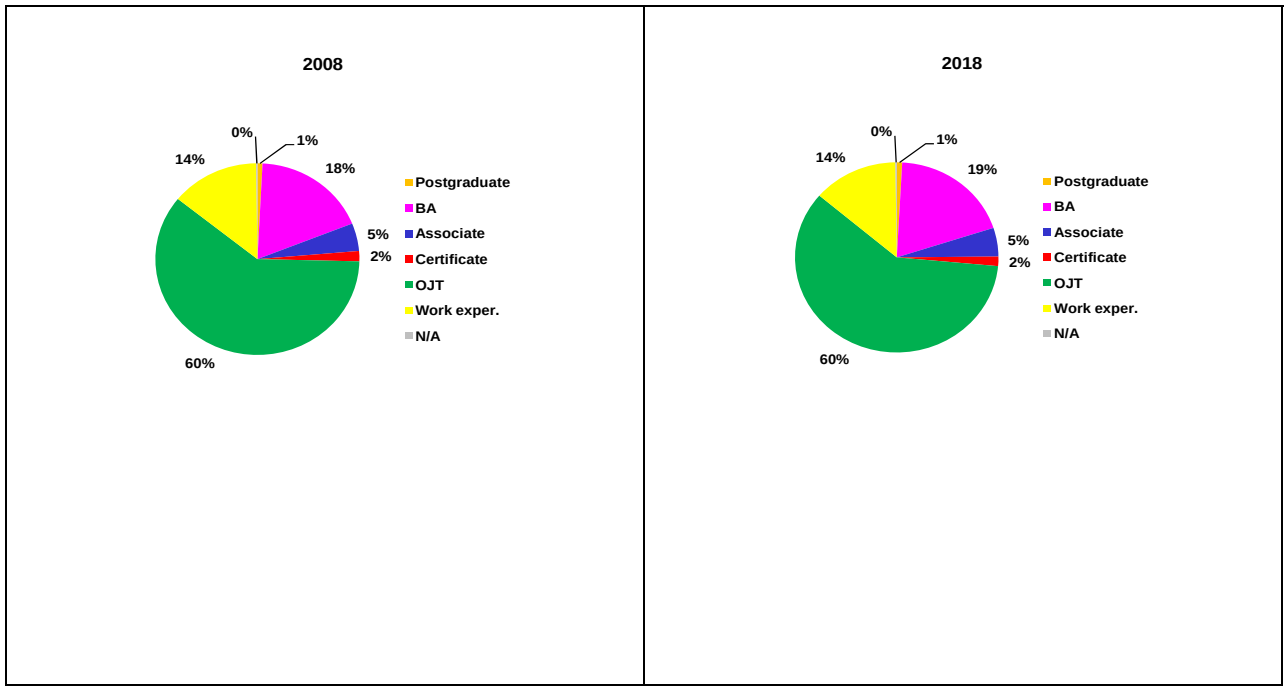


Figure 111: WIA XVI – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

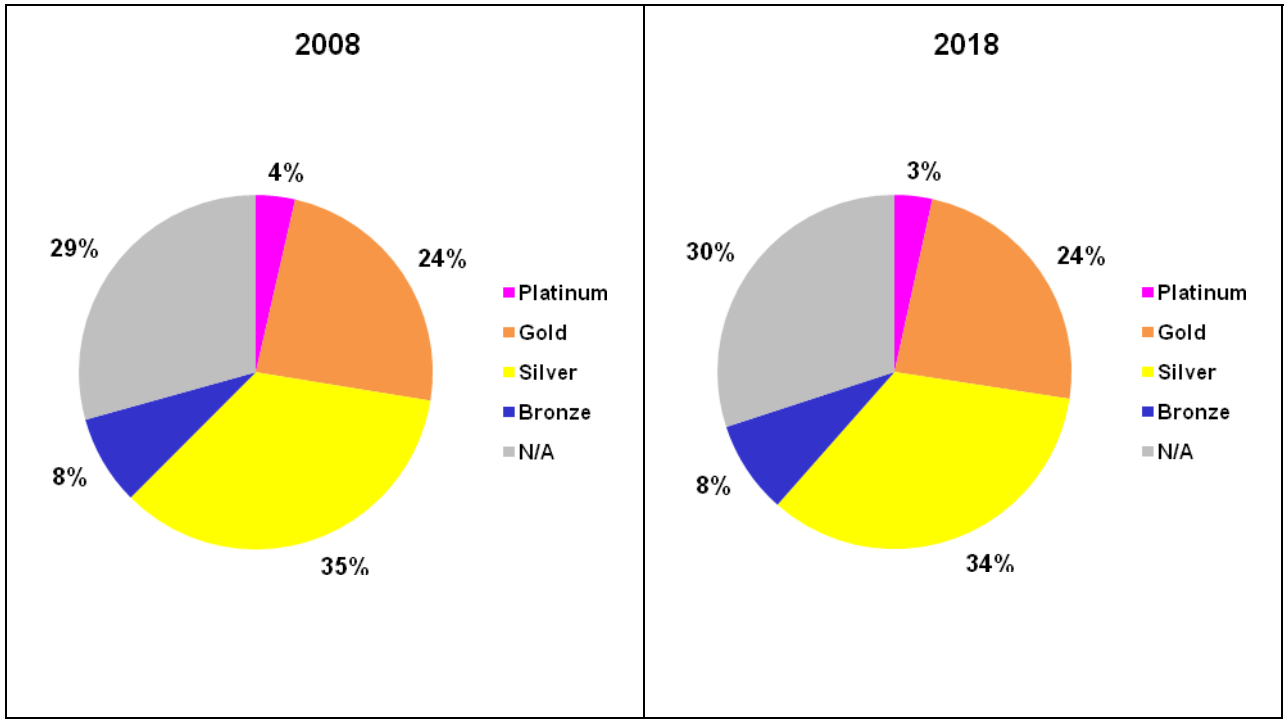


Figure 112: WIA XVI – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 56: WIA XVI – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Business Operations Specialists, All Other	13-1199		BA degree	179	0	-179
Computer Software Engineers, Applications	15-1031		BA degree	92	5	-87
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	70	4	-66
Civil Engineers	17-2051		BA degree	70	35	-35
Medical and Clinical Laboratory Technicians	29-2012	Gold	Associate degree	27	0	-27
Physical Therapists	29-1123		Master's degree	20	0	-20
Market Research Analysts	19-3021	Gold	BA degree	43	24	-19
Architects, Except Landscape and Naval	17-1011		BA degree	18	0	-18
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	17	0	-17
Operations Research Analysts	15-2031	Gold	Master's degree	17	0	-17
Life, Physical, and Social Science Technicians, All Other	19-4099		Associate degree	16	0	-16
Mechanical Engineers	17-2141	Gold	BA degree	31	16	-15
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022		Certificate	14	0	-14
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	12	0	-12
Electrical Engineers	17-2071	Gold	BA degree	26	15	-11
Interior Designers	27-1025		Associate degree	16	6	-10
Urban and Regional Planners	19-3051		Master's degree	10	0	-10
Electronics Engineers, Except Computer	17-2072	Platinum	BA degree	25	17	-8
Broadcast Technicians	27-4012		Associate degree	7	0	-7
Surveyors	17-1022		BA degree	7	0	-7

WIA XVII (West Piedmont)

Current and Projected Employment

- Employment in identified green occupations is projected to increase from 34,138 (or 44.5 percent of total employment) in 2008 to 37,755 (or 44.7 percent of total employment) in 2018 (*see* Figure 113).
- Overall, employment in identified green occupations is projected to increase by 10.6 percent between 2008 and 2018, as compared to a 10.1 percent increase in total employment (*see* Figure 114).
- Breaking these data down according to major occupation categories shows that the fastest growth is anticipated in: 1) *Personal Care and Service*, 2) *Healthcare Support*, 3) *Computer and Mathematical*, 4) *Healthcare Practitioners and Technical*, and 5) *Community and Social Services* occupations (*see* Table 57).

Education and Core Employability Skill Levels

- Jobs requiring a BA degree or above are estimated to account for 10 percent of the total employment in green occupations in both 2008 and 2018 (*see* Figure 115).
- Jobs that require core employability skills at the gold CRC level or above are estimated to comprise 20 percent of total employment in green occupations in both 2008 and 2018 (*see* Figure 116).

Gap Analysis

- The largest potential shortages of trained workers are estimated to be in the occupations: 1) *Education Administrators, Elementary and Secondary School*, 2) *Accountants and Auditors*, 3) *Business Operations Specialists, All Other*, 4) *Physical Therapists*, and 5)*Training and Development Specialists* (*see* Table 58).
- Eighteen out of the "top 20" gaps are in occupations that typically require a BA degree or above (*see* Table 58).
- Eleven of the 12 "top 20" gap occupations for which data are available require a gold CRC or above (*see* Table 58).

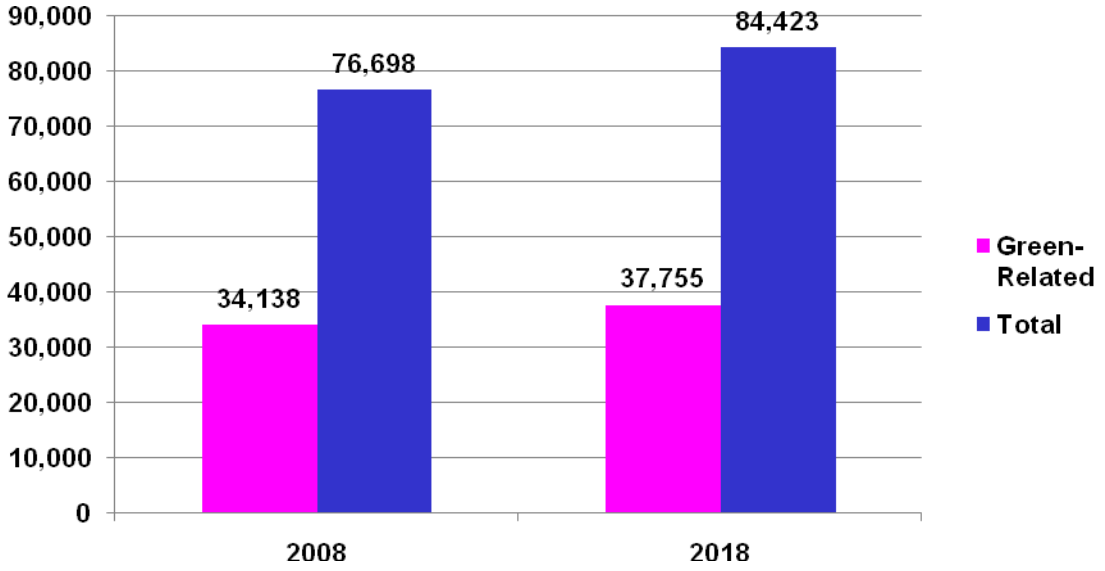


Figure 113: WIA XVII – Green-Related Occupational Employment, 2008 to 2018

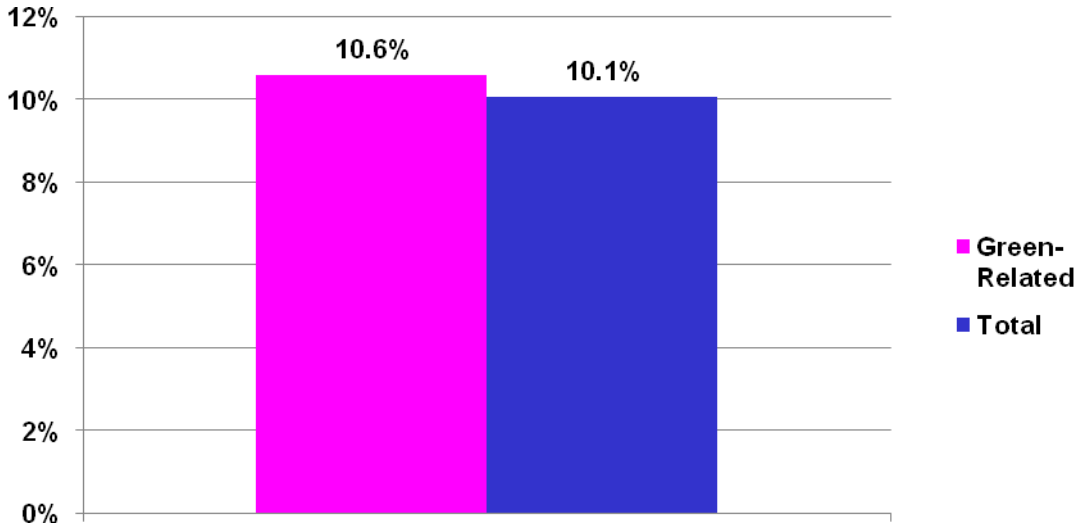


Figure 114: WIA XVII – Projected Green-Related Occupational Employment Growth, 2008 to 2018

Table 57: WIA XVII – Projected Green-Related Occupation Growth by Major Occupation Category

Major Occupation Category	SOC	Estimated 2008 Emp.	Projected 2018 Emp.	% Change
Personal Care and Service Occupations	39-0000	92	132	43.5%
Healthcare Support Occupations	31-0000	93	128	37.6%
Computer and Mathematical Occupations	15-0000	169	220	30.2%
Healthcare Practitioners and Technical Occupations	29-0000	1,583	2,002	26.5%
Community and Social Services Occupations	21-0000	318	390	22.6%
Business and Financial Operations Occupations	13-0000	1,180	1,414	19.8%
Life, Physical, and Social Science Occupations	19-0000	51	61	19.6%
Education, Training, and Library Occupations	25-0000	866	1,035	19.5%
Building and Grounds Cleaning and Maintenance Occupations	37-0000	664	788	18.7%
Food Preparation and Serving Related Occupations	35-0000	2,466	2,905	17.8%
Construction and Extraction Occupations	47-0000	2,847	3,155	10.8%
Office and Administrative Support Occupations	43-0000	9,075	10,050	10.7%
Sales and Related Occupations	41-0000	5,964	6,424	7.7%
Transportation and Material Moving Occupations	53-0000	1,153	1,238	7.4%
Installation, Maintenance, and Repair Occupations	49-0000	2,586	2,759	6.7%
Architecture and Engineering Occupations	17-0000	182	193	6.0%
Arts, Design, Entertainment, Sports, and Media Occupations	27-0000	145	152	4.8%
Protective Service Occupations	33-0000	87	90	3.4%
Management Occupations	11-0000	2,029	2,097	3.4%
Production Occupations	51-0000	2,362	2,330	-1.4%
Farming, Fishing, and Forestry Occupations	45-0000	226	192	-15.0%

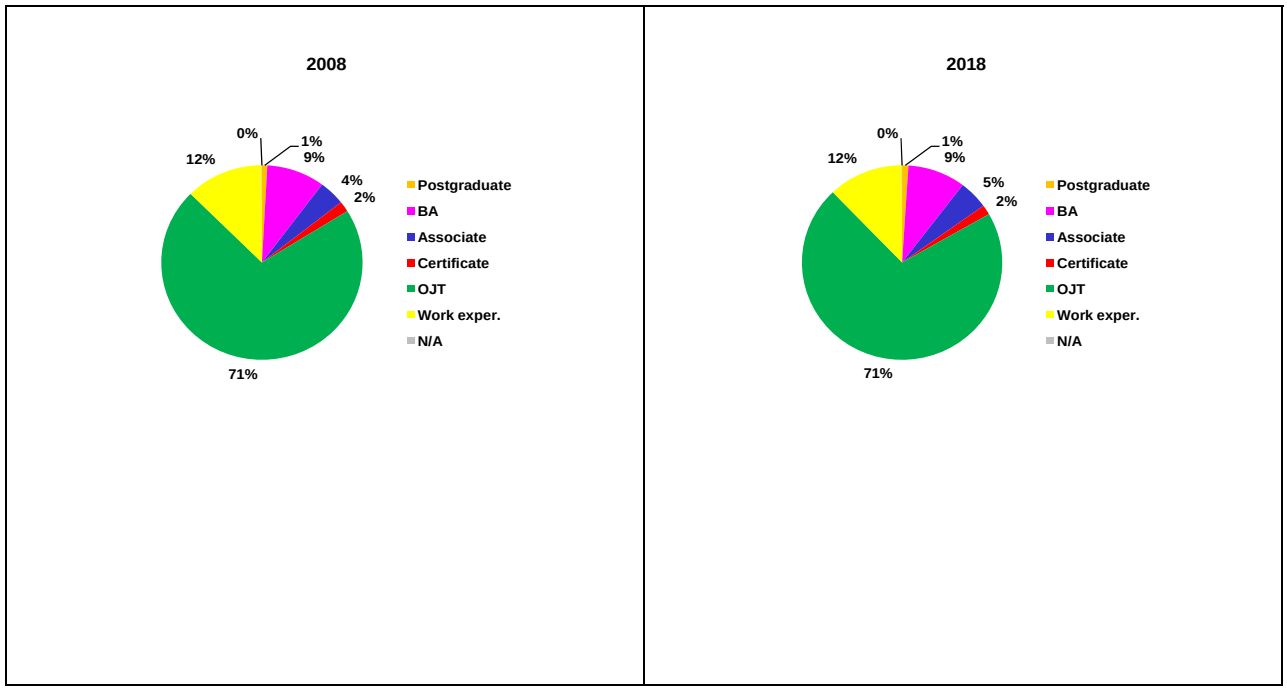


Figure 115: WIA XVII – Green-Related Occupational Employment, Required Degree Levels, 2008 to 2018

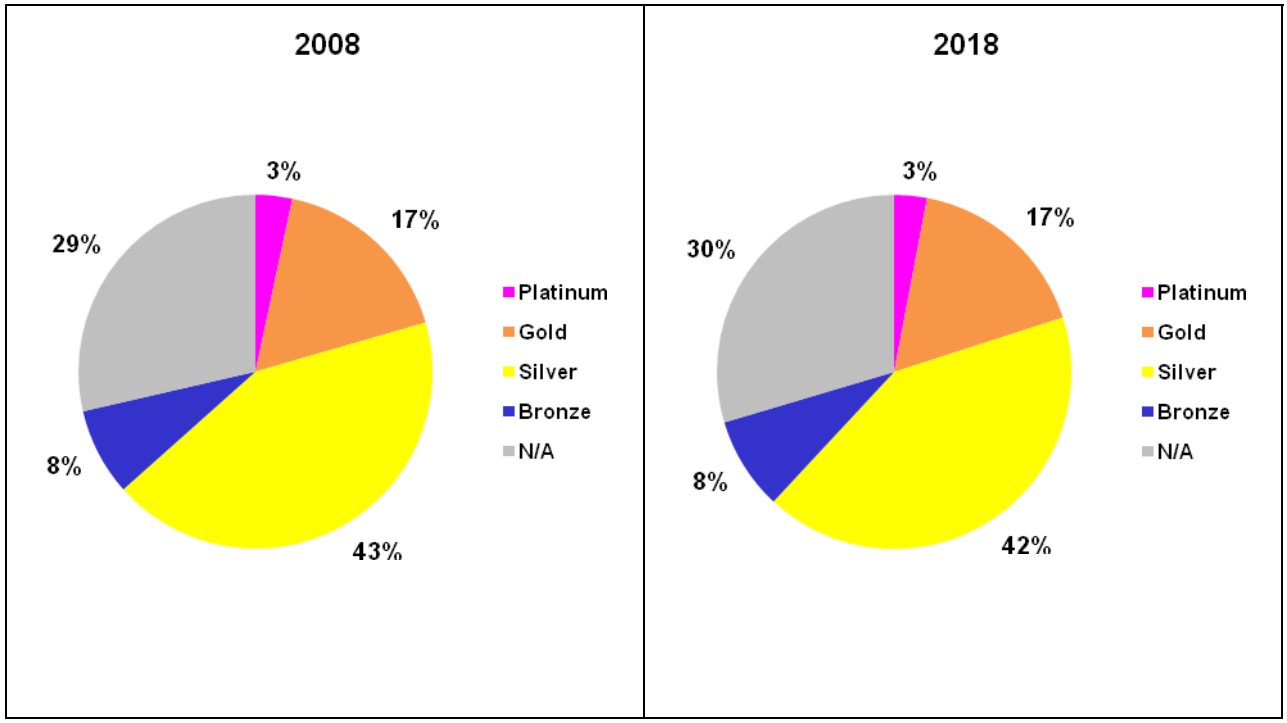


Figure 116: WIA XVII – Green-Related Occupational Employment, Required Career Readiness Certificate Levels, 2008 to 2018

Table 58: WIA XVII – Green-Related Occupation Gap Analysis Summary – Top 20

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Education Administrators, Elementary and Secondary School	11-9032	Gold	BA or higher degree, plus work experience	9	0	-9
Accountants and Auditors	13-2011	Bronze	BA degree	13	6	-7
Business Operations Specialists, All Other	13-1199		BA degree	7	0	-7
Physical Therapists	29-1123		Master's degree	7	0	-7
Training and Development Specialists	13-1073	Gold	BA or higher degree, plus work experience	6	0	-6
Educational, Vocational, and School Counselors	21-1012	Silver	Master's degree	6	0	-6
Medical and Clinical Laboratory Technicians	29-2012	Gold	Associate degree	3	0	-3
Computer Software Engineers, Applications	15-1031		BA degree	3	0	-3
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	3	0	-3
Financial Managers	11-3031	Gold	BA or higher degree, plus work experience	3	0	-3
Market Research Analysts	19-3021	Gold	BA degree	2	0	-2
Mechanical Engineers	17-2141	Gold	BA degree	2	0	-2
Public Relations Specialists	27-3031	Gold	BA degree	2	0	-2
Electronic Home Entertainment Equipment Installers and Repairers	49-2097		Certificate	2	0	-2
Civil Engineers	17-2051		BA degree	1	0	-1
Electronics Engineers, Except Computer	17-2072	Platinum	BA degree	1	0	-1
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	1	0	-1
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	1	0	-1
Education Administrators, All Other	11-9039		BA or higher degree, plus work experience	1	0	-1
Education Administrators, Postsecondary	11-9033	Platinum	BA or higher degree, plus work experience	1	0	-1

5. Summary and Conclusion

This report has presented a summary of preliminary findings from a "gap" analysis for those occupations identified in the MARC LMI Green Jobs Survey conducted by ICF International in 2010 in the District of Columbia, Maryland, and Virginia. The purpose of this analysis is to compare the projected demand for workers in these "green job" occupations with the pipeline of completers from associated postsecondary education programs within the MARC region to identify potential gaps between the demand for, and supply of, trained workers. The gap analysis was conducted at the state/jurisdiction level for the District of Columbia, Maryland, and Virginia, and at the Workforce Investment Area (WIA) level for the 12 WIA's within Maryland and the 14 WIAs within Virginia.

Occupational demand data for these identified green occupations were obtained from state-level and, where applicable, WIA-level projections of average annual openings from the District of Columbia's Department of Employment Services; Maryland Department of Labor, Licensing, and Regulation; and Virginia Employment Commission. In each case, projections are for the most recent forecast horizon available for each state/jurisdiction and WIA.[18] Data on completers from associated postsecondary education programs were obtained from the U.S. Department of Education's *Integrated Postsecondary Education Data System* .[19] The gap analysis was performed using the *WIN Strategic Compass*, a web-based software product produced by Worldwide Interactive Network.

In addition to findings from the gap analysis, we have also provided information on the general characteristics of the identified green occupations in terms of projected employment, and required education and core employability skill levels.

[18] Occupational employment projections for the District of Columbia are for the 2006-2016 forecast horizon. Occupational employment projections for Maryland are for the 2008-2018 forecast horizon at the state level and the 2006-2016 forecast horizon at the sub-state level. Occupational employment projections for Virginia are for the 2008-2018 forecast horizon at both the state and sub-state level.

[19] These data consist of the number of completers reported by postsecondary education institutions within each stat/jurisdiction and sub-state area included in the analysis for the 2008-2009 academic year.

5.1. Summary of Findings

The principal findings from our analysis are as follows.

Current and Projected Employment

The MARC LMI Green Jobs Survey identified 50 unique green jobs at the six-digit standard occupation code (SOC) level in the District of Columbia, 188 in Maryland, and the 214 in Virginia.[20] Our analysis has shown that these identified green occupations comprise a larger proportion of total current and projected employment in Maryland (51.3 percent in 2008 and 51.0 percent in 2018) and Virginia (54.5 percent in 2008 and 54.7 percent in 2018), than in the District of Columbia (30.1 percent in 2006 and 29.9 percent in 2016). In addition, our analysis has shown that of the three jurisdictions, only in Virginia are green occupations projected to account for a larger proportion of future employment than current employment.[21]

At the Workforce Investment Area (WIA) level, our analysis has shown that in Maryland, the Southern Maryland WIA exhibited the largest proportion of green occupational employment (54.4 percent in 2006 and 53.6 percent in 2016), while the City of Baltimore WIA exhibited the lowest proportion (47.2 percent in 2006 and 46.9 percent in 2016). In addition, in only one out of the 12 Maryland WIAs (Western Maryland WIA) are green occupations projected to account for a larger proportion of future employment than current employment.

In Virginia, the combined area of WIAs XI and XII – Northern Virginia and Alexandria/Arlington exhibited the largest proportion of green occupational employment (57.4 percent in 2008 and 58.0 percent in 2018), while WIA XV – Crater Area exhibited the lowest proportion (43.8 percent in 2008 and 43.6 percent in 2018). Further, in Virginia six out of 14 WIAs (WIA II – New River/Mount Rogers, WIA III – Western Virginia, WIA VII – Region 2000, WIAs XI and XII – Northern Virginia and Alexandria/Arlington, and WIA XVII – West Piedmont) are projected to experience a larger proportion of green occupational employment in future.

[20] A comprehensive list of these occupation at both the state/jurisdiction level and the WIA level is provided in Table A2 of the data appendix.

[21] Recall that, because the gap analysis compares the totality of employment demand in a given occupation to the totality of completers in postsecondary education programs associated with that occupation, the employment numbers presented in this report are more expansive than those identified in the MARC LMI Green Jobs Survey. The reason for this is that, of necessity, they include all employment in a given occupation, regardless of whether that occupational employment is in identified green industries or not. What this means in practice, for example, is that we compare the total number of completers coming out of accounting programs to the total occupational demand for accountants. It is necessary to conduct the analysis at this level because we have no way to know in advance what proportion of completers will go into green industries, and what proportion will not.

In terms of projected employment growth, our analysis has shown that between 2006 and 2016, employment in identified green occupations is projected to increase by 7.7 percent in the District of Columbia, as compared to an 8.5 percent projected increase in total employment. Whereas in Maryland, employment in identified green occupations is projected to increase by 8.5 percent between 2008 and 2018, as compared to a 9.1 projected increase in total employment, and in Virginia green occupational employment is projected to increase by 15.4 percent between 2008 and 2018, as compared to a 14.9 projected increase in total employment. As these data show, of the three jurisdictions, Virginia is not only projected to experience the largest increase in employment in identified green occupations, but also it is the only jurisdiction where growth in these occupations exceeds total employment growth.

Again looking at the WIA level data, our analysis has shown that in Maryland, the WIAs of Anne Arundel County and Frederick County are tied for the largest projected increase in employment in identified green occupations (23.6 percent between 2006 and 2016), while the City of Baltimore WIA is expected to experience the lowest increase (a decline of 1.7 percent between 2006 and 2016). While projected growth in employment in green occupations to total employment growth indicates that green occupations are projected to grow at a faster rate than total employment in only one out of the 12 Maryland WIAs (Western Maryland WIA).

In Virginia, the largest increase in employment in identified green occupations is projected in the combined area of WIAs XI and XII – Northern Virginia and Alexandria/Arlington (21.5 percent between 2008 and 2018), while WIA I – Southwestern Virginia is projected to experience the smallest increase (10.5 percent between 2008 and 2018). In this case, a comparison of projected growth in employment in green occupations to total employment growth shows that green occupations are projected to grow at a faster rate than total employment in nine of the 14 Virginia WIAs (WIA II – New River/Mount Rogers, WIA III – Western Virginia, WIA IV – Shenandoah Valley, WIA VI – Piedmont Workforce Network, WIA VII – Region 2000, WIAs XI and XII – Northern Virginia and Alexandria/Arlington, WIA XIV – Greater Peninsula, and WIA XVII – West Piedmont).

Finally, as part of our analysis we also disaggregated the green occupation data for each state/jurisdiction and WIA into major occupation categories and ranked those major categories according to projected employment growth. Interestingly, that analysis showed significant similarities across jurisdictions. Specifically, we found that across all three jurisdictions and in most of the WIAs there were five major occupational categories that consistently ranked in the top ten in terms of largest anticipated employment growth. Those five were: *Arts Design, Entertainment, and Media*; *Business and Financial*; *Community and Social Services*; *Computer and Mathematical*; and *Life, Physical, and Social Science* occupations. In addition, *Architecture and Engineering* occupations ranked among the top ten fastest growing in the District of Columbia and Maryland, and *Legal* occupations ranked among the top ten in the District of Columbia.

Education and Core Employability Skill Levels

Our analysis also evaluated the required education and core employability skill levels associated with occupations identified in the MARC LMI Green Jobs Survey. With regard to required education levels, that evaluation indicated that in the District of Columbia jobs requiring a BA degree or above accounted for approximately 69 percent of total employment in identified green occupations in 2006 and are projected to account for 70 percent in 2016. In Maryland and Virginia, however, these percentages were much lower. In Maryland, jobs requiring a BA degree or above account for approximately 23 percent of total employment in identified green occupations in both 2008 and 2018, while in Virginia they account for 26 percent in 2008 and 27 percent in 2018. These differences are likely attributable to differences in the types of green jobs identified by the MARC LMI Green Jobs Survey in each jurisdiction, where the preponderance of "green jobs" identified in the District of Columbia tended to be in the high education/high skill professional and technical services sector, where the preponderance of "green jobs" identified in Maryland and Virginia tended to be in the lower education/lower skill building trades sector.

At the WIA level, our analysis shows that in Maryland the WIA with the largest proportion of green occupational employment in jobs requiring a BA degree or above was Montgomery County (29 percent in both 2006 and 2016), while the WIA with the lowest proportion was Western Maryland (10 percent in both 2006 and 2016). Whereas for Virginia, the combined area of WIAs XI and XII – Northern Virginia and Alexandria/Arlington exhibited the largest proportion of green occupational employment in jobs that required a BA degree or above (39 percent in 2008 and 41 percent projected in 2016), while WIA XVII – Western Piedmont exhibited the lowest proportion (10 percent in both 2006 and 2016).

With regard to core employability skill levels, our analysis indicates that in 2006 approximately 49 percent of total employment in identified green occupations in the District of Columbia was in jobs that required a gold-level Career Readiness Certificate (CRC) or above, while that proportion is projected to increase to 50 percent in 2016.[22] Again because of differences in the types of "green jobs" identified in the District of Columbia as compared to Maryland and Virginia, in this case as well, these percentages tend to be lower in Maryland and Virginia. In Maryland, jobs requiring a gold-level CRC or above accounted for approximately 29 percent of total employment in identified green occupations in 2008 and are projected to account for 28 percent in 2018, while in Virginia they account for 28 percent in both 2008 and 2018.

Turning again to the WIA-level data, we find that the Maryland WIAs with the largest proportion of green occupational employment in jobs requiring a gold-level CRC or above were Anne Arundel County and Montgomery County (both 30 percent in both 2006 and 2016), while Frederick County

[22]The CRC is a workforce certification program that is based on ACT's *WorkKeys* skill assessment system. It certifies that a recipient possess core skills in three assessment categories: applied math, reading for information, and locating information.[22] For a Bronze certificate, a recipient must score at least a level 3 in all three assessment categories. for a Silver certificate at least a level 4, for a Gold certificate at least a level 5, and for a Platinum certificate at least a level 6.

had the lowest (24 percent in both 2006 and 2016). In Virginia, WIAs XI and XII – Northern Virginia and Alexandria/Arlington had the largest proportion of green occupational employment in jobs requiring a gold-level CRC or above (33 percent in 2008 and 34 percent in 2018), while WIA XVII – West Piedmont had the lowest (20 percent in both 2008 and 2018).

5.2. Gap Analysis

For purposes of this analysis, we have defined the "gap" as the difference between the likely annual supply of trained graduates associated with each identified green occupation and the projected average annual openings for each occupation. Further, we have focused our analysis only on those instances where there is a possible shortage of trained graduates. This report presents the gap data in a summary form where projected average annual openings are compared to the aggregated sum of all completers, at all degree levels, from all associated postsecondary programs within the appropriate state/jurisdiction or WIA. Importantly, the number of graduates presented for each occupation is a "distributed" number, which takes into account the many-to-many relationship between occupations and educational programs, where graduates from one academic program often qualify for employment in more than one occupation, and more than one occupation can be associated with a single academic program.

Our analysis has revealed several similarities and many differences between the three jurisdictions. One of the primary similarities is that the largest gaps, in terms of likely shortages of trained graduates, tend to be at the BA level and above. In the District of Columbia five out of the top 10 largest gaps are for occupations that typically require a BA degree or above, while in both Maryland and Virginia nine out of the top 10 largest gaps are for occupations that typically require a BA degree or above.

When we look at the types of occupations that fall into these top 10, however, there are significant differences between the jurisdictions. In the District of Columbia three out of the top 10 largest gaps are in *Life, Physical, and Social Science* occupations, while two are in *Architecture and Engineering* and two are in *Business and Financial Operations* occupations (these, along with the other occupation groups referenced in this paragraph, are two digit SOC families that encompass the more granular six digit SOC occupations presented in the gap tables).[23] In contrast, in both Maryland and Virginia *Business and Financial Operations* and *Computer and Mathematical* occupations are more heavily represented. In Maryland, four out of the top 10 largest gaps are in *Business and Financial Operations* occupations and two are in *Computer and Mathematical* occupations.[24] Where in Virginia, four out of the top 10 largest gaps are also in *Business and Financial Operations* occupations and four are in *Computer and Mathematical* occupations.[25]

[23] The remaining three "top 10" largest gaps are evenly distributed between *Arts, Design, Entertainment, Sports, and Media*; *Installation, Maintenance, and Repair*; and *Legal* occupations.

[24] The remaining four "top 10" largest gaps are evenly distributed between *Architecture and Engineering*; *Community and Social Services*; *Healthcare Practitioners and Technical*; and *Legal*.

[25] The remaining two "top 10" largest gaps are split between *Installation, Maintenance, and Repair*; and *Management* occupations.

In the data appendix that follows this report, we provide a full listing of the negative (possible shortage of trained workers), or positive (possible over-supply of trained workers), gap associated with every occupation identified in the MARC LMI Green Jobs Survey at the state/jurisdiction level. In these data, the gap is presented in two ways. First, in the summary form described above. Second, in a more detailed format where projected average annual openings are distributed according to the typical education levels of new hires within that occupation as reported by the U.S. Bureau of Labor Statistics, and associated graduates are distributed according to corresponding degree levels. These more granular data are offered to provide a more comprehensive description of the postsecondary pipeline feeding each occupation, and to take into account the fact that "typically requires a baccalaureate (BA) degree" may mean very different things in different occupations.

5.3. Conclusion

Our analysis has shown that are significant differences in the current and projected employment, required education and core employability skill levels, and potential gaps in the supply of trained workers for green jobs identified in the District of Columbia, Maryland, and Virginia through the MARC LMI Green Jobs Survey and that these differences are driven in part by differences in the types of green jobs identified in each jurisdiction. Of the three jurisdictions, Virginia is projected to experience the largest employment increase in identified green occupations and is the only one of the three jurisdictions where projected growth in green occupations is expected to exceed projected growth in total employment. Another key difference pertains to required education and core employability skills levels, with identified green occupations in the District of Columbia typically requiring much higher education and core employability skills levels than those in either Maryland or Virginia.

Finally, our analysis has shown that, although in terms of likely shortages of trained graduates the largest gaps in all three jurisdictions tend to be disproportionately at the BA level and above, there are differences in the types of occupations that are most adversely impacted in each jurisdiction. Specifically, whereas in the District of Columbia the largest number of "top 10" gaps are in *Life, Physical, and Social Science*; *Architecture and Engineering*; and *Business and Financial Operations* occupations (in order of frequency), in Maryland and Virginia *Business and Financial Operations* occupations are most heavily represented in the top ten and *Computer and Mathematical* occupations rank second.

In sum, these data demonstrate that there are clear distinctions in "green" employment between the three jurisdictions. As a result, to be successful, strategies designed to promote that employment will have to be tailored to take into account those distinctions.

6. Data Appendix

6.1. Postsecondary Institutions

Table A1: Postsecondary Institutions Included in the Gap Analysis[26]

State	WIA	Institution
DC	N/A	American University
DC	N/A	Bennett Career Institute
DC	N/A	Career Technical Institute
DC	N/A	Catholic University of America
DC	N/A	Corcoran College of Art and Design
DC	N/A	Dominican House of Studies
DC	N/A	Dudley Beauty College
DC	N/A	Gallaudet University
DC	N/A	George Washington University
DC	N/A	Georgetown University
DC	N/A	Howard University
DC	N/A	Institute of World Politics
DC	N/A	National Conservatory of Dramatic Arts
DC	N/A	Pontifical John Paul II Institute for Studies on Marriage and Family
DC	N/A	Potomac College
DC	N/A	Southeastern University
DC	N/A	Strayer University
DC	N/A	Technical Learning Centers Inc
DC	N/A	Trinity Washington University
DC	N/A	University of Phoenix-Washington DC Campus
DC	N/A	University of the District of Columbia
DC	N/A	University of the District of Columbia David A Clarke School of Law
DC	N/A	Washington Theological Union
DC	N/A	Wesley Theological Seminary
MD	Anne Arundel	Anne Arundel Community College
MD	Anne Arundel	Baltimore School of Massage
MD	Anne Arundel	St John's College

[26] Includes all postsecondary institutions listed in the U.S. Department of Education's *Integrated Postsecondary Education Database System* (IPEDS) in each state/jurisdiction and Workforce Investment Area included in the gap analysis. These institutions comprise the universe of institutions from which data on program completers was derived.

Table A1: Postsecondary Institutions Included in the Gap Analysis[26]

State	WIA	Institution
MD	Anne Arundel	The Fila Academy Inc
MD	Anne Arundel	United States Naval Academy
MD	Baltimore City	All-State Career School
MD	Baltimore City	Baltimore City Community College
MD	Baltimore City	Baltimore Hebrew University Inc
MD	Baltimore City	Baltimore International College
MD	Baltimore City	Baltimore Studio of Hair Design
MD	Baltimore City	College of Notre Dame of Maryland
MD	Baltimore City	Coppin State University
MD	Baltimore City	Johns Hopkins University
MD	Baltimore City	Loyola University Maryland
MD	Baltimore City	Maryland Institute College of Art
MD	Baltimore City	Morgan State University
MD	Baltimore City	Sojourner-Douglass College
MD	Baltimore City	St. Mary's Seminary & University
MD	Baltimore City	University of Baltimore
MD	Baltimore City	University of Maryland-Baltimore
MD	Baltimore County	Empire Beauty School-Owings Mills
MD	Baltimore County	Goucher College
MD	Baltimore County	ITT Technical Institute-Owings Mills
MD	Baltimore County	Maryland Beauty Academy
MD	Baltimore County	Maryland Beauty Academy of Essex
MD	Baltimore County	Medix School
MD	Baltimore County	Medix School-West
MD	Baltimore County	Ner Israel Rabbinical College
MD	Baltimore County	North American Trade Schools
MD	Baltimore County	Robert Paul Academy of Cosmetology Arts & Sciences
MD	Baltimore County	Stevenson University
MD	Baltimore County	TESST College of Technology-Baltimore
MD	Baltimore County	TESST College of Technology-Towson
MD	Baltimore County	The Community College of Baltimore County
MD	Baltimore County	Towson University
MD	Baltimore County	University of Maryland-Baltimore County
MD	Frederick County	Frederick Community College
MD	Frederick County	Frederick School of Cosmetology
MD	Frederick County	Hood College
MD	Frederick County	Kaplan University

Table A1: Postsecondary Institutions Included in the Gap Analysis[26]

State	WIA	Institution
MD	Frederick County	Mount St. Mary's University
MD	Frederick County	The Temple-A Paul Mitchell Partner School
MD	Lower Shore	Delmarva Beauty Academy
MD	Lower Shore	Salisbury University
MD	Lower Shore	University of Maryland Eastern Shore
MD	Lower Shore	Wor-Wic Community College
MD	Mid-Maryland	Carroll Community College
MD	Mid-Maryland	Howard Community College
MD	Mid-Maryland	Lincoln College of Technology
MD	Mid-Maryland	McDaniel College
MD	Mid-Maryland	Tai Sophia Institute
MD	Mid-Maryland	University of Phoenix-Maryland Campus
MD	Montgomery County	Aesthetics Institute of Cosmetology
MD	Montgomery County	American Beauty Academy
MD	Montgomery County	American Career Institute
MD	Montgomery County	DeVry University-Maryland
MD	Montgomery County	Everest Institute-Silver Spring
MD	Montgomery County	Hair Expressions Academy
MD	Montgomery County	L'Academie de Cuisine
MD	Montgomery County	Montgomery Beauty School
MD	Montgomery County	Montgomery College
MD	Montgomery County	National Labor College
MD	Montgomery County	Omega Studios' School of Applied Recording Arts & Sciences
MD	Montgomery County	Washington Adventist University
MD	Montgomery County	Yeshiva College of the Nations Capital
MD	Prince George's County	Bowie State University
MD	Prince George's County	Capitol College
MD	Prince George's County	Hair Academy Inc-New Carrollton
MD	Prince George's County	Maple Springs Baptist Bible College and Seminary
MD	Prince George's County	Medix South
MD	Prince George's County	New Creations Academy of Hair Design
MD	Prince George's County	Prince George's Community College
MD	Prince George's County	Sanford-Brown Institute
MD	Prince George's County	TESST College of Technology-Beltsville
MD	Prince George's County	University of Maryland-College Park
MD	Prince George's County	University of Maryland-University College
MD	Prince George's County	University System of Maryland

Table A1: Postsecondary Institutions Included in the Gap Analysis[26]

State	WIA	Institution
MD	Prince George's County	University System of Maryland Research Centers
MD	Prince George's County	Washington Bible College-Capital Bible Seminary
MD	Southern Maryland	Aaron's Academy of Beauty
MD	Southern Maryland	Blades School of Hair Design
MD	Southern Maryland	College of Southern Maryland
MD	Southern Maryland	St. Mary's College of Maryland
MD	Susquehanna Region	Cecil College
MD	Susquehanna Region	Harford Community College
MD	Susquehanna Region	International Beauty School-Bel Air
MD	Upper Shore	Chesapeake College
MD	Upper Shore	Washington College
MD	Western Maryland	Allegany College of Maryland
MD	Western Maryland	Award Beauty School
MD	Western Maryland	Frostburg State University
MD	Western Maryland	Garrett College
MD	Western Maryland	Hagerstown Community College
MD	Western Maryland	International Beauty School
MD	Western Maryland	Kaplan University
VA	WIA I	Appalachian College of Pharmacy
VA	WIA I	Appalachian School of Law
VA	WIA I	Bluefield College
VA	WIA I	Mountain Empire Community College
VA	WIA I	Southwest Virginia Community College
VA	WIA I	The University of Virginia's College at Wise
VA	WIA II	Edward Via Virginia College of Osteopathic Medicine
VA	WIA II	Emory and Henry College
VA	WIA II	New River Community College
VA	WIA II	Radford University
VA	WIA II	Southeast Culinary & Hospitality College
VA	WIA II	Virginia Highlands Community College
VA	WIA II	Virginia Intermont College
VA	WIA II	Virginia Polytechnic Institute and State University
VA	WIA II	Washington County Adult Skill Center
VA	WIA II	Wytheville Community College
VA	WIA III	Bar Palma Beauty Careers Academy
VA	WIA III	Dabney S Lancaster Community College
VA	WIA III	ECPI Technical College

Table A1: Postsecondary Institutions Included in the Gap Analysis[26]

State	WIA	Institution
VA	WIA III	Hollins University
VA	WIA III	Jefferson College of Health Sciences
VA	WIA III	National College-Salem
VA	WIA III	Roanoke College
VA	WIA III	Tap This Valley Works CET
VA	WIA III	Virginia Western Community College
VA	WIA IV	Blue Ridge Community College
VA	WIA IV	Bridgewater College
VA	WIA IV	Eastern Mennonite University
VA	WIA IV	James Madison University
VA	WIA IV	Mary Baldwin College
VA	WIA IV	Southern Virginia University
VA	WIA IV	Staunton School of Cosmetology
VA	WIA IV	Virginia Military Institute
VA	WIA IV	Washington and Lee University
VA	WIA IV	Woodrow Wilson Rehabilitation Center
VA	WIA V	Lord Fairfax Community College
VA	WIA V	Shenandoah University
VA	WIA VI	Culpeper Cosmetology Training Center
VA	WIA VI	Germanna Community College
VA	WIA VI	Piedmont Virginia Community College
VA	WIA VI	University of Virginia-Main Campus
VA	WIA VI	Virginia School of Massage
VA	WIA VII	Central Virginia Community College
VA	WIA VII	Legends Institute
VA	WIA VII	Liberty University
VA	WIA VII	Lynchburg College
VA	WIA VII	Lynchburg General Hospital School of Nursing
VA	WIA VII	Miller-Motte Technical College
VA	WIA VII	Randolph College
VA	WIA VII	Sweet Briar College
VA	WIA VII	Virginia University of Lynchburg
VA	WIA VIII	Hampden-Sydney College
VA	WIA VIII	Longwood University
VA	WIA VIII	Saint Pauls College
VA	WIA VIII	Southside Virginia Community College
VA	WIA IX	Baptist Theological Seminary at Richmond

Table A1: Postsecondary Institutions Included in the Gap Analysis[26]

State	WIA	Institution
VA	WIA IX	Bon Secours Memorial School of Nursing
VA	WIA IX	Bon Secours St Mary's Hospital School of Medical Imaging
VA	WIA IX	Bryant and Stratton College-Richmond
VA	WIA IX	Centura College
VA	WIA IX	Centura College
VA	WIA IX	ECPI Technical College
VA	WIA IX	Empire Beauty School-Midlothian
VA	WIA IX	Empire Beauty School-Richmond
VA	WIA IX	Fortis College
VA	WIA IX	Henrico County-Saint Marys Hospital School of Practical Nursing
VA	WIA IX	ITT Technical Institute-Richmond
VA	WIA IX	J Sargeant Reynolds Community College
VA	WIA IX	John Tyler Community College
VA	WIA IX	MedSpa Careers Institute
VA	WIA IX	Randolph-Macon College
VA	WIA IX	Richmond School of Health and Technology
VA	WIA IX	Union Theological Seminary & Presbyterian School of Christian Education
VA	WIA IX	University of Phoenix-Richmond Campus
VA	LWIA XI and LWIA XII	ACT College
VA	LWIA XI and LWIA XII	Argosy University-Washington D.C.
VA	LWIA XI and LWIA XII	Avi Career Training
VA	LWIA XI and LWIA XII	Aviation Institute of Maintenance-Manassas
VA	LWIA XI and LWIA XII	Centura College
VA	LWIA XI and LWIA XII	CET-Alexandria
VA	LWIA XI and LWIA XII	Columbia College
VA	LWIA XI and LWIA XII	DeVry University-Virginia
VA	LWIA XI and LWIA XII	Everest College-Arlington
VA	LWIA XI and LWIA XII	Everest College-McLean
VA	LWIA XI and LWIA XII	George Mason University
VA	LWIA XI and LWIA XII	Global Health Nurse Training Services
VA	LWIA XI and LWIA XII	Graham Webb International Academy of Hair
VA	LWIA XI and LWIA XII	Heritage Institute
VA	LWIA XI and LWIA XII	Institute for the Psychological Sciences
VA	LWIA XI and LWIA XII	ITT Technical Institute-Chantilly
VA	LWIA XI and LWIA XII	ITT Technical Institute-Springfield
VA	LWIA XI and LWIA XII	Marymount University
VA	LWIA XI and LWIA XII	Northern Virginia Community College

Table A1: Postsecondary Institutions Included in the Gap Analysis[26]

State	WIA	Institution
VA	LWIA XI and LWIA XII	Potomac College
VA	LWIA XI and LWIA XII	Sanford-Brown College
VA	LWIA XI and LWIA XII	Sanz School
VA	LWIA XI and LWIA XII	Springfield Beauty Academy
VA	LWIA XI and LWIA XII	Stratford University
VA	LWIA XI and LWIA XII	The Art Institute of Washington
VA	LWIA XI and LWIA XII	The Art Institute of Washington-Northern Virginia
VA	LWIA XI and LWIA XII	University of Phoenix-Northern Virginia Campus
VA	LWIA XI and LWIA XII	Westwood College-Annandale
VA	LWIA XI and LWIA XII	Westwood College-Arlington Ballston
VA	WIA XIII	Career Training Solutions
VA	WIA XIII	Eastern Shore Community College
VA	WIA XIII	Rappahannock Community College
VA	WIA XIII	University of Mary Washington
VA	WIA XIII	University of Richmond
VA	WIA XIII	Virginia Commonwealth University
VA	WIA XIII	Virginia Union University
VA	WIA XIV	Bethel College
VA	WIA XIV	Centura College
VA	WIA XIV	Christopher Newport University
VA	WIA XIV	College of William and Mary
VA	WIA XIV	Dominion School of Hair Design
VA	WIA XIV	Everest College-Newport News
VA	WIA XIV	Hampton University
VA	WIA XIV	Riverside School of Health Careers
VA	WIA XIV	Thomas Nelson Community College
VA	WIA XIV	Virginia School of Hair Design
VA	WIA XV	Richard Bland College of the College of William and Mary
VA	WIA XV	Southside Regional Medical Center
VA	WIA XV	Virginia State University
VA	WIA XVI	Advanced Technology Institute
VA	WIA XVI	Aviation Institute of Maintenance-Chesapeake
VA	WIA XVI	Bryant and Stratton College-Virginia Beach
VA	WIA XVI	Central School of Practical Nursing
VA	WIA XVI	Centura College
VA	WIA XVI	Centura College
VA	WIA XVI	Centura College

Table A1: Postsecondary Institutions Included in the Gap Analysis[26]

State	WIA	Institution
VA	WIA XVI	Eastern Virginia Medical School
VA	WIA XVI	ECPI College of Technology
VA	WIA XVI	Evereest College-Chesapeake
VA	WIA XVI	Ferrum College
VA	WIA XVI	Fortis College
VA	WIA XVI	Hyperlearning Technologies Inc
VA	WIA XVI	ITT Technical Institute-Norfolk
VA	WIA XVI	Norfolk State University
VA	WIA XVI	Old Dominion University
VA	WIA XVI	Paul D Camp Community College
VA	WIA XVI	Regent University
VA	WIA XVI	Rudy & Kelly Academy of Hair and Nails
VA	WIA XVI	Sentara College of Health Sciences
VA	WIA XVI	Suffolk Beauty Academy
VA	WIA XVI	Suffolk Public Schools-Sentara Obici Hospital School of Practical Nursing
VA	WIA XVI	Tidewater Community College
VA	WIA XVI	Tidewater Tech-Trades
VA	WIA XVI	Virginia Beach City Public Schools School of Practical Nursing
VA	WIA XVI	Virginia Wesleyan College
VA	WIA XVI	Wards Corner Beauty Academy
VA	WIA XVI	Wards Corner Beauty Academy-Virginia Beach
VA	WIA XVII	Averett University
VA	WIA XVII	Averett University-Non-Traditional Programs
VA	WIA XVII	Danville Community College
VA	WIA XVII	Danville Regional Medical Center School of Health Professions
VA	WIA XVII	Patrick Henry Community College

6.2. Green-Related Occupations by Jurisdiction and WIA

Table A2: Green-Related Occupations Included in the Gap Analysis – District of Columbia[27]

Occupation	SOC	DC
Chief Executives	11-1011	X
General and Operations Managers	11-1021	X
Advertising and Promotions Managers	11-2011	X
Administrative Services Managers	11-3011	X
Medical and Health Services Managers	11-9111	X
Natural Sciences Managers	11-9121	X
Managers, All Other	11-9199	X
Wholesale and Retail Buyers, Except Farm Products	13-1022	
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	X
Management Analysts	13-1111	X
Meeting and Convention Planners	13-1121	X
Business Operations Specialists, All Other	13-1199	X
Accountants and Auditors	13-2011	X
Credit Analysts	13-2041	X
Computer Software Engineers, Systems Software	15-1032	X
Computer Specialists, All Other	15-1099	X
Civil Engineers	17-2051	X
Electrical Engineers	17-2071	X

[27] Green-related occupations listed in the "Occupation" and "SOC" columns are derived from the ICF International green jobs business survey conducted in the District of Columbia in 2010. Occupations denoted with an "X" in the column to the right are those for which employment projections were available for that jurisdiction and were, as a result, included in the gap analysis.

Table A2: Green-Related Occupations Included in the Gap Analysis – District of Columbia[27]

Occupation	SOC	DC
Environmental Engineers	17-2081	X
Architectural and Civil Drafters	17-3011	X
Environmental Scientists and Specialists, Including Health	19-2041	X
Geographers	19-3092	
Agricultural and Food Science Technicians	19-4011	X
Social Science Research Assistants	19-4061	X
Life, Physical, and Social Science Technicians, All Other	19-4099	X
Educational, Vocational, and School Counselors	21-1012	X
Social and Human Service Assistants	21-1093	X
Lawyers	23-1011	X
Paralegals and Legal Assistants	23-2011	X
Economics Teachers, Postsecondary	25-1063	
Communications Teachers, Postsecondary	25-1122	
Multi-Media Artists and Animators	27-1014	X
Graphic Designers	27-1024	X
Interior Designers	27-1025	X
Producers and Directors	27-2012	X
Public Relations Specialists	27-3031	
Media and Communication Workers, All Other	27-3099	
Audio and Video Equipment Technicians	27-4011	X
Waiters and Waitresses	35-3031	X
Door-to-Door Sales Workers, News and Street Vendors, and Related Workers	41-9091	
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	X
Customer Service Representatives	43-4051	X
Shipping, Receiving, and Traffic Clerks	43-5071	

Table A2: Green-Related Occupations Included in the Gap Analysis – District of Columbia[27]

Occupation	SOC	DC
Office and Administrative Support Workers, All Other	43-9199	
Forest and Conservation Workers	45-4011	
Elevator Installers and Repairers	47-4021	
Automotive Service Technicians and Mechanics	49-3023	X
Maintenance and Repair Workers, General	49-9042	X
Helpers—Installation, Maintenance, and Repair Workers	49-9098	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland[28]

Occupation	SOC	MD	Anne Arundel	Baltimore City	Baltimore County	Frederick County	Lower Shore	Mid-Maryland
Chief Executives	11-1011	X	X	X	X	X	X	X
General and Operations Managers	11-1021	X	X	X	X	X	X	X
Advertising and Promotions Managers	11-2011	X	X	X	X	X	X	X
Sales Managers	11-2022	X	X	X	X	X	X	X
Public Relations Managers	11-2031	X	X	X	X	X	X	X
Administrative Services Managers	11-3011	X	X	X	X	X	X	X
Computer and Information Systems Managers	11-3021	X	X	X	X	X	X	X
Financial Managers	11-3031	X	X	X	X	X	X	X

[28] Green-related occupations listed in the "Occupation" and "SOC" columns are derived from the ICF International green jobs business survey conducted in the District of Columbia, Maryland, and Virginia in 2010. Occupations denoted with an "X" in the columns to the right are those for which employment projections were available and were, as a result, included in the gap analysis.

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland[28]

Occupation	SOC	MD	Anne Arundel	Baltimore City	Baltimore County	Frederick County	Lower Shore	Mid-Maryland
Training and Development Managers	11-3042	X	X	X	X	X		X
Industrial Production Managers	11-3051	X	X	X	X	X	X	X
Purchasing Managers	11-3061	X	X	X	X	X	X	X
Transportation, Storage, and Distribution Managers	11-3071	X	X	X	X	X	X	X
Farm, Ranch, and Other Agricultural Managers	11-9011	X				X	X	
Farmers and Ranchers	11-9012	X						
Construction Managers	11-9021	X	X	X	X	X	X	X
Education Administrators, Preschool and Child Care Center/Program	11-9031	X	X	X	X	X	X	X
Education Administrators, Postsecondary	11-9033	X		X	X	X	X	X
Natural Sciences Managers	11-9121	X	X	X	X	X		X
Property, Real Estate, and Community Association Managers	11-9141	X	X	X	X	X	X	X
Managers, All Other	11-9199	X	X	X	X	X	X	X
Purchasing Agents and Buyers, Farm Products	13-1021	X	X	X	X			X
Wholesale and Retail Buyers, Except Farm Products	13-1022	X	X	X	X	X	X	X
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	X	X	X	X	X	X	X
Claims Adjusters, Examiners, and Investigators	13-1031	X	X	X	X	X	X	X
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	X	X	X	X	X	X	X
Cost Estimators	13-1051	X	X	X	X	X	X	X
Emergency Management Specialists	13-1061	X		X				X
Training and Development Specialists	13-1073	X	X	X	X	X	X	X
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	X	X	X	X	X	X	X
Logisticians	13-1081	X	X	X	X	X	X	X
Management Analysts	13-1111	X	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland[28]

Occupation	SOC	MD	Anne Arundel	Baltimore City	Baltimore County	Frederick County	Lower Shore	Mid-Maryland
Meeting and Convention Planners	13-1121	X	X	X	X	X	X	X
Business Operations Specialists, All Other	13-1199	X	X	X	X	X	X	X
Accountants and Auditors	13-2011	X	X	X	X	X	X	X
Financial Analysts	13-2051	X	X	X	X	X		X
Computer Programmers	15-1021	X	X	X	X	X	X	X
Computer Software Engineers, Applications	15-1031	X	X	X	X	X	X	X
Computer Support Specialists	15-1041	X	X	X	X	X	X	X
Computer Specialists, All Other	15-1099	X	X	X	X	X	X	X
Operations Research Analysts	15-2031	X	X	X	X	X		X
Architects, Except Landscape and Naval	17-1011	X	X	X	X	X	X	X
Landscape Architects	17-1012	X	X	X	X			X
Surveyors	17-1022	X		X	X	X	X	X
Biomedical Engineers	17-2031	X		X		X		X
Chemical Engineers	17-2041	X	X	X	X			X
Civil Engineers	17-2051	X	X	X	X	X	X	X
Electrical Engineers	17-2071	X	X	X	X	X	X	X
Environmental Engineers	17-2081	X	X	X	X			X
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111	X	X	X	X	X		
Industrial Engineers	17-2112	X	X	X	X	X	X	X
Mechanical Engineers	17-2141	X	X	X	X	X	X	X
Petroleum Engineers	17-2171							
Engineers, All Other	17-2199	X	X	X	X	X	X	X
Architectural and Civil Drafters	17-3011	X	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland[28]

Occupation	SOC	MD	Anne Arundel	Baltimore City	Baltimore County	Frederick County	Lower Shore	Mid-Maryland
Electrical and Electronics Drafters	17-3012	X	X	X	X	X	X	X
Mechanical Drafters	17-3013	X	X	X	X	X	X	X
Electrical and Electronic Engineering Technicians	17-3023	X	X	X	X	X	X	X
Environmental Engineering Technicians	17-3025	X			X			
Industrial Engineering Technicians	17-3026	X	X	X	X	X		X
Engineering Technicians, Except Drafters, All Other	17-3029	X	X	X	X	X		X
Soil and Plant Scientists	19-1013	X						
Conservation Scientists	19-1031	X	X	X				
Chemists	19-2031	X	X	X	X	X	X	X
Environmental Scientists and Specialists, Including Health	19-2041	X	X	X	X	X	X	X
Economists	19-3011	X			X			
Urban and Regional Planners	19-3051	X	X	X	X		X	X
Agricultural and Food Science Technicians	19-4011	X						
Environmental Science and Protection Technicians, Including Health	19-4091	X	X	X				
Rehabilitation Counselors	21-1015	X	X	X	X		X	X
Lawyers	23-1011	X	X	X	X	X	X	X
Paralegals and Legal Assistants	23-2011	X	X	X	X	X	X	X
Mathematical Science Teachers, Postsecondary	25-1022	X		X	X		X	X
Architecture Teachers, Postsecondary	25-1031							
Vocational Education Teachers, Postsecondary	25-1194	X		X	X			
Postsecondary Teachers, All Other	25-1199	X		X	X			
Librarians	25-4021	X	X	X	X	X	X	X
Teacher Assistants	25-9041	X	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland[28]

Occupation	SOC	MD	Anne Arundel	Baltimore City	Baltimore County	Frederick County	Lower Shore	Mid-Maryland
Art Directors	27-1011	X	X	X	X			X
Craft Artists	27-1012							
Floral Designers	27-1023	X	X	X	X	X	X	X
Interior Designers	27-1025	X	X	X	X	X	X	
Merchandise Displayers and Window Trimmers	27-1026	X	X		X	X	X	X
Producers and Directors	27-2012	X	X		X		X	X
Athletes and Sports Competitors	27-2021	X						
Public Relations Specialists	27-3031	X	X	X	X	X		X
Writers and Authors	27-3043	X	X	X	X	X		X
Interpreters and Translators	27-3091	X	X	X	X		X	
Sound Engineering Technicians	27-4014	X		X	X			
Pharmacists	29-1051	X	X	X	X	X	X	X
Physicians and Surgeons, All Other	29-1069	X	X	X	X	X	X	X
Registered Nurses	29-1111	X	X	X	X	X	X	X
Health Diagnosing and Treating Practitioners, All Other	29-1199	X	X	X	X			X
Occupational Health and Safety Specialists	29-9011	X	X	X	X	X		X
First-Line Supervisors/Managers of Correctional Officers	33-1011	X					X	X
Correctional Officers and Jailers	33-3012	X					X	X
Bartenders	35-3011	X	X	X	X	X	X	X
Waiters and Waitresses	35-3031	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012	X	X	X	X	X	X	X
Landscaping and Groundskeeping Workers	37-3011	X	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland[28]

Occupation	SOC	MD	Anne Arundel	Baltimore City	Baltimore County	Frederick County	Lower Shore	Mid-Maryland
Grounds Maintenance Workers, All Other	37-3019	X		X	X			
Slot Key Persons	39-1012							
Personal and Home Care Aides	39-9021	X	X	X	X		X	X
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	X	X	X	X	X	X	X
Cashiers	41-2011	X	X	X	X	X	X	X
Counter and Rental Clerks	41-2021	X	X	X	X	X	X	X
Parts Salespersons	41-2022	X	X	X	X	X	X	X
Retail Salespersons	41-2031	X	X	X	X	X	X	X
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	X	X	X	X	X	X	X
Real Estate Brokers	41-9021	X		X	X	X	X	X
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	X	X	X	X	X	X	X
Billing and Posting Clerks and Machine Operators	43-3021	X	X	X	X	X	X	X
Bookkeeping, Accounting, and Auditing Clerks	43-3031	X	X	X	X	X	X	X
Procurement Clerks	43-3061	X	X	X	X	X	X	X
Customer Service Representatives	43-4051	X	X	X	X	X	X	X
Hotel, Motel, and Resort Desk Clerks	43-4081	X	X	X	X	X	X	X
Order Clerks	43-4151	X	X	X	X	X	X	X
Information and Record Clerks, All Other	43-4199	X	X	X	X	X	X	X
Dispatchers, Except Police, Fire, and Ambulance	43-5032	X	X	X	X	X	X	X
Postal Service Clerks	43-5051	X	X	X	X	X	X	X
Postal Service Mail Sorters, Processors, and Processing Machine Operators	43-5053	X	X	X	X	X	X	X
Production, Planning, and Expediting Clerks	43-5061	X	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland[28]

Occupation	SOC	MD	Anne Arundel	Baltimore City	Baltimore County	Frederick County	Lower Shore	Mid-Maryland
Shipping, Receiving, and Traffic Clerks	43-5071	X	X	X	X	X	X	X
Stock Clerks and Order Fillers	43-5081	X	X	X	X	X	X	X
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111	X	X	X	X		X	X
Executive Secretaries and Administrative Assistants	43-6011	X	X	X	X	X	X	X
Secretaries, Except Legal, Medical, and Executive	43-6014	X	X	X	X	X	X	X
Data Entry Keyers	43-9021	X	X	X	X	X	X	X
Office Clerks, General	43-9061	X	X	X	X	X	X	X
Office and Administrative Support Workers, All Other	43-9199	X	X	X	X	X	X	X
Agricultural Equipment Operators	45-2091							
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	X	X	X	X	X	X	X
Farmworkers, Farm and Ranch Animals	45-2093	X					X	X
Fishers and Related Fishing Workers	45-3011	X					X	
Forest and Conservation Workers	45-4011							
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	X	X	X	X	X	X	X
Carpenters	47-2031	X	X	X	X	X	X	X
Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042							
Construction Laborers	47-2061	X	X	X	X	X	X	X
Electricians	47-2111	X	X	X	X	X	X	X
Insulation Workers, Floor, Ceiling, and Wall	47-2131	X						
Painters, Construction and Maintenance	47-2141	X	X	X	X	X	X	X
Plumbers, Pipefitters, and Steamfitters	47-2152	X	X	X	X	X	X	X
Roofers	47-2181	X		X	X			X
Sheet Metal Workers	47-2211	X	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland[28]

Occupation	SOC	MD	Anne Arundel	Baltimore City	Baltimore County	Frederick County	Lower Shore	Mid-Maryland
Helpers—Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011	X	X	X	X	X		X
Helpers—Electricians	47-3013	X	X	X	X	X	X	X
Construction and Building Inspectors	47-4011	X	X	X	X	X	X	X
Elevator Installers and Repairers	47-4021	X	X					
Hazardous Materials Removal Workers	47-4041	X		X	X			
Highway Maintenance Workers	47-4051	X					X	X
Septic Tank Servicers and Sewer Pipe Cleaners	47-4071	X						
Construction and Related Workers, All Other	47-4099	X	X		X		X	X
Derrick Operators, Oil and Gas	47-5011							
Explosives Workers, Ordnance Handling Experts, and Blasters	47-5031							
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	X	X	X	X	X	X	X
Radio Mechanics	49-2021	X		X				
Automotive Body and Related Repairers	49-3021	X	X	X	X	X	X	X
Automotive Service Technicians and Mechanics	49-3023	X	X	X	X	X	X	X
Farm Equipment Mechanics	49-3041							
Mechanical Door Repairers	49-9011							
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	X	X	X	X	X	X	X
Maintenance and Repair Workers, General	49-9042	X	X	X	X	X	X	X
Maintenance Workers, Machinery	49-9043	X	X	X	X	X	X	X
Helpers—Installation, Maintenance, and Repair Workers	49-9098	X	X	X	X	X	X	X
Installation, Maintenance, and Repair Workers, All Other	49-9099	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	X	X	X	X	X	X	X
Structural Metal Fabricators and Fitters	51-2041	X		X	X	X		X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland[28]

Occupation	SOC	MD	Anne Arundel	Baltimore City	Baltimore County	Frederick County	Lower Shore	Mid-Maryland
Food Cooking Machine Operators and Tenders	51-3093	X		X	X			
Machinists	51-4041	X	X	X	X	X	X	X
Tool Grinders, Filers, and Sharpeners	51-4194	X			X			
Bookbinders	51-5012	X	X		X			
Job Printers	51-5021	X	X	X	X	X		
Prepress Technicians and Workers	51-5022	X	X	X	X			X
Printing Machine Operators	51-5023	X	X	X	X	X	X	X
Laundry and Dry-Cleaning Workers	51-6011	X	X	X	X	X	X	X
Cabinetmakers and Bench Carpenters	51-7011	X	X	X	X	X		
Power Distributors and Dispatchers	51-8012							
Power Plant Operators	51-8013							
Stationary Engineers and Boiler Operators	51-8021	X	X	X	X	X	X	X
Water and Liquid Waste Treatment Plant and System Operators	51-8031	X	X		X	X	X	X
Chemical Equipment Operators and Tenders	51-9011	X		X				
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	X	X	X	X	X	X	X
Bus Drivers, School	53-3022	X	X	X	X	X	X	X
Truck Drivers, Heavy and Tractor-Trailer	53-3032	X	X	X	X	X	X	X
Excavating and Loading Machine and Dragline Operators	53-7032	X	X	X	X	X	X	X
Tank Car, Truck, and Ship Loaders	53-7121							

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland (continued)[29]

Occupation	SOC	Montgomery County	Prince George's County	Southern Maryland	Susquehanna	Upper Shore	Western Maryland
Chief Executives	11-1011	X	X	X	X	X	X
General and Operations Managers	11-1021	X	X	X	X	X	X
Advertising and Promotions Managers	11-2011	X	X		X		
Sales Managers	11-2022	X	X	X	X	X	X
Public Relations Managers	11-2031	X	X	X	X	X	X
Administrative Services Managers	11-3011	X	X	X	X	X	X
Computer and Information Systems Managers	11-3021	X	X	X	X	X	X
Financial Managers	11-3031	X	X	X	X	X	X
Training and Development Managers	11-3042	X	X	X	X		X
Industrial Production Managers	11-3051	X	X	X	X	X	X
Purchasing Managers	11-3061	X	X	X	X	X	X
Transportation, Storage, and Distribution Managers	11-3071	X	X	X	X	X	X
Farm, Ranch, and Other Agricultural Managers	11-9011					X	X
Farmers and Ranchers	11-9012						
Construction Managers	11-9021	X	X	X	X	X	X
Education Administrators, Preschool and Child Care Center/Program	11-9031	X	X	X	X	X	X
Education Administrators, Postsecondary	11-9033	X	X	X	X	X	X
Natural Sciences Managers	11-9121	X	X	X	X	X	
Property, Real Estate, and Community Association Managers	11-9141	X	X	X	X	X	X
Managers, All Other	11-9199	X	X	X	X	X	X

[29] Green-related occupations listed in the "Occupation" and "SOC" columns are derived from the ICF International green jobs business survey conducted in the District of Columbia, Maryland, and Virginia in 2010. Occupations denoted with an "X" in the columns to the right are those for which employment projections were available and were, as a result, included in the gap analysis.

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland (continued)[29]

Occupation	SOC	Montgomery County	Prince George's County	Southern Maryland	Susquehanna	Upper Shore	Western Maryland
Purchasing Agents and Buyers, Farm Products	13-1021		X				X
Wholesale and Retail Buyers, Except Farm Products	13-1022	X	X	X	X	X	X
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	X	X	X	X	X	X
Claims Adjusters, Examiners, and Investigators	13-1031	X	X				X
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	X	X	X	X	X	X
Cost Estimators	13-1051	X	X	X	X	X	X
Emergency Management Specialists	13-1061	X	X				X
Training and Development Specialists	13-1073	X	X	X	X	X	X
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	X	X	X	X	X	X
Logisticians	13-1081	X	X	X	X		X
Management Analysts	13-1111	X	X	X	X	X	X
Meeting and Convention Planners	13-1121	X	X		X	X	X
Business Operations Specialists, All Other	13-1199	X	X	X	X	X	X
Accountants and Auditors	13-2011	X	X	X	X	X	X
Financial Analysts	13-2051	X	X	X	X		X
Computer Programmers	15-1021	X	X	X	X	X	X
Computer Software Engineers, Applications	15-1031	X	X	X	X	X	X
Computer Support Specialists	15-1041	X	X	X	X	X	X
Computer Specialists, All Other	15-1099	X	X	X	X		X
Operations Research Analysts	15-2031	X	X	X	X		
Architects, Except Landscape and Naval	17-1011	X	X	X	X		X
Landscape Architects	17-1012	X	X	X	X		
Surveyors	17-1022	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland (continued)[29]

Occupation	SOC	Montgomery County	Prince George's County	Southern Maryland	Susquehanna	Upper Shore	Western Maryland
Biomedical Engineers	17-2031	X	X				
Chemical Engineers	17-2041	X	X	X	X		
Civil Engineers	17-2051	X	X	X	X	X	X
Electrical Engineers	17-2071	X	X	X	X	X	
Environmental Engineers	17-2081	X	X	X	X		
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111	X	X	X	X		X
Industrial Engineers	17-2112	X	X	X	X	X	X
Mechanical Engineers	17-2141	X	X	X	X	X	X
Petroleum Engineers	17-2171						
Engineers, All Other	17-2199	X	X	X	X	X	X
Architectural and Civil Drafters	17-3011	X	X	X	X		
Electrical and Electronics Drafters	17-3012	X	X	X	X		X
Mechanical Drafters	17-3013	X	X	X	X	X	X
Electrical and Electronic Engineering Technicians	17-3023	X	X	X	X	X	X
Environmental Engineering Technicians	17-3025	X	X				
Industrial Engineering Technicians	17-3026	X		X	X		
Engineering Technicians, Except Drafters, All Other	17-3029	X	X	X	X		X
Soil and Plant Scientists	19-1013		X				
Conservation Scientists	19-1031		X		X	X	
Chemists	19-2031	X	X	X	X		
Environmental Scientists and Specialists, Including Health	19-2041	X	X	X	X	X	X
Economists	19-3011	X					
Urban and Regional Planners	19-3051	X	X	X	X		X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland (continued)[29]

Occupation	SOC	Montgomery County	Prince George's County	Southern Maryland	Susquehanna	Upper Shore	Western Maryland
Agricultural and Food Science Technicians	19-4011		X				
Environmental Science and Protection Technicians, Including Health	19-4091	X	X	X	X	X	
Rehabilitation Counselors	21-1015	X	X	X	X	X	X
Lawyers	23-1011	X	X	X	X	X	X
Paralegals and Legal Assistants	23-2011	X	X	X	X	X	X
Mathematical Science Teachers, Postsecondary	25-1022		X				
Architecture Teachers, Postsecondary	25-1031						
Vocational Education Teachers, Postsecondary	25-1194	X	X				
Postsecondary Teachers, All Other	25-1199		X				
Librarians	25-4021	X	X	X	X	X	X
Teacher Assistants	25-9041	X	X	X	X	X	X
Art Directors	27-1011	X	X		X		
Craft Artists	27-1012						
Floral Designers	27-1023	X	X	X	X	X	X
Interior Designers	27-1025	X	X	X	X	X	X
Merchandise Displayers and Window Trimmers	27-1026	X	X	X	X		X
Producers and Directors	27-2012		X	X			
Athletes and Sports Competitors	27-2021	X					
Public Relations Specialists	27-3031	X	X	X	X	X	X
Writers and Authors	27-3043	X	X	X		X	
Interpreters and Translators	27-3091	X	X			X	X
Sound Engineering Technicians	27-4014		X				
Pharmacists	29-1051	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland (continued)[29]

Occupation	SOC	Montgomery County	Prince George's County	Southern Maryland	Susquehanna	Upper Shore	Western Maryland
Physicians and Surgeons, All Other	29-1069	X	X	X	X	X	X
Registered Nurses	29-1111	X	X	X	X	X	X
Health Diagnosing and Treating Practitioners, All Other	29-1199	X	X		X		X
Occupational Health and Safety Specialists	29-9011	X	X	X	X		X
First-Line Supervisors/Managers of Correctional Officers	33-1011						X
Correctional Officers and Jailers	33-3012			X		X	X
Bartenders	35-3011	X	X	X	X	X	X
Waiters and Waitresses	35-3031	X	X	X	X	X	X
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011	X	X	X	X	X	X
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012	X	X	X	X	X	X
Landscaping and Groundskeeping Workers	37-3011	X	X	X	X	X	X
Grounds Maintenance Workers, All Other	37-3019						
Slot Key Persons	39-1012						
Personal and Home Care Aides	39-9021	X	X	X		X	X
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	X	X	X	X	X	X
Cashiers	41-2011	X	X	X	X	X	X
Counter and Rental Clerks	41-2021	X	X	X	X	X	X
Parts Salespersons	41-2022	X	X	X	X	X	X
Retail Salespersons	41-2031	X	X	X	X	X	X
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	X	X	X	X	X	X
Real Estate Brokers	41-9021	X	X	X			
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland (continued)[29]

Occupation	SOC	Montgomery County	Prince George's County	Southern Maryland	Susquehanna	Upper Shore	Western Maryland
Billing and Posting Clerks and Machine Operators	43-3021	X	X	X	X	X	X
Bookkeeping, Accounting, and Auditing Clerks	43-3031	X	X	X	X	X	X
Procurement Clerks	43-3061	X	X	X	X	X	X
Customer Service Representatives	43-4051	X	X	X	X	X	X
Hotel, Motel, and Resort Desk Clerks	43-4081	X	X	X	X	X	X
Order Clerks	43-4151	X	X	X	X	X	X
Information and Record Clerks, All Other	43-4199	X	X	X	X	X	X
Dispatchers, Except Police, Fire, and Ambulance	43-5032	X	X	X	X	X	X
Postal Service Clerks	43-5051	X	X	X	X	X	X
Postal Service Mail Sorters, Processors, and Processing Machine Operators	43-5053	X	X	X	X	X	X
Production, Planning, and Expediting Clerks	43-5061	X	X	X	X	X	X
Shipping, Receiving, and Traffic Clerks	43-5071	X	X	X	X	X	X
Stock Clerks and Order Fillers	43-5081	X	X	X	X	X	X
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111	X	X	X	X	X	X
Executive Secretaries and Administrative Assistants	43-6011	X	X	X	X	X	X
Secretaries, Except Legal, Medical, and Executive	43-6014	X	X	X	X	X	X
Data Entry Keyers	43-9021	X	X	X	X	X	X
Office Clerks, General	43-9061	X	X	X	X	X	X
Office and Administrative Support Workers, All Other	43-9199	X	X	X	X		X
Agricultural Equipment Operators	45-2091						
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	X	X	X	X	X	
Farmworkers, Farm and Ranch Animals	45-2093	X					
Fishers and Related Fishing Workers	45-3011		X			X	

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland (continued)[29]

Occupation	SOC	Montgomery County	Prince George's County	Southern Maryland	Susquehanna	Upper Shore	Western Maryland
Forest and Conservation Workers	45-4011						
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	X	X	X	X	X	X
Carpenters	47-2031	X	X	X	X	X	X
Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042						
Construction Laborers	47-2061	X	X	X	X	X	X
Electricians	47-2111	X	X	X	X	X	X
Insulation Workers, Floor, Ceiling, and Wall	47-2131				X		
Painters, Construction and Maintenance	47-2141	X	X	X	X	X	X
Plumbers, Pipefitters, and Steamfitters	47-2152	X	X	X	X	X	X
Roofers	47-2181	X	X				
Sheet Metal Workers	47-2211	X	X	X	X	X	X
Helpers—Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011	X	X	X		X	X
Helpers—Electricians	47-3013	X	X	X	X		X
Construction and Building Inspectors	47-4011	X	X	X	X	X	X
Elevator Installers and Repairers	47-4021		X				
Hazardous Materials Removal Workers	47-4041		X				
Highway Maintenance Workers	47-4051		X	X		X	X
Septic Tank Servicers and Sewer Pipe Cleaners	47-4071		X				
Construction and Related Workers, All Other	47-4099	X	X	X			
Derrick Operators, Oil and Gas	47-5011						
Explosives Workers, Ordnance Handling Experts, and Blasters	47-5031						
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	X	X	X	X	X	X

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland (continued)[29]

Occupation	SOC	Montgomery County	Prince George's County	Southern Maryland	Susquehanna	Upper Shore	Western Maryland
Radio Mechanics	49-2021						
Automotive Body and Related Repairers	49-3021	X	X	X	X	X	X
Automotive Service Technicians and Mechanics	49-3023	X	X	X	X	X	X
Farm Equipment Mechanics	49-3041						
Mechanical Door Repairers	49-9011						
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	X	X	X	X	X	X
Maintenance and Repair Workers, General	49-9042	X	X	X	X	X	X
Maintenance Workers, Machinery	49-9043	X	X	X	X	X	X
Helpers—Installation, Maintenance, and Repair Workers	49-9098	X	X	X	X	X	X
Installation, Maintenance, and Repair Workers, All Other	49-9099	X	X	X	X	X	X
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	X	X	X	X	X	X
Structural Metal Fabricators and Fitters	51-2041	X			X		X
Food Cooking Machine Operators and Tenders	51-3093		X			X	X
Machinists	51-4041	X	X	X	X	X	X
Tool Grinders, Filers, and Sharpeners	51-4194						
Bookbinders	51-5012		X				
Job Printers	51-5021	X	X	X	X		X
Prepress Technicians and Workers	51-5022	X	X	X	X	X	X
Printing Machine Operators	51-5023	X	X	X	X	X	X
Laundry and Dry-Cleaning Workers	51-6011	X	X	X	X	X	X
Cabinetmakers and Bench Carpenters	51-7011	X	X	X			X
Power Distributors and Dispatchers	51-8012						
Power Plant Operators	51-8013						

Table A3: Green-Related Occupations Included in the Gap Analysis – Maryland (continued)[29]

Occupation	SOC	Montgomery County	Prince George's County	Southern Maryland	Susquehanna	Upper Shore	Western Maryland
Stationary Engineers and Boiler Operators	51-8021	X	X	X	X		X
Water and Liquid Waste Treatment Plant and System Operators	51-8031	X	X	X	X	X	X
Chemical Equipment Operators and Tenders	51-9011						
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	X	X	X	X	X	X
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	X	X	X	X	X	X
Bus Drivers, School	53-3022	X	X	X	X	X	X
Truck Drivers, Heavy and Tractor-Trailer	53-3032	X	X	X	X	X	X
Excavating and Loading Machine and Dragline Operators	53-7032		X	X	X	X	X
Tank Car, Truck, and Ship Loaders	53-7121						

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Chief Executives	11-1011	X	X	X	X	X	X		X
General and Operations Managers	11-1021	X	X	X	X	X	X	X	X
Advertising and Promotions Managers	11-2011	X			X	X	X		
Marketing Managers	11-2021	X	X	X	X	X	X	X	
Sales Managers	11-2022	X	X	X	X	X	X	X	X

[30] Green-related occupations listed in the "Occupation" and "SOC" columns are derived from the ICF International green jobs business survey conducted in the District of Columbia, Maryland, and Virginia in 2010. Occupations denoted with an "X" in the columns to the right are those for which employment projections were available and were, as a result, included in the gap analysis.

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Public Relations Managers	11-2031	X			X	X	X		
Administrative Services Managers	11-3011	X	X	X	X	X	X	X	X
Computer and Information Systems Managers	11-3021	X		X	X	X	X	X	X
Financial Managers	11-3031	X	X	X	X	X	X	X	X
Training and Development Managers	11-3042	X		X	X	X	X	X	
Industrial Production Managers	11-3051	X	X	X	X	X	X	X	X
Purchasing Managers	11-3061	X		X	X	X	X	X	X
Transportation, Storage, and Distribution Managers	11-3071	X		X	X	X	X	X	X
Farm, Ranch, and Other Agricultural Managers	11-9011	X							
Farmers and Ranchers	11-9012								
Construction Managers	11-9021	X	X	X	X	X	X	X	
Education Administrators, Preschool and Child Care Center/Program	11-9031	X		X	X		X		
Education Administrators, Elementary and Secondary School	11-9032	X	X	X	X	X	X	X	X
Education Administrators, Postsecondary	11-9033	X	X	X	X	X		X	X
Education Administrators, All Other	11-9039	X			X	X	X	X	X
Engineering Managers	11-9041	X	X	X	X	X	X	X	X
Gaming Managers	11-9071								
Natural Sciences Managers	11-9121	X		X			X		
Property, Real Estate, and Community Association Managers	11-9141	X		X	X	X	X		
Social and Community Service Managers	11-9151	X	X	X	X	X	X	X	X
Managers, All Other	11-9199	X	X	X	X	X	X	X	X
Agents and Business Managers of Artists, Performers, and Athletes	13-1011	X							
Purchasing Agents and Buyers, Farm Products	13-1021	X				X			

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Wholesale and Retail Buyers, Except Farm Products	13-1022	X	X	X	X	X	X	X	
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	X	X	X	X	X	X	X	X
Claims Adjusters, Examiners, and Investigators	13-1031	X	X	X	X	X	X	X	X
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	X	X	X	X	X	X	X	X
Cost Estimators	13-1051	X	X	X	X	X	X	X	X
Emergency Management Specialists	13-1061	X		X	X	X	X		
Training and Development Specialists	13-1073	X	X	X	X	X	X	X	X
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	X	X	X	X	X	X	X	X
Management Analysts	13-1111	X		X	X	X	X	X	X
Business Operations Specialists, All Other	13-1199	X	X	X	X	X	X	X	X
Accountants and Auditors	13-2011	X	X	X	X	X	X	X	X
Personal Financial Advisors	13-2052	X		X	X	X	X	X	
Tax Examiners, Collectors, and Revenue Agents	13-2081	X	X	X	X	X	X	X	
Computer Software Engineers, Applications	15-1031	X	X	X	X	X	X	X	X
Computer Software Engineers, Systems Software	15-1032	X		X	X	X	X	X	
Computer Systems Analysts	15-1051	X	X	X	X	X	X	X	X
Network and Computer Systems Administrators	15-1071	X	X	X	X	X	X	X	X
Computer Specialists, All Other	15-1099	X		X	X	X			X
Operations Research Analysts	15-2031	X			X		X		
Architects, Except Landscape and Naval	17-1011	X		X	X	X	X	X	
Landscape Architects	17-1012	X			X	X			
Surveyors	17-1022	X	X	X	X	X	X	X	X

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Civil Engineers	17-2051	X	X	X	X	X	X	X	X
Electrical Engineers	17-2071	X		X	X	X	X	X	X
Electronics Engineers, Except Computer	17-2072	X		X	X		X	X	
Environmental Engineers	17-2081	X		X	X	X	X	X	
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111	X		X	X	X	X		
Mechanical Engineers	17-2141	X	X	X	X	X	X	X	
Petroleum Engineers	17-2171	X					X		
Engineers, All Other	17-2199	X		X	X	X	X		
Architectural and Civil Drafters	17-3011	X	X	X	X	X	X	X	X
Electrical and Electronics Drafters	17-3012	X			X	X		X	
Mechanical Drafters	17-3013	X		X	X	X		X	
Electrical and Electronic Engineering Technicians	17-3023	X	X	X	X	X	X	X	
Environmental Engineering Technicians	17-3025	X		X	X	X			
Surveying and Mapping Technicians	17-3031	X	X	X	X	X	X		X
Soil and Plant Scientists	19-1013	X		X					
Zoologists and Wildlife Biologists	19-1023	X		X	X	X			X
Conservation Scientists	19-1031	X		X		X	X	X	
Foresters	19-1032	X		X	X	X	X	X	
Environmental Scientists and Specialists, Including Health	19-2041	X		X	X	X	X	X	
Economists	19-3011	X			X	X			
Market Research Analysts	19-3021	X	X	X	X	X	X	X	X
Urban and Regional Planners	19-3051	X		X	X	X	X	X	X
Geographers	19-3092	X							
Social Scientists and Related Workers, All Other	19-3099	X			X				

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Agricultural and Food Science Technicians	19-4011	X				X			X
Social Science Research Assistants	19-4061	X			X				
Environmental Science and Protection Technicians, Including Health	19-4091	X		X	X				X
Life, Physical, and Social Science Technicians, All Other	19-4099	X			X	X			X
Substance Abuse and Behavioral Disorder Counselors	21-1011	X	X	X	X	X	X		X
Educational, Vocational, and School Counselors	21-1012	X	X	X	X	X	X	X	X
Social and Human Service Assistants	21-1093	X	X	X	X	X	X	X	X
Environmental Science Teachers, Postsecondary	25-1053	X			X			X	
Communications Teachers, Postsecondary	25-1122	X			X				
Recreation and Fitness Studies Teachers, Postsecon	25-1193	X			X	X		X	
Vocational Education Teachers, Postsecondary	25-1194	X	X	X	X	X		X	X
Museum Technicians and Conservators	25-4013	X							X
Teacher Assistants	25-9041	X	X	X	X	X	X	X	X
Education, Training, and Library Workers, All Other	25-9099	X		X	X				
Art Directors	27-1011	X			X	X	X		
Graphic Designers	27-1024	X	X	X	X	X	X	X	X
Interior Designers	27-1025	X		X	X	X	X	X	
Merchandise Displayers and Window Trimmers	27-1026	X		X	X	X		X	
Producers and Directors	27-2012	X		X	X	X	X		
Public Relations Specialists	27-3031	X	X	X	X	X	X	X	X
Writers and Authors	27-3043	X		X	X	X	X	X	
Audio and Video Equipment Technicians	27-4011	X	X	X	X	X	X		
Broadcast Technicians	27-4012	X		X	X	X			

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Registered Nurses	29-1111	X	X	X	X	X		X	X
Physical Therapists	29-1123	X	X	X	X	X	X	X	X
Therapists, All Other	29-1129	X			X				
Medical and Clinical Laboratory Technicians	29-2012	X	X	X	X	X		X	X
Occupational Health and Safety Specialists	29-9011	X	X	X	X	X	X	X	X
Healthcare Practitioner and Technical Workers, All Other	29-9099	X							
Medical Assistants	31-9092	X	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Correctional Officers	33-1011	X	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	33-1021	X		X	X	X	X		
Fire Fighters	33-2011	X					X		
First-Line Supervisors/Managers of Food Preparation and Serving Workers	35-1012	X	X		X	X	X	X	X
Food Preparation Workers	35-2021	X	X	X	X	X	X	X	X
Bartenders	35-3011	X		X	X	X	X	X	X
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	X	X	X	X	X	X	X	X
Food Servers, Nonrestaurant	35-3041	X	X	X	X	X	X	X	
Dishwashers	35-9021	X	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011	X	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012	X	X	X	X	X	X	X	X
Landscaping and Groundskeeping Workers	37-3011	X	X	X	X	X	X	X	X
Pesticide Handlers, Sprayers, and Applicators, Vegetation	37-3012	X				X			
Tree Trimmers and Pruners	37-3013	X							
Grounds Maintenance Workers, All Other	37-3019								

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
First-Line Supervisors/Managers of Personal Service Workers	39-1021	X	X	X	X	X	X	X	
Nonfarm Animal Caretakers	39-2021	X	X						X
Tour Guides and Escorts	39-6021	X		X	X	X			
Transportation Attendants, Except Flight Attendants and Baggage Porters	39-6032	X							
Child Care Workers	39-9011	X	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	X	X	X	X	X	X	X	X
Cashiers	41-2011	X	X	X	X	X	X	X	X
Retail Salespersons	41-2031	X	X	X	X	X	X	X	X
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	X	X		X	X	X	X	
Telemarketers	41-9041	X		X	X	X		X	
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	X	X	X	X	X	X	X	X
Switchboard Operators, Including Answering Service	43-2011	X			X		X	X	X
Bookkeeping, Accounting, and Auditing Clerks	43-3031	X	X	X	X	X	X	X	X
Customer Service Representatives	43-4051	X		X	X	X	X	X	X
Human Resources Assistants, Except Payroll and Timekeeping	43-4161	X	X	X	X	X	X	X	X
Production, Planning, and Expediting Clerks	43-5061	X	X	X	X	X	X	X	X
Shipping, Receiving, and Traffic Clerks	43-5071	X	X	X	X	X	X	X	X
Stock Clerks and Order Fillers	43-5081	X	X	X	X	X	X	X	X
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111	X	X	X	X		X	X	X
Executive Secretaries and Administrative Assistants	43-6011	X	X	X	X	X	X	X	X

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Secretaries, Except Legal, Medical, and Executive	43-6014	X	X	X	X	X	X	X	X
Data Entry Keyers	43-9021	X	X	X	X	X	X	X	X
Office Clerks, General	43-9061	X	X	X	X	X	X	X	X
Office Machine Operators, Except Computer	43-9071	X		X	X	X	X		
Office and Administrative Support Workers, All Other	43-9199	X	X		X	X	X	X	
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	45-1011	X		X			X	X	X
Agricultural Equipment Operators	45-2091								
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	X		X	X	X	X		
Fishers and Related Fishing Workers	45-3011								
Fallers	45-4021								
Logging Equipment Operators	45-4022	X			X		X	X	X
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	X	X	X	X	X	X	X	X
Carpenters	47-2031	X	X	X	X	X	X	X	X
Floor Sanders and Finishers	47-2043								
Construction Laborers	47-2061	X	X	X	X	X	X	X	X
Operating Engineers and Other Construction Equipment Operators	47-2073	X	X	X	X	X	X	X	X
Electricians	47-2111	X	X	X	X	X	X	X	X
Insulation Workers, Floor, Ceiling, and Wall	47-2131	X				X			
Plumbers, Pipefitters, and Steamfitters	47-2152	X	X	X	X	X	X	X	X
Reinforcing Iron and Rebar Workers	47-2171	X			X				
Roofers	47-2181	X		X	X	X	X	X	X
Sheet Metal Workers	47-2211	X	X	X	X	X	X	X	X
Structural Iron and Steel Workers	47-2221	X			X	X			

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Helpers—Electricians	47-3013	X		X	X	X	X	X	
Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters	47-3015	X		X	X	X	X		
Construction and Building Inspectors	47-4011	X	X	X	X	X	X	X	X
Elevator Installers and Repairers	47-4021	X			X				
Fence Erectors	47-4031	X							
Hazardous Materials Removal Workers	47-4041	X			X				
Construction and Related Workers, All Other	47-4099	X			X	X			
Earth Drillers, Except Oil and Gas	47-5021	X	X	X		X	X		
Extraction Workers, All Other	47-5099								
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	X	X	X	X	X	X	X	X
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022	X		X	X	X	X		X
Electronic Home Entertainment Equipment Installers and Repairers	49-2097	X		X	X	X			
Automotive Body and Related Repairers	49-3021	X		X	X	X	X	X	X
Automotive Service Technicians and Mechanics	49-3023	X	X	X	X	X	X	X	X
Motorcycle Mechanics	49-3052	X		X		X		X	
Outdoor Power Equipment and Other Small Engine Mechanics	49-3053	X		X	X	X	X	X	
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	X	X	X	X	X	X	X	X
Home Appliance Repairers	49-9031	X		X		X			
Industrial Machinery Mechanics	49-9041	X	X	X	X	X	X	X	X
Maintenance and Repair Workers, General	49-9042	X	X	X	X	X	X	X	X
Maintenance Workers, Machinery	49-9043	X	X	X	X	X	X	X	X
Telecommunications Line Installers and Repairers	49-9052	X	X		X	X		X	

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Helpers—Installation, Maintenance, and Repair Workers	49-9098	X	X	X	X	X	X	X	X
Installation, Maintenance, and Repair Workers, All Other	49-9099	X		X	X	X		X	X
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	X	X	X	X	X	X	X	X
Structural Metal Fabricators and Fitters	51-2041	X	X	X	X	X	X	X	
Fiberglass Laminators and Fabricators	51-2091								
Slaughterers and Meat Packers	51-3023	X		X		X			
Food Cooking Machine Operators and Tenders	51-3093	X			X			X	
Machinists	51-4041	X	X	X	X	X	X	X	
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072	X		X	X	X			X
Tool and Die Makers	51-4111	X		X	X	X		X	
Printing Machine Operators	51-5023	X		X	X	X	X	X	X
Textile, Apparel, and Furnishings Workers, All Other	51-6099	X			X				
Furniture Finishers	51-7021	X			X	X		X	
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041	X		X	X	X		X	X
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042	X		X	X	X	X	X	X
Power Plant Operators	51-8013	X							
Stationary Engineers and Boiler Operators	51-8021	X		X	X	X			
Water and Liquid Waste Treatment Plant and System Operators	51-8031	X	X	X	X	X	X	X	X
Mixing and Blending Machine Setters, Operators, and Tenders	51-9023	X	X	X	X	X	X	X	
Medical Appliance Technicians	51-9082	X			X		X		
Painters, Transportation Equipment	51-9122	X			X	X		X	X

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia[30]

Occupation	SOC	VA	WIA I	WIA II	WIA III	WIA IV	WIA VI	WIA VII	WIA VIII
Painting, Coating, and Decorating Workers	51-9123	X		X	X	X			
Molders, Shapers, and Casters, Except Metal and Plastic	51-9195	X		X		X			X
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	X	X	X					X
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	X	X	X	X	X	X	X	X
Airfield Operations Specialists	53-2022	X				X			
Truck Drivers, Heavy and Tractor-Trailer	53-3032	X	X	X	X	X	X	X	X
Motor Vehicle Operators, All Other	53-3099	X		X	X	X		X	
Conveyor Operators and Tenders	53-7011	X	X		X	X			X
Crane and Tower Operators	53-7021	X		X	X	X	X	X	

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Chief Executives	11-1011	X	X	X	X	X	X	
General and Operations Managers	11-1021	X	X	X	X	X	X	X
Advertising and Promotions Managers	11-2011	X	X	X			X	
Marketing Managers	11-2021	X	X	X	X	X	X	X
Sales Managers	11-2022	X	X	X	X	X	X	X
Public Relations Managers	11-2031	X	X	X			X	

[31] Green-related occupations listed in the "Occupation" and "SOC" columns are derived from the ICF International green jobs business survey conducted in the District of Columbia, Maryland, and Virginia in 2010. Occupations denoted with an "X" in the columns to the right are those for which employment projections were available and were, as a result, included in the gap analysis.

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Administrative Services Managers	11-3011	X	X	X	X	X	X	X
Computer and Information Systems Managers	11-3021	X	X	X	X	X	X	X
Financial Managers	11-3031	X	X	X	X	X	X	X
Training and Development Managers	11-3042	X	X	X	X		X	
Industrial Production Managers	11-3051	X	X	X	X	X	X	X
Purchasing Managers	11-3061	X	X	X	X	X	X	X
Transportation, Storage, and Distribution Managers	11-3071	X	X	X	X	X	X	X
Farm, Ranch, and Other Agricultural Managers	11-9011	X		X				X
Farmers and Ranchers	11-9012							
Construction Managers	11-9021	X	X	X	X		X	X
Education Administrators, Preschool and Child Care Center/Program	11-9031	X	X	X	X		X	
Education Administrators, Elementary and Secondary School	11-9032	X	X	X	X	X	X	X
Education Administrators, Postsecondary	11-9033		X		X		X	X
Education Administrators, All Other	11-9039	X	X	X	X	X	X	X
Engineering Managers	11-9041	X	X	X	X	X	X	X
Gaming Managers	11-9071							
Natural Sciences Managers	11-9121		X					
Property, Real Estate, and Community Association Managers	11-9141	X	X	X	X		X	X
Social and Community Service Managers	11-9151	X	X	X	X	X	X	X
Managers, All Other	11-9199	X	X	X	X	X	X	X
Agents and Business Managers of Artists, Performers, and Athletes	13-1011		X					
Purchasing Agents and Buyers, Farm Products	13-1021							
Wholesale and Retail Buyers, Except Farm Products	13-1022	X	X	X	X	X	X	X

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	X	X	X	X	X	X	X
Claims Adjusters, Examiners, and Investigators	13-1031	X	X	X	X	X	X	X
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	X	X	X	X	X	X	X
Cost Estimators	13-1051	X	X	X	X	X	X	X
Emergency Management Specialists	13-1061	X		X	X	X		
Training and Development Specialists	13-1073	X	X	X	X	X	X	X
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	X	X	X	X	X	X	X
Management Analysts	13-1111	X	X	X	X	X	X	X
Business Operations Specialists, All Other	13-1199	X	X	X	X	X	X	X
Accountants and Auditors	13-2011	X	X	X	X	X	X	X
Personal Financial Advisors	13-2052		X		X		X	
Tax Examiners, Collectors, and Revenue Agents	13-2081	X	X	X	X	X	X	
Computer Software Engineers, Applications	15-1031	X	X	X	X	X	X	X
Computer Software Engineers, Systems Software	15-1032	X	X	X	X		X	
Computer Systems Analysts	15-1051	X	X	X	X	X	X	X
Network and Computer Systems Administrators	15-1071	X	X	X	X	X	X	X
Computer Specialists, All Other	15-1099	X	X	X	X	X	X	
Operations Research Analysts	15-2031	X	X	X			X	
Architects, Except Landscape and Naval	17-1011		X		X		X	X
Landscape Architects	17-1012		X				X	
Surveyors	17-1022	X	X	X	X		X	
Civil Engineers	17-2051	X	X	X	X	X	X	X
Electrical Engineers	17-2071	X	X	X	X	X	X	X

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Electronics Engineers, Except Computer	17-2072	X	X	X	X	X	X	X
Environmental Engineers	17-2081	X	X	X	X		X	
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111		X		X		X	
Mechanical Engineers	17-2141	X	X	X	X	X	X	X
Petroleum Engineers	17-2171		X					
Engineers, All Other	17-2199		X			X		
Architectural and Civil Drafters	17-3011	X	X	X	X		X	
Electrical and Electronics Drafters	17-3012		X		X		X	
Mechanical Drafters	17-3013		X				X	X
Electrical and Electronic Engineering Technicians	17-3023	X	X	X	X		X	
Environmental Engineering Technicians	17-3025				X		X	
Surveying and Mapping Technicians	17-3031	X	X	X	X		X	X
Soil and Plant Scientists	19-1013		X					
Zoologists and Wildlife Biologists	19-1023		X		X	X	X	X
Conservation Scientists	19-1031	X	X	X		X		
Foresters	19-1032		X			X	X	
Environmental Scientists and Specialists, Including Health	19-2041	X	X	X	X	X	X	
Economists	19-3011		X				X	
Market Research Analysts	19-3021	X	X	X	X		X	X
Urban and Regional Planners	19-3051	X	X	X	X	X	X	X
Geographers	19-3092		X					
Social Scientists and Related Workers, All Other	19-3099	X	X	X	X		X	
Agricultural and Food Science Technicians	19-4011							
Social Science Research Assistants	19-4061		X				X	

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Environmental Science and Protection Technicians, Including Health	19-4091		X		X		X	
Life, Physical, and Social Science Technicians, All Other	19-4099	X	X	X	X		X	
Substance Abuse and Behavioral Disorder Counselors	21-1011	X	X	X	X		X	
Educational, Vocational, and School Counselors	21-1012	X	X	X	X	X	X	X
Social and Human Service Assistants	21-1093	X	X	X	X	X	X	X
Environmental Science Teachers, Postsecondary	25-1053						X	
Communications Teachers, Postsecondary	25-1122		X		X		X	
Recreation and Fitness Studies Teachers, Postsecon	25-1193						X	
Vocational Education Teachers, Postsecondary	25-1194		X		X		X	
Museum Technicians and Conservators	25-4013		X					
Teacher Assistants	25-9041	X	X	X	X	X	X	X
Education, Training, and Library Workers, All Other	25-9099				X		X	
Art Directors	27-1011		X		X	X	X	
Graphic Designers	27-1024	X	X	X	X	X	X	X
Interior Designers	27-1025		X		X	X	X	
Merchandise Displayers and Window Trimmers	27-1026	X	X	X	X		X	
Producers and Directors	27-2012	X	X	X	X		X	
Public Relations Specialists	27-3031	X	X	X	X	X	X	X
Writers and Authors	27-3043	X	X	X	X		X	X
Audio and Video Equipment Technicians	27-4011	X	X	X	X		X	
Broadcast Technicians	27-4012		X				X	
Registered Nurses	29-1111	X	X	X	X	X	X	X
Physical Therapists	29-1123	X	X	X	X	X	X	X

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Therapists, All Other	29-1129		X					
Medical and Clinical Laboratory Technicians	29-2012	X	X	X	X	X	X	X
Occupational Health and Safety Specialists	29-9011	X	X	X	X	X	X	X
Healthcare Practitioner and Technical Workers, All Other	29-9099		X					X
Medical Assistants	31-9092	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Correctional Officers	33-1011	X	X	X	X		X	X
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	33-1021	X	X	X	X		X	
Fire Fighters	33-2011							
First-Line Supervisors/Managers of Food Preparation and Serving Workers	35-1012		X		X		X	
Food Preparation Workers	35-2021	X	X	X	X	X	X	X
Bartenders	35-3011		X		X		X	
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	X	X	X	X	X	X	X
Food Servers, Nonrestaurant	35-3041		X			X	X	
Dishwashers	35-9021		X		X		X	
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012	X	X	X	X	X	X	X
Landscaping and Groundskeeping Workers	37-3011	X	X	X	X	X	X	X
Pesticide Handlers, Sprayers, and Applicators, Vegetation	37-3012				X			
Tree Trimmers and Pruners	37-3013	X		X				
Grounds Maintenance Workers, All Other	37-3019							
First-Line Supervisors/Managers of Personal Service Workers	39-1021	X	X	X	X	X	X	X
Nonfarm Animal Caretakers	39-2021		X					

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Tour Guides and Escorts	39-6021		X		X		X	X
Transportation Attendants, Except Flight Attendants and Baggage Porters	39-6032		X					
Child Care Workers	39-9011	X	X	X	X	X	X	
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	X	X	X	X	X	X	X
Cashiers	41-2011	X	X	X	X	X	X	X
Retail Salespersons	41-2031	X	X	X	X	X	X	X
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	X	X	X	X	X	X	
Telemarketers	41-9041	X	X	X	X		X	X
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	X	X	X	X	X	X	X
Switchboard Operators, Including Answering Service	43-2011		X		X	X	X	
Bookkeeping, Accounting, and Auditing Clerks	43-3031	X	X	X	X	X	X	X
Customer Service Representatives	43-4051	X	X	X	X	X	X	X
Human Resources Assistants, Except Payroll and Timekeeping	43-4161	X	X	X	X	X	X	X
Production, Planning, and Expediting Clerks	43-5061	X	X	X		X		X
Shipping, Receiving, and Traffic Clerks	43-5071	X	X	X	X	X	X	X
Stock Clerks and Order Fillers	43-5081	X	X	X	X	X	X	X
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111	X	X	X	X	X	X	X
Executive Secretaries and Administrative Assistants	43-6011	X	X	X	X	X	X	X
Secretaries, Except Legal, Medical, and Executive	43-6014	X	X	X	X	X	X	X
Data Entry Keyers	43-9021	X	X	X	X	X	X	X
Office Clerks, General	43-9061	X	X	X	X	X	X	X
Office Machine Operators, Except Computer	43-9071	X	X	X	X		X	

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Office and Administrative Support Workers, All Other	43-9199	X	X	X	X	X	X	X
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	45-1011		X					X
Agricultural Equipment Operators	45-2091							
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	X		X			X	X
Fishers and Related Fishing Workers	45-3011							
Fallers	45-4021							
Logging Equipment Operators	45-4022	X		X				X
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	X	X	X	X	X	X	X
Carpenters	47-2031	X	X	X	X		X	X
Floor Sanders and Finishers	47-2043							
Construction Laborers	47-2061	X	X	X	X	X	X	X
Operating Engineers and Other Construction Equipment Operators	47-2073	X	X	X	X	X	X	X
Electricians	47-2111	X	X	X	X	X	X	X
Insulation Workers, Floor, Ceiling, and Wall	47-2131							
Plumbers, Pipefitters, and Steamfitters	47-2152	X	X	X	X	X	X	X
Reinforcing Iron and Rebar Workers	47-2171		X				X	
Roofers	47-2181	X	X	X	X		X	X
Sheet Metal Workers	47-2211		X					
Structural Iron and Steel Workers	47-2221		X					X
Helpers—Electricians	47-3013	X	X	X	X		X	
Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters	47-3015		X				X	
Construction and Building Inspectors	47-4011	X	X	X	X	X	X	X
Elevator Installers and Repairers	47-4021		X				X	

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Fence Erectors	47-4031		X					
Hazardous Materials Removal Workers	47-4041		X			X	X	
Construction and Related Workers, All Other	47-4099						X	
Earth Drillers, Except Oil and Gas	47-5021		X					
Extraction Workers, All Other	47-5099							
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	X	X	X	X	X	X	X
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022	X	X	X	X		X	X
Electronic Home Entertainment Equipment Installers and Repairers	49-2097		X		X			X
Automotive Body and Related Repairers	49-3021	X	X	X	X	X	X	X
Automotive Service Technicians and Mechanics	49-3023	X	X	X	X	X	X	X
Motorcycle Mechanics	49-3052							X
Outdoor Power Equipment and Other Small Engine Mechanics	49-3053	X	X	X	X		X	
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	X	X	X	X	X	X	X
Home Appliance Repairers	49-9031		X					
Industrial Machinery Mechanics	49-9041	X	X	X	X	X	X	X
Maintenance and Repair Workers, General	49-9042	X	X	X	X	X	X	X
Maintenance Workers, Machinery	49-9043	X	X	X	X	X	X	X
Telecommunications Line Installers and Repairers	49-9052	X	X	X	X		X	X
Helpers—Installation, Maintenance, and Repair Workers	49-9098	X	X	X	X		X	X
Installation, Maintenance, and Repair Workers, All Other	49-9099		X		X		X	
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	X	X	X	X	X	X	X
Structural Metal Fabricators and Fitters	51-2041		X		X		X	

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Fiberglass Laminators and Fabricators	51-2091							
Slaughterers and Meat Packers	51-3023							
Food Cooking Machine Operators and Tenders	51-3093	X		X	X		X	
Machinists	51-4041	X	X	X	X	X	X	X
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072		X					X
Tool and Die Makers	51-4111	X		X			X	X
Printing Machine Operators	51-5023		X		X	X	X	X
Textile, Apparel, and Furnishings Workers, All Other	51-6099		X				X	X
Furniture Finishers	51-7021		X				X	
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041	X	X	X				X
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042	X		X				X
Power Plant Operators	51-8013		X					X
Stationary Engineers and Boiler Operators	51-8021	X	X	X	X		X	
Water and Liquid Waste Treatment Plant and System Operators	51-8031	X	X	X	X	X	X	X
Mixing and Blending Machine Setters, Operators, and Tenders	51-9023		X			X		X
Medical Appliance Technicians	51-9082		X				X	
Painters, Transportation Equipment	51-9122	X	X	X			X	X
Painting, Coating, and Decorating Workers	51-9123	X	X	X	X		X	X
Molders, Shapers, and Casters, Except Metal and Plastic	51-9195		X					X
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	X	X	X		X		X
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	X	X	X	X	X	X	X

Table A4: Green-Related Occupations Included in the Gap Analysis – Virginia (continued)[31]

Occupation	SOC	WIA IX	WIA XI & XII	WIA XIII	WIA XIV	WIA XV	WIA XVI	WIA XVII
Airfield Operations Specialists	53-2022		X					
Truck Drivers, Heavy and Tractor-Trailer	53-3032	X	X	X	X	X	X	X
Motor Vehicle Operators, All Other	53-3099						X	
Conveyor Operators and Tenders	53-7011	X		X		X	X	
Crane and Tower Operators	53-7021		X		X	X	X	

6.3. Gap Analysis Detail – District of Columbia

Table A5: District of Columbia – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Accountants and Auditors	13-2011	Bronze	Bachelor's degree	12,878	14,044	9.1%
Administrative Services Managers	11-3011	Gold	Bachelor's or higher degree, plus work experience	5,588	5,942	6.3%
Advertising and Promotions Managers	11-2011	Gold	Bachelor's or higher degree, plus work experience	396	415	4.8%
Agricultural and Food Science Technicians	19-4011		Associate degree	119	123	3.4%
Architectural and Civil Drafters	17-3011	Gold	Postsecondary vocational award	304	293	-3.6%
Audio and Video Equipment Technicians	27-4011		Long-term on-the-job training	824	938	13.8%
Automotive Service Technicians and Mechanics	49-3023	Silver	Postsecondary vocational award	423	469	10.9%
Business Operations Specialists, All Other	13-1199		Bachelor's degree	29,064	32,596	12.2%
Chief Executives	11-1011		Bachelor's or higher degree, plus work experience	2,765	2,727	-1.4%
Civil Engineers	17-2051		Bachelor's degree	1,031	1,118	8.4%
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041		Long-term on-the-job training	3,084	3,189	3.4%
Computer Software Engineers, Systems Software	15-1032	Gold	Bachelor's degree	2,448	3,208	31.0%
Computer Specialists, All Other	15-1099		Associate degree	9,853	9,985	1.3%
Credit Analysts	13-2041	Platinum	Bachelor's degree	289	292	1.0%
Customer Service Representatives	43-4051		Moderate-term on-the-job training	6,301	7,696	22.1%
Educational, Vocational, and School Counselors	21-1012	Silver	Master's degree	823	933	13.4%
Electrical Engineers	17-2071	Gold	Bachelor's degree	690	789	14.3%
Environmental Engineers	17-2081		Bachelor's degree	774	827	6.8%
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	1,938	1,995	2.9%

Table A5: District of Columbia – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011		Work experience in a related occupation	4,978	5,212	4.7%
General and Operations Managers	11-1021	Platinum	Bachelor's or higher degree, plus work experience	25,030	25,890	3.4%
Graphic Designers	27-1024	Gold	Bachelor's degree	2,571	2,827	10.0%
Helpers—Installation, Maintenance, and Repair Workers	49-9098	Silver	Short-term on-the-job training	256	259	1.2%
Interior Designers	27-1025		Associate degree	680	744	9.4%
Lawyers	23-1011	Platinum	First professional degree	50,425	52,821	4.8%
Life, Physical, and Social Science Technicians, All Other	19-4099		Associate degree	412	438	6.3%
Maintenance and Repair Workers, General	49-9042	Gold	Moderate-term on-the-job training	4,595	5,079	10.5%
Management Analysts	13-1111	Gold	Bachelor's or higher degree, plus work experience	17,267	18,327	6.1%
Managers, All Other	11-9199		Work experience in a related occupation	15,406	15,581	1.1%
Medical and Health Services Managers	11-9111		Bachelor's or higher degree, plus work experience	1,536	1,598	4.0%
Meeting and Convention Planners	13-1121	Gold	Bachelor's degree	1,736	2,024	16.6%
Multi-Media Artists and Animators	27-1014		Bachelor's degree	426	518	21.6%
Natural Sciences Managers	11-9121	Gold	Bachelor's or higher degree, plus work experience	1,504	1,587	5.5%
Paralegals and Legal Assistants	23-2011		Associate degree	7,571	9,174	21.2%
Producers and Directors	27-2012	Gold	Bachelor's or higher degree, plus work experience	1,656	1,714	3.5%
Social and Human Service Assistants	21-1093		Moderate-term on-the-job training	2,628	3,465	31.8%
Social Science Research Assistants	19-4061		Associate degree	896	958	6.9%
Waiters and Waitresses	35-3031	Silver	Short-term on-the-job training	9,286	10,255	10.4%

Table A6: District of Columbia – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Paralegals and Legal Assistants	23-2011		Associate degree	260	212	-48
Social Science Research Assistants	19-4061		Associate degree	40	13	-27
Life, Physical, and Social Science Technicians, All Other	19-4099		Associate degree	19	0	-19
Interior Designers	27-1025		Associate degree	24	21	-3
Agricultural and Food Science Technicians	19-4011		Associate degree	2	0	-2
Computer Specialists, All Other	15-1099		Associate degree	274	442	168
Business Operations Specialists, All Other	13-1199		Bachelor's degree	664	23	-641
Graphic Designers	27-1024	Gold	Bachelor's degree	94	23	-71
Meeting and Convention Planners	13-1121	Gold	Bachelor's degree	64	0	-64
Environmental Engineers	17-2081		Bachelor's degree	28	0	-28
Multi-Media Artists and Animators	27-1014		Bachelor's degree	19	13	-6
Electrical Engineers	17-2071	Gold	Bachelor's degree	26	25	-1
Civil Engineers	17-2051		Bachelor's degree	36	36	0
Credit Analysts	13-2041	Platinum	Bachelor's degree	11	38	27
Computer Software Engineers, Systems Software	15-1032	Gold	Bachelor's degree	112	173	61
Accountants and Auditors	13-2011	Bronze	Bachelor's degree	344	724	380
Advertising and Promotions Managers	11-2011	Gold	Bachelor's or higher degree, plus work experience	11	62	51
Producers and Directors	27-2012	Gold	Bachelor's or higher degree, plus work experience	55	162	107
Administrative Services Managers	11-3011	Gold	Bachelor's or higher degree, plus work experience	183	564	381
Medical and Health Services Managers	11-9111		Bachelor's or higher degree, plus work experience	35	467	432
Management Analysts	13-1111	Gold	Bachelor's or higher degree, plus work experience	401	1,031	630
Natural Sciences Managers	11-9121	Gold	Bachelor's or higher degree, plus work experience	41	717	676

Table A6: District of Columbia – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
General and Operations Managers	11-1021	Platinum	Bachelor's or higher degree, plus work experience	690	2,238	1,548
Chief Executives	11-1011		Bachelor's or higher degree, plus work experience	76	2,559	2,483
Lawyers	23-1011	Platinum	First professional degree	1,196	1,521	325
Audio and Video Equipment Technicians	27-4011		Long-term on-the-job training	38	0	-38
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041		Long-term on-the-job training	47	15	-32
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	56	17	-39
Educational, Vocational, and School Counselors	21-1012	Silver	Master's degree	27	104	77
Customer Service Representatives	43-4051		Moderate-term on-the-job training	316	0	-316
Social and Human Service Assistants	21-1093		Moderate-term on-the-job training	114	0	-114
Maintenance and Repair Workers, General	49-9042	Gold	Moderate-term on-the-job training	59	0	-59
Automotive Service Technicians and Mechanics	49-3023	Silver	Postsecondary vocational award	14	0	-14
Architectural and Civil Drafters	17-3011	Gold	Postsecondary vocational award	9	0	-9
Waiters and Waitresses	35-3031	Silver	Short-term on-the-job training	602	0	-602
Helpers—Installation, Maintenance, and Repair Workers	49-9098	Silver	Short-term on-the-job training	6	0	-6
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011		Work experience in a related occupation	126	19	-107
Managers, All Other	11-9199		Work experience in a related occupation	325	1,175	850

Table A7: District of Columbia – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Accountants and Auditors	13-2011	3.7%	13	0	17.1%	59	80	79.1%	272	644
Administrative Services Managers	11-3011	21.4%	39	0	38.8%	71	66	39.9%	73	499
Advertising and Promotions Managers	11-2011	7.1%	1	0	17.5%	2	1	75.5%	8	61
Agricultural and Food Science Technicians	19-4011	42.7%	1	0	25.6%	1	0	31.6%	1	0
Architectural and Civil Drafters	17-3011	13.0%	1	0	62.4%	6	0	24.6%	2	0
Audio and Video Equipment Technicians	27-4011	21.2%	8	0	43.9%	17	0	35.0%	13	0
Automotive Service Technicians and Mechanics	49-3023	62.4%	9	0	33.7%	5	0	3.9%	1	0
Business Operations Specialists, All Other	13-1199	18.2%	121	0	33.2%	220	0	48.7%	323	23
Chief Executives	11-1011	13.0%	10	0	21.8%	17	20	65.2%	50	2538
Civil Engineers	17-2051	2.7%	1	0	10.0%	4	0	87.3%	31	36
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	14.0%	7	0	27.9%	13	0	58.0%	27	15
Computer Software Engineers, Systems Software	15-1032	2.2%	2	0	13.0%	15	17	84.8%	95	157
Computer Specialists, All Other	15-1099	7.0%	19	0	24.6%	67	45	68.4%	187	397
Credit Analysts	13-2041	14.9%	2	0	25.4%	3	3	59.7%	7	36
Customer Service Representatives	43-4051	33.8%	107	0	44.2%	140	0	22.0%	70	0

Table A7: District of Columbia – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Educational, Vocational, and School Counselors	21-1012	8.9%	2	0	18.3%	5	0	72.8%	20	104
Electrical Engineers	17-2071	2.9%	1	0	16.5%	4	0	80.5%	21	25
Environmental Engineers	17-2081	0.0%	0	0	9.9%	3	0	86.4%	24	0
Environmental Scientists and Specialists, Including Health	19-2041	0.0%	0	0	6.9%	4	0	93.0%	52	17
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	28.1%	35	0	43.1%	54	0	28.9%	36	19
General and Operations Managers	11-1021	19.6%	135	0	32.5%	224	193	48.0%	331	2045
Graphic Designers	27-1024	13.9%	13	0	31.4%	30	7	54.6%	51	15
Helpers—Installation, Maintenance, and Repair Workers	49-9098	76.9%	5	0	17.7%	1	0	0.0%	0	0
Interior Designers	27-1025	13.9%	3	0	31.4%	8	0	54.6%	13	21
Lawyers	23-1011	0.2%	2	0	0.7%	8	0	99.1%	1185	1521
Life, Physical, and Social Science Technicians, All Other	19-4099	19.4%	4	0	34.9%	7	0	45.7%	9	0
Maintenance and Repair Workers, General	49-9042	58.3%	34	0	35.6%	21	0	6.1%	4	0
Management Analysts	13-1111	6.6%	26	0	15.9%	64	112	77.5%	311	918
Managers, All Other	11-9199	17.3%	56	0	27.3%	89	94	55.4%	180	1080

Table A7: District of Columbia – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Medical and Health Services Managers	11-9111	11.4%	4	0	32.0%	11	0	56.6%	20	467
Meeting and Convention Planners	13-1121	10.6%	7	0	22.0%	14	0	67.4%	43	0
Multi-Media Artists and Animators	27-1014	13.6%	3	0	28.5%	5	4	58.0%	11	9
Natural Sciences Managers	11-9121	0.0%	0	0	0.0%	0	0	92.8%	38	717
Paralegals and Legal Assistants	23-2011	12.7%	33	0	42.7%	111	0	44.6%	116	212
Producers and Directors	27-2012	6.1%	3	0	19.4%	11	14	74.5%	41	148
Social and Human Service Assistants	21-1093	15.6%	18	0	26.3%	30	0	58.1%	66	0
Social Science Research Assistants	19-4061	19.4%	8	0	34.9%	14	0	45.7%	18	13
Waiters and Waitresses	35-3031	50.8%	306	0	35.1%	211	0	14.1%	85	0

Table A8: District of Columbia – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Chief Executives	111011	$184,640	4,830	Management Analysts	131111	$88,260	14,150	1
Chief Executives	111011	$184,640	4,830	Aerospace Engineers	172011	$111,280	370	2
Chief Executives	111011	$184,640	4,830	Surgeons	291067	$166,400	300	3
Chief Executives	111011	$184,640	4,830	Computer and Information Scientists, Research	151011	$111,100	330	4
Chief Executives	111011	$184,640	4,830	Medical Scientists, Except Epidemiologists	191042	$95,790	440	5
General and Operations Managers	111021	$120,890	27,440	Opticians, Dispensing	292081	$35,360	250	1
General and Operations Managers	111021	$120,890	27,440	Film and Video Editors	274032	$75,450	90	2
General and Operations Managers	111021	$120,890	27,440	Food Service Managers	119051	$54,030	640	3
General and Operations Managers	111021	$120,890	27,440	Pharmacy Technicians	292052	$33,020	690	4
General and Operations Managers	111021	$120,890	27,440	Printing Machine Operators	515023	$62,690	750	5
Administrative Services Managers	113011	$80,290	3,650	Respiratory Therapists	291126	$56,100	310	1
Administrative Services Managers	113011	$80,290	3,650	Broadcast News Analysts	273021	$66,890	160	2
Administrative Services Managers	113011	$80,290	3,650	Property, Real Estate, and Community Association Managers	119141	$62,210	1,220	3
Administrative Services Managers	113011	$80,290	3,650	Fitness Trainers and Aerobics Instructors	399031	$45,570	1,170	4
Administrative Services Managers	113011	$80,290	3,650	First-Line Supervisors/Managers of Non-Retail Sales Workers	411012	$68,110	520	5
Medical and Health Services Managers	119111	$96,080	2,100	Veterinary Technologists and Technicians	292056	$36,160	40	1
Medical and Health Services Managers	119111	$96,080	2,100	Technical Writers	273042	$72,310	690	2
Medical and Health Services Managers	119111	$96,080	2,100	Transportation Inspectors	536051	$93,530	300	3
Medical and Health Services Managers	119111	$96,080	2,100	Helpers--Installation, Maintenance, and Repair Workers	499098	$34,360	280	4
Medical and Health Services Managers	119111	$96,080	2,100	Proofreaders and Copy Markers	439081	$37,760	340	5
Natural Sciences Managers	119121	$126,550	920	Automotive Service Technicians and Mechanics	493023	$44,850	370	1
Natural Sciences Managers	119121	$126,550	920	First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$67,170	4,600	2
Natural Sciences Managers	119121	$126,550	920	Elementary School Teachers, Except Special Education	252021	$64,200	3,030	3
Natural Sciences Managers	119121	$126,550	920	Art, Drama, and Music Teachers, Postsecondary	251121	$68,540	630	4

Table A8: District of Columbia – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Natural Sciences Managers	119121	$126,550	920	Foreign Language and Literature Teachers, Postsecondary	251124	$64,310	300	5
Management Analysts	131111	$88,260	14,150	Clergy	212011	$54,490	260	1
Management Analysts	131111	$88,260	14,150	Education Teachers, Postsecondary	251081	$61,470	310	2
Management Analysts	131111	$88,260	14,150	Education Administrators, Elementary and Secondary School	119032	$86,660	880	3
Meeting and Convention Planners	131121	$55,170	1,930	Bus and Truck Mechanics and Diesel Engine Specialists	493031	$48,290	70	1
Meeting and Convention Planners	131121	$55,170	1,930	Cabinetmakers and Bench Carpenters	517011	$49,230	80	2
Meeting and Convention Planners	131121	$55,170	1,930	Carpenters	472031	$49,330	1,140	3
Meeting and Convention Planners	131121	$55,170	1,930	First-Line Supervisors/Managers of Food Preparation and Serving Workers	351012	$39,470	2,650	4
Accountants and Auditors	132011	$79,990	10,790	Dental Assistants	319091	$45,630	450	1
Accountants and Auditors	132011	$79,990	10,790	Statistical Assistants	439111	$47,600	180	2
Accountants and Auditors	132011	$79,990	10,790	First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$71,700	860	3
Accountants and Auditors	132011	$79,990	10,790	Technical Writers	273042	$72,310	690	4
Accountants and Auditors	132011	$79,990	10,790	Epidemiologists	191041	$75,300	40	5
Credit Analysts	132041	$71,910	190	Pharmacy Aides	319095	$24,350	80	1
Credit Analysts	132041	$71,910	190	Bindery Workers	515011	$59,360	230	2
Credit Analysts	132041	$71,910	190	Computer Support Specialists	151041	$57,920	3,970	3
Credit Analysts	132041	$71,910	190	Floral Designers	271023	$29,520	60	4
Credit Analysts	132041	$71,910	190	Correspondence Clerks	434021	$46,000	110	5
Computer Software Engineers, Systems Software	151032	$95,120	1,790	Sociologists	193041	$93,870	600	1
Computer Software Engineers, Systems Software	151032	$95,120	1,790	Network and Computer Systems Administrators	151071	$79,170	4,000	2
Computer Software Engineers, Systems Software	151032	$95,120	1,790	Computer Software Engineers, Applications	151031	$88,300	3,110	3
Computer Software Engineers, Systems Software	151032	$95,120	1,790	English Language and Literature Teachers, Postsecondary	251123	$67,180	600	4
Computer Software Engineers, Systems Software	151032	$95,120	1,790	Clinical, Counseling, and School Psychologists	193031	$67,240	570	5
Computer Specialists, All Other	151099	$104,080	7,760	Mental Health Counselors	211014	$48,440	450	1

Table A8: District of Columbia – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Computer Specialists, All Other	151099	$104,080	7,760	Elevator Installers and Repairers	474021	$62,680	60	2
Computer Specialists, All Other	151099	$104,080	7,760	Computer, Automated Teller, and Office Machine Repairers	492011	$49,210	460	3
Computer Specialists, All Other	151099	$104,080	7,760	First-Line Supervisors/Managers of Personal Service Workers	391021	$49,860	550	4
Computer Specialists, All Other	151099	$104,080	7,760	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$88,570	80	5
Civil Engineers	172051	$93,790	710	Veterinary Assistants and Laboratory Animal Caretakers	319096	$38,710	90	1
Civil Engineers	172051	$93,790	710	Network and Computer Systems Administrators	151071	$79,170	4,000	2
Civil Engineers	172051	$93,790	710	Computer Support Specialists	151041	$57,920	3,970	3
Civil Engineers	172051	$93,790	710	Carpenters	472031	$49,330	1,140	4
Civil Engineers	172051	$93,790	710	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$77,520	2,790	5
Electrical Engineers	172071	$96,440	470	Education Administrators, Postsecondary	119033	$91,540	930	1
Electrical Engineers	172071	$96,440	470	Computer Software Engineers, Applications	151031	$88,300	3,110	2
Electrical Engineers	172071	$96,440	470	Veterinarians	291131	$92,150	50	3
Electrical Engineers	172071	$96,440	470	Network and Computer Systems Administrators	151071	$79,170	4,000	4
Electrical Engineers	172071	$96,440	470	Anthropology and Archeology Teachers, Postsecondary	251061	$82,130	70	5
Environmental Engineers	172081	$95,440	440	Carpenters	472031	$49,330	1,140	1
Environmental Engineers	172081	$95,440	440	Cooks, Short Order	352015	$27,450	660	2
Environmental Engineers	172081	$95,440	440	Microbiologists	191022	$94,770	120	3
Environmental Engineers	172081	$95,440	440	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$77,520	2,790	4
Environmental Engineers	172081	$95,440	440	Network and Computer Systems Administrators	151071	$79,170	4,000	5
Social Science Research Assistants	194061	$45,500	730	Automotive Service Technicians and Mechanics	493023	$44,850	370	1
Social Science Research Assistants	194061	$45,500	730	Medical and Clinical Laboratory Technicians	292012	$41,010	510	2
Social Science Research Assistants	194061	$45,500	730	Mobile Heavy Equipment Mechanics, Except Engines	493042	$40,290	40	3
Social Science Research Assistants	194061	$45,500	730	Credit Authorizers, Checkers, and Clerks	434041	$31,850	40	4

Table A8: District of Columbia – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Educational, Vocational, and School Counselors	211012	$51,520	1,480	Substance Abuse and Behavioral Disorder Counselors	211011	$38,970	420	1
Educational, Vocational, and School Counselors	211012	$51,520	1,480	Medical and Clinical Laboratory Technicians	292012	$41,010	510	2
Educational, Vocational, and School Counselors	211012	$51,520	1,480	Special Education Teachers, Secondary School	252043	$48,660	260	3
Educational, Vocational, and School Counselors	211012	$51,520	1,480	Mobile Heavy Equipment Mechanics, Except Engines	493042	$40,290	40	4
Social and Human Service Assistants	211093	$33,520	2,050	Construction Laborers	472061	$32,390	2,330	1
Social and Human Service Assistants	211093	$33,520	2,050	Stock Clerks and Order Fillers	435081	$33,280	1,160	2
Social and Human Service Assistants	211093	$33,520	2,050	Manicurists and Pedicurists	395092	$29,390	60	3
Social and Human Service Assistants	211093	$33,520	2,050	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$25,090	14,600	4
Social and Human Service Assistants	211093	$33,520	2,050	Helpers--Production Workers	519198	$27,190	50	5
Lawyers	231011	$156,750	28,440	Computer Programmers	151021	$77,620	2,820	1
Lawyers	231011	$156,750	28,440	Fire Inspectors and Investigators	332021	$72,620	60	2
Lawyers	231011	$156,750	28,440	Financial Managers	113031	$121,050	6,220	3
Lawyers	231011	$156,750	28,440	Education Administrators, Preschool and Child Care Center/Program	119031	$59,710	360	4
Lawyers	231011	$156,750	28,440	Business Teachers, Postsecondary	251011	$76,700	1,080	5
Paralegals and Legal Assistants	232011	$64,760	6,370	Photographic Process Workers	519131	$39,270	70	1
Paralegals and Legal Assistants	232011	$64,760	6,370	Cooks, Institution and Cafeteria	352012	$29,140	1,240	2
Paralegals and Legal Assistants	232011	$64,760	6,370	Telemarketers	419041	$33,940	600	3
Paralegals and Legal Assistants	232011	$64,760	6,370	Insurance Claims and Policy Processing Clerks	439041	$49,140	200	4
Paralegals and Legal Assistants	232011	$64,760	6,370	Secretaries, Except Legal, Medical, and Executive	436014	$47,010	9,310	5
Economics Teachers, Postsecondary	251063	$87,570	210	Employment, Recruitment, and Placement Specialists	131071	$54,970	2,130	1
Economics Teachers, Postsecondary	251063	$87,570	210	Industrial Machinery Mechanics	499041	$58,070	150	2
Economics Teachers, Postsecondary	251063	$87,570	210	Art Directors	271011	$78,270	310	3
Economics Teachers, Postsecondary	251063	$87,570	210	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$28,760	40	4
Economics Teachers, Postsecondary	251063	$87,570	210	Interior Designers	271025	$67,550	720	5

Table A8: District of Columbia – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Communications Teachers, Postsecondary	251122	$61,550	400	Criminal Justice and Law Enforcement Teachers, Postsecondary	251111	$57,030	170	1
Communications Teachers, Postsecondary	251122	$61,550	400	Secondary School Teachers, Except Special and Vocational Education	252031	$55,740	1,900	2
Communications Teachers, Postsecondary	251122	$61,550	400	First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	371012	$53,900	90	3
Communications Teachers, Postsecondary	251122	$61,550	400	Vocational Education Teachers, Postsecondary	251194	$55,480	170	4
Multi-Media Artists and Animators	271014	$58,350	100	Bicycle Repairers	493091	$22,360	60	1
Multi-Media Artists and Animators	271014	$58,350	100	Kindergarten Teachers, Except Special Education	252012	$38,930	210	2
Multi-Media Artists and Animators	271014	$58,350	100	Medical and Clinical Laboratory Technicians	292012	$41,010	510	3
Multi-Media Artists and Animators	271014	$58,350	100	Procurement Clerks	433061	$47,780	310	4
Multi-Media Artists and Animators	271014	$58,350	100	Special Education Teachers, Preschool, Kindergarten, and Elementary School	252041	$48,770	230	5
Graphic Designers	271024	$68,110	1,540	Baggage Porters and Bellhops	396011	$30,000	670	1
Graphic Designers	271024	$68,110	1,540	Refuse and Recyclable Material Collectors	537081	$36,370	620	2
Graphic Designers	271024	$68,110	1,540	Food Preparation Workers	352021	$25,070	3,140	3
Graphic Designers	271024	$68,110	1,540	File Clerks	434071	$33,620	670	4
Graphic Designers	271024	$68,110	1,540	Manicurists and Pedicurists	395092	$29,390	60	5
Interior Designers	271025	$67,550	720	Bicycle Repairers	493091	$22,360	60	1
Interior Designers	271025	$67,550	720	Statistical Assistants	439111	$47,600	180	2
Interior Designers	271025	$67,550	720	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$28,760	40	3
Interior Designers	271025	$67,550	720	Procurement Clerks	433061	$47,780	310	4
Interior Designers	271025	$67,550	720	Set and Exhibit Designers	271027	$60,170	190	5
Producers and Directors	272012	$87,580	1,340	Special Education Teachers, Preschool, Kindergarten, and Elementary School	252041	$48,770	230	1
Producers and Directors	272012	$87,580	1,340	First-Line Supervisors/Managers of Correctional Officers	331011	$66,170	80	2
Producers and Directors	272012	$87,580	1,340	Social Science Research Assistants	194061	$45,500	730	3
Producers and Directors	272012	$87,580	1,340	Automotive Service Technicians and Mechanics	493023	$44,850	370	4

Table A8: District of Columbia – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Producers and Directors	272012	$87,580	1,340	Mobile Heavy Equipment Mechanics, Except Engines	493042	$40,290	40	5
Public Relations Specialists	273031	$97,550	9,510	Foreign Language and Literature Teachers, Postsecondary	251124	$64,310	300	1
Public Relations Specialists	273031	$97,550	9,510	Statistical Assistants	439111	$47,600	180	2
Public Relations Specialists	273031	$97,550	9,510	Water and Liquid Waste Treatment Plant and System Operators	518031	$53,620	260	3
Public Relations Specialists	273031	$97,550	9,510	Helpers--Installation, Maintenance, and Repair Workers	499098	$34,360	280	4
Public Relations Specialists	273031	$97,550	9,510	Transportation Inspectors	536051	$93,530	300	5
Audio and Video Equipment Technicians	274011	$53,050	370	First-Line Supervisors/Managers of Retail Sales Workers	411011	$43,900	2,090	1
Audio and Video Equipment Technicians	274011	$53,050	370	Bill and Account Collectors	433011	$39,200	730	2
Audio and Video Equipment Technicians	274011	$53,050	370	Pest Control Workers	372021	$42,320	50	3
Audio and Video Equipment Technicians	274011	$53,050	370	Court, Municipal, and License Clerks	434031	$46,820	50	4
Audio and Video Equipment Technicians	274011	$53,050	370	Fitness Trainers and Aerobics Instructors	399031	$45,570	1,170	5
Waiters and Waitresses	353031	$26,660	8,210	Home Health Aides	311011	$23,320	3,260	1
Waiters and Waitresses	353031	$26,660	8,210	Dishwashers	359021	$22,080	2,590	2
Waiters and Waitresses	353031	$26,660	8,210	Bartenders	353011	$25,740	2,360	3
Waiters and Waitresses	353031	$26,660	8,210	Parking Lot Attendants	536021	$21,380	2,290	4
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$25,090	14,600	Shampooers	395093	$22,550	110	1
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$25,090	14,600	Cashiers	412011	$22,490	6,360	2
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$25,090	14,600	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$24,910	1,300	3
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$25,090	14,600	Food Preparation Workers	352021	$25,070	3,140	4
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$25,090	14,600	Parking Lot Attendants	536021	$21,380	2,290	5
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$67,170	4,600	Multi-Media Artists and Animators	271014	$58,350	100	1
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$67,170	4,600	Industrial Machinery Mechanics	499041	$58,070	150	2
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$67,170	4,600	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$28,760	40	3

Table A8: District of Columbia – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$67,170	4,600	Employment, Recruitment, and Placement Specialists	131071	$54,970	2,130	4
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$67,170	4,600	Special Education Teachers, Preschool, Kindergarten, and Elementary School	252041	$48,770	230	5
Customer Service Representatives	434051	$36,180	6,910	Teacher Assistants	259041	$25,830	3,860	1
Customer Service Representatives	434051	$36,180	6,910	Skin Care Specialists	395094	$32,960	60	2
Customer Service Representatives	434051	$36,180	6,910	Pharmacy Technicians	292052	$33,020	690	3
Customer Service Representatives	434051	$36,180	6,910	Reservation and Transportation Ticket Agents and Travel Clerks	434181	$35,550	380	4
Shipping, Receiving, and Traffic Clerks	435071	$42,280	830	Child Care Workers	399011	$24,590	730	1
Shipping, Receiving, and Traffic Clerks	435071	$42,280	830	Preschool Teachers, Except Special Education	252011	$32,680	1,200	2
Shipping, Receiving, and Traffic Clerks	435071	$42,280	830	Photographic Processing Machine Operators	519132	$22,310	220	3
Elevator Installers and Repairers	474021	$62,680	60	Computer, Automated Teller, and Office Machine Repairers	492011	$49,210	460	1
Elevator Installers and Repairers	474021	$62,680	60	First-Line Supervisors/Managers of Personal Service Workers	391021	$49,860	550	2
Elevator Installers and Repairers	474021	$62,680	60	Procurement Clerks	433061	$47,780	310	3
Elevator Installers and Repairers	474021	$62,680	60	Drywall and Ceiling Tile Installers	472081	$50,550	200	4
Elevator Installers and Repairers	474021	$62,680	60	Education Administrators, Preschool and Child Care Center/Program	119031	$59,710	360	5
Automotive Service Technicians and Mechanics	493023	$44,850	370	Psychiatric Technicians	292053	$42,550	480	1
Automotive Service Technicians and Mechanics	493023	$44,850	370	Health Technologists and Technicians, All Other	292099	$43,840	350	2
Automotive Service Technicians and Mechanics	493023	$44,850	370	Graduate Teaching Assistants	251191	$39,530	690	3
Maintenance and Repair Workers, General	499042	$44,360	3,880	Job Printers	515021	$30,310	510	1
Maintenance and Repair Workers, General	499042	$44,360	3,880	Pharmacy Technicians	292052	$33,020	690	2
Maintenance and Repair Workers, General	499042	$44,360	3,880	Receptionists and Information Clerks	434171	$34,260	6,870	3
Maintenance and Repair Workers, General	499042	$44,360	3,880	Hairdressers, Hairstylists, and Cosmetologists	395012	$43,330	900	4
Maintenance and Repair Workers, General	499042	$44,360	3,880	Medical Equipment Preparers	319093	$37,680	50	5
Helpers--Installation, Maintenance, and Repair Workers	499098	$34,360	280	Tax Preparers	132082	$30,120	220	1
Helpers--Installation, Maintenance, and Repair Workers	499098	$34,360	280	Teacher Assistants	259041	$25,830	3,860	2

Table A8: District of Columbia – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Cleaners of Vehicles and Equipment	537061	$34,710	490	Pressers, Textile, Garment, and Related Materials	516021	$24,530	140	1
Cleaners of Vehicles and Equipment	537061	$34,710	490	Maids and Housekeeping Cleaners	372012	$30,770	4,890	2
Cleaners of Vehicles and Equipment	537061	$34,710	490	Counter and Rental Clerks	412021	$27,220	640	3
Cleaners of Vehicles and Equipment	537061	$34,710	490	Stock Clerks and Order Fillers	435081	$33,280	1,160	4
Cleaners of Vehicles and Equipment	537061	$34,710	490	Dining Room and Cafeteria Attendants and Bartender Helpers	359011	$21,290	3,030	5
Refuse and Recyclable Material Collectors	537081	$36,370	620	Retail Salespersons	412031	$25,830	6,080	1
Refuse and Recyclable Material Collectors	537081	$36,370	620	Switchboard Operators, Including Answering Service	432011	$33,940	770	2
Refuse and Recyclable Material Collectors	537081	$36,370	620	Office Clerks, General	439061	$35,550	12,180	3
Refuse and Recyclable Material Collectors	537081	$36,370	620	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$24,910	1,300	4
Refuse and Recyclable Material Collectors	537081	$36,370	620	Couriers and Messengers	435021	$32,170	260	5

6.4. Gap Analysis Detail – Maryland Statewide

Table A9: Maryland Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Accountants and Auditors	13-2011	Bronze	Bachelor's degree	25,445	32,055	26.0%
Administrative Services Managers	11-3011	Gold	Bachelor's or higher degree, plus work experience	6,970	7,640	9.6%
Advertising and Promotions Managers	11-2011	Gold	Bachelor's or higher degree, plus work experience	655	625	-4.6%
Agricultural and Food Science Technicians	19-4011		Associate degree	310	355	14.5%
Agricultural Equipment Operators	45-2091	Silver	Moderate-term on-the-job training	200	200	0.0%
Architects, Except Landscape and Naval	17-1011		Bachelor's degree	2,415	2,780	15.1%
Architectural and Civil Drafters	17-3011	Gold	Postsecondary vocational award	1,630	1,810	11.0%
Architecture Teachers, Postsecondary	25-1031			15	20	33.3%
Art Directors	27-1011		Bachelor's or higher degree, plus work experience	900	930	3.3%
Athletes and Sports Competitors	27-2021		Long-term on-the-job training	675	745	10.4%
Automotive Body and Related Repairers	49-3021	Bronze	Long-term on-the-job training	3,435	3,355	-2.3%
Automotive Service Technicians and Mechanics	49-3023	Silver	Postsecondary vocational award	16,360	16,560	1.2%
Bartenders	35-3011	Silver	Short-term on-the-job training	10,145	11,165	10.1%
Billing and Posting Clerks and Machine Operators	43-3021	Silver	Moderate-term on-the-job training	8,510	9,600	12.8%
Biomedical Engineers	17-2031		Bachelor's degree	560	955	70.5%
Bookbinders	51-5012	Bronze	Moderate-term on-the-job training	410	355	-13.4%
Bookkeeping, Accounting, and Auditing Clerks	43-3031	Silver	Moderate-term on-the-job training	30,115	33,065	9.8%
Bus Drivers, School	53-3022		Moderate-term on-the-job training	4,120	4,640	12.6%
Business Operations Specialists, All Other	13-1199		Bachelor's degree	23,015	25,295	9.9%
Cabinetmakers and Bench Carpenters	51-7011	Silver	Long-term on-the-job training	1,275	1,230	-3.5%

Table A9: Maryland Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Carpenters	47-2031		Long-term on-the-job training	24,550	25,105	2.3%
Cashiers	41-2011	Silver	Short-term on-the-job training	73,940	76,345	3.3%
Chemical Engineers	17-2041		Bachelor's degree	645	670	3.9%
Chemical Equipment Operators and Tenders	51-9011		Moderate-term on-the-job training	530	445	-16.0%
Chemists	19-2031		Bachelor's degree	3,485	3,640	4.4%
Chief Executives	11-1011		Bachelor's or higher degree, plus work experience	5,825	5,810	-0.3%
Civil Engineers	17-2051		Bachelor's degree	7,270	9,490	30.5%
Claims Adjusters, Examiners, and Investigators	13-1031		Long-term on-the-job training	6,975	7,495	7.5%
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041		Long-term on-the-job training	5,890	7,675	30.3%
Computer and Information Systems Managers	11-3021	Platinum	Bachelor's or higher degree, plus work experience	7,840	9,040	15.3%
Computer Programmers	15-1021	Gold	Bachelor's degree	8,615	7,875	-8.6%
Computer Software Engineers, Applications	15-1031		Bachelor's degree	11,485	14,880	29.6%
Computer Specialists, All Other	15-1099		Associate degree	11,270	11,905	5.6%
Computer Support Specialists	15-1041	Gold	Associate degree	12,875	14,420	12.0%
Conservation Scientists	19-1031		Bachelor's degree	430	470	9.3%
Construction and Building Inspectors	47-4011	Silver	Work experience in a related occupation	3,035	3,765	24.1%
Construction and Related Workers, All Other	47-4099		Moderate-term on-the-job training	670	700	4.5%
Construction Laborers	47-2061	Silver	Moderate-term on-the-job training	27,505	30,715	11.7%
Construction Managers	11-9021	Silver	Bachelor's degree	17,045	18,370	7.8%
Correctional Officers and Jailers	33-3012	Silver	Moderate-term on-the-job training	10,865	11,440	5.3%
Cost Estimators	13-1051		Bachelor's degree	5,035	6,035	19.9%
Counter and Rental Clerks	41-2021	Silver	Short-term on-the-job training	8,190	8,050	-1.7%
Craft Artists	27-1012		Long-term on-the-job training	110	100	-9.1%
Customer Service Representatives	43-4051		Moderate-term on-the-job training	37,285	42,525	14.1%

Table A9: Maryland Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Data Entry Keyers	43-9021	Silver	Moderate-term on-the-job training	4,160	3,795	-8.8%
Dispatchers, Except Police, Fire, and Ambulance	43-5032	Gold	Moderate-term on-the-job training	2,965	2,640	-11.0%
Economists	19-3011		Master's degree	240	225	-6.3%
Education Administrators, Postsecondary	11-9033	Platinum	Bachelor's or higher degree, plus work experience	2,520	2,545	1.0%
Education Administrators, Preschool and Child Care Center/Program	11-9031		Bachelor's or higher degree, plus work experience	1,505	1,630	8.3%
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	4,380	4,315	-1.5%
Electrical and Electronics Drafters	17-3012		Postsecondary vocational award	840	875	4.2%
Electrical Engineers	17-2071	Gold	Bachelor's degree	3,905	4,040	3.5%
Electricians	47-2111	Gold	Long-term on-the-job training	18,010	18,905	5.0%
Elevator Installers and Repairers	47-4021	Gold	Long-term on-the-job training	1,075	1,055	-1.9%
Emergency Management Specialists	13-1061		Work experience in a related occupation	165	195	18.2%
Engineering Technicians, Except Drafters, All Other	17-3029	Silver	Associate degree	3,010	3,310	10.0%
Engineers, All Other	17-2199		Bachelor's degree	6,795	7,355	8.2%
Environmental Engineering Technicians	17-3025	Silver	Associate degree	315	460	46.0%
Environmental Engineers	17-2081		Bachelor's degree	1,380	1,890	37.0%
Environmental Science and Protection Technicians, Including Health	19-4091		Associate degree	510	640	25.5%
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	2,330	2,985	28.1%
Excavating and Loading Machine and Dragline Operators	53-7032		Moderate-term on-the-job training	1,245	1,300	4.4%
Executive Secretaries and Administrative Assistants	43-6011	Silver	Work experience in a related occupation	24,660	27,515	11.6%
Farm Equipment Mechanics	49-3041	Silver	Long-term on-the-job training	295	325	10.2%
Farm, Ranch, and Other Agricultural Managers	11-9011		Bachelor's or higher degree, plus work experience	685	715	4.4%

Table A9: Maryland Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	Bronze	Short-term on-the-job training	3,110	3,135	0.8%
Farmworkers, Farm and Ranch Animals	45-2093		Short-term on-the-job training	545	600	10.1%
Financial Analysts	13-2051		Bachelor's degree	5,370	6,675	24.3%
Financial Managers	11-3031	Gold	Bachelor's or higher degree, plus work experience	10,200	10,950	7.4%
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011		Work experience in a related occupation	18,040	19,630	8.8%
First-Line Supervisors/Managers of Correctional Officers	33-1011		Work experience in a related occupation	460	500	8.7%
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	Silver	Work experience in a related occupation	3,150	3,225	2.4%
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011		Work experience in a related occupation	5,925	6,665	12.5%
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012		Work experience in a related occupation	5,685	6,940	22.1%
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	Silver	Work experience in a related occupation	9,725	10,085	3.7%
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011		Work experience in a related occupation	26,615	29,100	9.3%
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	Silver	Work experience in a related occupation	7,995	7,510	-6.1%
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	Gold	Work experience in a related occupation	35,255	36,220	2.7%

Table A9: Maryland Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	Silver	Work experience in a related occupation	3,935	3,740	-5.0%
Fishers and Related Fishing Workers	45-3011		Moderate-term on-the-job training	190	170	-10.5%
Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042		Moderate-term on-the-job training	470	455	-3.2%
Floral Designers	27-1023	Bronze	Moderate-term on-the-job training	1,655	1,515	-8.5%
Forest and Conservation Workers	45-4011		Moderate-term on-the-job training	85	40	-52.9%
General and Operations Managers	11-1021	Platinum	Bachelor's or higher degree, plus work experience	54,315	54,395	0.1%
Grounds Maintenance Workers, All Other	37-3019		Short-term on-the-job training	1,185	1,520	28.3%
Hazardous Materials Removal Workers	47-4041		Moderate-term on-the-job training	1,060	1,175	10.8%
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111		Bachelor's degree	570	680	19.3%
Health Diagnosing and Treating Practitioners, All Other	29-1199		Bachelor's degree	4,280	4,400	2.8%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	Silver	Long-term on-the-job training	6,245	7,480	19.8%
Helpers—Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011		Short-term on-the-job training	1,415	1,500	6.0%
Helpers—Electricians	47-3013	Bronze	Short-term on-the-job training	2,560	2,895	13.1%
Helpers—Installation, Maintenance, and Repair Workers	49-9098	Silver	Short-term on-the-job training	4,625	4,905	6.1%
Highway Maintenance Workers	47-4051		Moderate-term on-the-job training	1,965	2,075	5.6%
Hotel, Motel, and Resort Desk Clerks	43-4081	Silver	Short-term on-the-job training	3,085	4,100	32.9%
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	Bachelor's degree	5,320	6,335	19.1%

Table A9: Maryland Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Industrial Engineering Technicians	17-3026	Silver	Associate degree	845	855	1.2%
Industrial Engineers	17-2112	Gold	Bachelor's degree	2,395	2,790	16.5%
Industrial Production Managers	11-3051		Work experience in a related occupation	1,580	1,480	-6.3%
Information and Record Clerks, All Other	43-4199		Short-term on-the-job training	6,065	5,160	-14.9%
Installation, Maintenance, and Repair Workers, All Other	49-9099		Moderate-term on-the-job training	3,125	3,465	10.9%
Insulation Workers, Floor, Ceiling, and Wall	47-2131		Moderate-term on-the-job training	325	380	16.9%
Interior Designers	27-1025		Associate degree	1,765	1,850	4.8%
Interpreters and Translators	27-3091		Long-term on-the-job training	1,195	1,410	18.0%
Job Printers	51-5021		Long-term on-the-job training	695	615	-11.5%
Landscape Architects	17-1012	Platinum	Bachelor's degree	740	885	19.6%
Landscaping and Groundskeeping Workers	37-3011	Silver	Short-term on-the-job training	22,035	27,645	25.5%
Laundry and Dry-Cleaning Workers	51-6011		Moderate-term on-the-job training	4,140	4,055	-2.1%
Lawyers	23-1011	Platinum	First professional degree	14,300	13,570	-5.1%
Librarians	25-4021	Gold	Master's degree	4,000	4,310	7.8%
Logisticians	13-1081		Bachelor's degree	3,240	3,985	23.0%
Machinists	51-4041	Silver	Long-term on-the-job training	3,130	3,075	-1.8%
Maintenance and Repair Workers, General	49-9042	Gold	Moderate-term on-the-job training	23,160	25,740	11.1%
Maintenance Workers, Machinery	49-9043	Bronze	Moderate-term on-the-job training	1,270	1,365	7.5%
Management Analysts	13-1111	Gold	Bachelor's or higher degree, plus work experience	24,625	27,990	13.7%
Managers, All Other	11-9199		Work experience in a related occupation	18,140	19,435	7.1%
Mathematical Science Teachers, Postsecondary	25-1022			850	950	11.8%
Mechanical Door Repairers	49-9011		Moderate-term on-the-job training	490	520	6.1%
Mechanical Drafters	17-3013	Gold	Postsecondary vocational award	1,515	1,695	11.9%
Mechanical Engineers	17-2141	Gold	Bachelor's degree	5,180	5,670	9.5%
Meeting and Convention Planners	13-1121	Gold	Bachelor's degree	1,530	1,840	20.3%

Table A9: Maryland Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Merchandise Displayers and Window Trimmers	27-1026		Moderate-term on-the-job training	1,050	1,105	5.2%
Natural Sciences Managers	11-9121	Gold	Bachelor's or higher degree, plus work experience	2,240	2,530	12.9%
Occupational Health and Safety Specialists	29-9011	Gold	Bachelor's degree	945	1,020	7.9%
Office and Administrative Support Workers, All Other	43-9199	Silver	Short-term on-the-job training	4,515	3,935	-12.8%
Office Clerks, General	43-9061	Silver	Short-term on-the-job training	68,550	75,540	10.2%
Operations Research Analysts	15-2031	Gold	Master's degree	2,285	2,740	19.9%
Order Clerks	43-4151	Silver	Short-term on-the-job training	2,920	1,980	-32.2%
Painters, Construction and Maintenance	47-2141	Silver	Moderate-term on-the-job training	9,300	9,405	1.1%
Paralegals and Legal Assistants	23-2011		Associate degree	6,135	6,455	5.2%
Personal and Home Care Aides	39-9021		Short-term on-the-job training	5,890	8,605	46.1%
Pharmacists	29-1051	Platinum	First professional degree	5,175	6,015	16.2%
Physicians and Surgeons, All Other	29-1069			9,790	10,620	8.5%
Plumbers, Pipefitters, and Steamfitters	47-2152	Silver	Long-term on-the-job training	12,835	13,965	8.8%
Postal Service Clerks	43-5051		Short-term on-the-job training	1,605	1,320	-17.8%
Postsecondary Teachers, All Other	25-1199	Platinum		675	755	11.9%
Power Distributors and Dispatchers	51-8012		Long-term on-the-job training	320	360	12.5%
Power Plant Operators	51-8013		Long-term on-the-job training	395	435	10.1%
Prepress Technicians and Workers	51-5022		Postsecondary vocational award	1,360	1,055	-22.4%
Printing Machine Operators	51-5023		Moderate-term on-the-job training	3,055	2,795	-8.5%
Producers and Directors	27-2012	Gold	Bachelor's or higher degree, plus work experience	1,910	2,075	8.6%
Production, Planning, and Expediting Clerks	43-5061	Silver	Moderate-term on-the-job training	3,690	3,755	1.8%
Property, Real Estate, and Community Association Managers	11-9141	Gold	Bachelor's degree	5,855	6,160	5.2%

Table A9: Maryland Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Public Relations Managers	11-2031	Silver	Bachelor's or higher degree, plus work experience	905	1,050	16.0%
Public Relations Specialists	27-3031	Gold	Bachelor's degree	3,485	4,255	22.1%
Purchasing Agents and Buyers, Farm Products	13-1021		Long-term on-the-job training	195	190	-2.6%
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	Gold	Long-term on-the-job training	6,520	7,715	18.3%
Purchasing Managers	11-3061	Silver	Bachelor's or higher degree, plus work experience	1,470	1,565	6.5%
Radio Mechanics	49-2021		Long-term on-the-job training	100	90	-10.0%
Real Estate Brokers	41-9021		Work experience in a related occupation	3,360	3,400	1.2%
Registered Nurses	29-1111		Associate degree	51,290	62,745	22.3%
Rehabilitation Counselors	21-1015	Gold	Master's degree	3,145	3,670	16.7%
Retail Salespersons	41-2031	Gold	Short-term on-the-job training	80,910	86,590	7.0%
Roofers	47-2181	Silver	Moderate-term on-the-job training	2,565	2,400	-6.4%
Sales Managers	11-2022	Platinum	Bachelor's or higher degree, plus work experience	6,280	7,165	14.1%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	Gold	Work experience in a related occupation	23,345	24,425	4.6%
Secretaries, Except Legal, Medical, and Executive	43-6014	Silver	Moderate-term on-the-job training	35,180	36,195	2.9%
Septic Tank Servicers and Sewer Pipe Cleaners	47-4071	Silver	Moderate-term on-the-job training	480	585	21.9%
Sheet Metal Workers	47-2211	Silver	Long-term on-the-job training	3,405	3,350	-1.6%
Shipping, Receiving, and Traffic Clerks	43-5071	Silver	Short-term on-the-job training	11,375	10,665	-6.2%
Soil and Plant Scientists	19-1013		Bachelor's degree	200	225	12.5%
Sound Engineering Technicians	27-4014		Postsecondary vocational award	380	420	10.5%
Stationary Engineers and Boiler Operators	51-8021		Long-term on-the-job training	1,380	1,430	3.6%
Stock Clerks and Order Fillers	43-5081	Silver	Short-term on-the-job training	33,905	36,845	8.7%
Structural Metal Fabricators and Fitters	51-2041		Moderate-term on-the-job training	1,380	1,510	9.4%

Table A9: Maryland Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Surveyors	17-1022		Bachelor's degree	1,240	1,420	14.5%
Tank Car, Truck, and Ship Loaders	53-7121	Silver	Moderate-term on-the-job training	135	115	-14.8%
Teacher Assistants	25-9041	Silver	Short-term on-the-job training	21,420	23,105	7.9%
Tool Grinders, Filers, and Sharpeners	51-4194	Silver	Moderate-term on-the-job training	55	55	0.0%
Training and Development Managers	11-3042	Silver	Bachelor's or higher degree, plus work experience	775	950	22.6%
Training and Development Specialists	13-1073	Gold	Bachelor's or higher degree, plus work experience	4,505	5,555	23.3%
Transportation, Storage, and Distribution Managers	11-3071	Silver	Work experience in a related occupation	1,865	1,745	-6.4%
Truck Drivers, Heavy and Tractor-Trailer	53-3032		Moderate-term on-the-job training	25,190	25,500	1.2%
Urban and Regional Planners	19-3051		Master's degree	930	1,070	15.1%
Vocational Education Teachers, Postsecondary	25-1194	Gold		450	500	11.1%
Waiters and Waitresses	35-3031	Silver	Short-term on-the-job training	44,225	47,345	7.1%
Water and Liquid Waste Treatment Plant and System Operators	51-8031	Silver	Long-term on-the-job training	1,555	1,905	22.5%
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111		Short-term on-the-job training	635	560	-11.8%
Wholesale and Retail Buyers, Except Farm Products	13-1022	Gold	Long-term on-the-job training	2,815	2,810	-0.2%
Writers and Authors	27-3043		Bachelor's degree	3,100	3,245	4.7%

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Computer Support Specialists	15-1041	Gold	Associate degree	511	8	-503
Engineering Technicians, Except Drafters, All Other	17-3029	Silver	Associate degree	87	26	-61
InteriorDesigners	27-1025		Associate degree	63	33	-30
Environmental Engineering Technicians	17-3025	Silver	Associate degree	21	0	-20

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Industrial Engineering Technicians	17-3026	Silver	Associate degree	18	0	-17
Environmental Science and Protection Technicians, Including Health	19-4091		Associate degree	35	23	-12
Agricultural and Food Science Technicians	19-4011		Associate degree	16	28	13
Paralegals and Legal Assistants	23-2011		Associate degree	102	165	64
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Associate degree	83	266	183
Computer Specialists, All Other	15-1099		Associate degree	306	629	323
Registered Nurses	29-1111		Associate degree	2,042	2,892	851
Business Operations Specialists, All Other	13-1199		Bachelor's degree	739	3	-736
Computer Software Engineers, Applications	15-1031		Bachelor's degree	436	97	-339
Civil Engineers	17-2051		Bachelor's degree	345	99	-245
Accountants and Auditors	13-2011	Bronze	Bachelor's degree	1,091	852	-239
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	Bachelor's degree	240	62	-178
Property, Real Estate, and Community Association Managers	11-9141	Gold	Bachelor's degree	132	20	-111
Logisticians	13-1081		Bachelor's degree	147	45	-101
Industrial Engineers	17-2112	Gold	Bachelor's degree	101	3	-97
Financial Analysts	13-2051		Bachelor's degree	228	137	-91
Meeting and Convention Planners	13-1121	Gold	Bachelor's degree	65	0	-65
Environmental Engineers	17-2081		Bachelor's degree	80	16	-63
Surveyors	17-1022		Bachelor's degree	50	6	-44
Architects, Except Landscape and Naval	17-1011		Bachelor's degree	77	41	-36
Mechanical Engineers	17-2141	Gold	Bachelor's degree	182	157	-25
Landscape Architects	17-1012	Platinum	Bachelor's degree	28	4	-23
Biomedical Engineers	17-2031		Bachelor's degree	51	30	-21
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111		Bachelor's degree	26	5	-20
Health Diagnosing and Treating Practitioners, All Other	29-1199		Bachelor's degree	90	80	-10
Chemical Engineers	17-2041		Bachelor's degree	19	13	-5
Chemists	19-2031		Bachelor's degree	131	134	3
Soil and Plant Scientists	19-1013		Bachelor's degree	9	18	9
Occupational Health and Safety Specialists	29-9011	Gold	Bachelor's degree	40	51	12
Conservation Scientists	19-1031		Bachelor's degree	9	34	26
Electrical Engineers	17-2071	Gold	Bachelor's degree	103	137	34
Engineers, All Other	17-2199		Bachelor's degree	197	356	159

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Computer Programmers	15-1021	Gold	Bachelor's degree	162	350	188
Public Relations Specialists	27-3031	Gold	Bachelor's degree	160	397	238
Construction Managers	11-9021	Silver	Bachelor's degree	265	560	295
Writers and Authors	27-3043		Bachelor's degree	80	406	327
Cost Estimators	13-1051		Bachelor's degree	212	611	399
Training and Development Specialists	13-1073	Gold	Bachelor's or higher degree, plus work experience	223	52	-170
Financial Managers	11-3031	Gold	Bachelor's or higher degree, plus work experience	259	172	-86
Purchasing Managers	11-3061	Silver	Bachelor's or higher degree, plus work experience	51	3	-48
Public Relations Managers	11-2031	Silver	Bachelor's or higher degree, plus work experience	36	0	-36
Education Administrators, Postsecondary	11-9033	Platinum	Bachelor's or higher degree, plus work experience	78	63	-15
Education Administrators, Preschool and Child Care Center/Program	11-9031		Bachelor's or higher degree, plus work experience	58	45	-12
Art Directors	27-1011		Bachelor's or higher degree, plus work experience	23	15	-8
Advertising and Promotions Managers	11-2011	Gold	Bachelor's or higher degree, plus work experience	16	17	2
Farm, Ranch, and Other Agricultural Managers	11-9011		Bachelor's or higher degree, plus work experience	17	23	6
Producers and Directors	27-2012	Gold	Bachelor's or higher degree, plus work experience	76	161	85

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Training and Development Managers	11-3042	Silver	Bachelor's or higher degree, plus work experience	34	135	102
Administrative Services Managers	11-3011	Gold	Bachelor's or higher degree, plus work experience	213	435	222
Computer and Information Systems Managers	11-3021	Platinum	Bachelor's or higher degree, plus work experience	248	596	349
Sales Managers	11-2022	Platinum	Bachelor's or higher degree, plus work experience	224	664	440
Management Analysts	13-1111	Gold	Bachelor's or higher degree, plus work experience	759	1,437	678
Chief Executives	11-1011		Bachelor's or higher degree, plus work experience	164	963	799
Natural Sciences Managers	11-9121	Gold	Bachelor's or higher degree, plus work experience	95	1,290	1,195
General and Operations Managers	11-1021	Platinum	Bachelor's or higher degree, plus work experience	1,582	3,263	1,682
Pharmacists	29-1051	Platinum	First professional degree	199	2	-197
Lawyers	23-1011	Platinum	First professional degree	267	113	-154
Electricians	47-2111	Gold	Long-term on-the-job training	525	46	-479
Plumbers, Pipefitters, and Steamfitters	47-2152	Silver	Long-term on-the-job training	372	0	-371
Carpenters	47-2031		Long-term on-the-job training	362	0	-361
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	Gold	Long-term on-the-job training	291	0	-291
Claims Adjusters, Examiners, and Investigators	13-1031		Long-term on-the-job training	229	0	-229

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041		Long-term on-the-job training	242	24	-217
Automotive Body and Related Repairers	49-3021	Bronze	Long-term on-the-job training	89	0	-89
Sheet Metal Workers	47-2211	Silver	Long-term on-the-job training	81	0	-81
Wholesale and Retail Buyers, Except Farm Products	13-1022	Gold	Long-term on-the-job training	71	0	-70
Water and Liquid Waste Treatment Plant and System Operators	51-8031	Silver	Long-term on-the-job training	69	0	-68
Machinists	51-4041	Silver	Long-term on-the-job training	42	0	-41
Elevator Installers and Repairers	47-4021	Gold	Long-term on-the-job training	30	0	-30
Cabinetmakers and Bench Carpenters	51-7011	Silver	Long-term on-the-job training	29	0	-28
Stationary Engineers and Boiler Operators	51-8021		Long-term on-the-job training	29	0	-28
Athletes and Sports Competitors	27-2021		Long-term on-the-job training	20	3	-17
Power Plant Operators	51-8013		Long-term on-the-job training	18	0	-17
Power Distributors and Dispatchers	51-8012		Long-term on-the-job training	15	0	-15
Farm Equipment Mechanics	49-3041	Silver	Long-term on-the-job training	9	0	-8
Purchasing Agents and Buyers, Farm Products	13-1021		Long-term on-the-job training	5	0	-4
Job Printers	51-5021		Long-term on-the-job training	3	0	-2
Radio Mechanics	49-2021		Long-term on-the-job training	2	0	-1
Craft Artists	27-1012		Long-term on-the-job training	3	14	12
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	Silver	Long-term on-the-job training	225	510	286
Interpreters and Translators	27-3091		Long-term on-the-job training	50	341	291
Rehabilitation Counselors	21-1015	Gold	Master's degree	117	0	-116
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	132	60	-71
Operations Research Analysts	15-2031	Gold	Master's degree	112	54	-58
Urban and Regional Planners	19-3051		Master's degree	32	1	-31
Librarians	25-4021	Gold	Master's degree	136	133	-3
Economists	19-3011		Master's degree	7	63	56

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Customer Service Representatives	43-4051		Moderate-term on-the-job training	1,698	7	-1,690
Maintenance and Repair Workers, General	49-9042	Gold	Moderate-term on-the-job training	615	2	-612
Secretaries, Except Legal, Medical, and Executive	43-6014	Silver	Moderate-term on-the-job training	576	30	-545
Construction Laborers	47-2061	Silver	Moderate-term on-the-job training	505	0	-505
Bookkeeping, Accounting, and Auditing Clerks	43-3031	Silver	Moderate-term on-the-job training	657	271	-386
Correctional Officers and Jailers	33-3012	Silver	Moderate-term on-the-job training	298	13	-285
Truck Drivers, Heavy and Tractor-Trailer	53-3032		Moderate-term on-the-job training	482	282	-200
Painters, Construction and Maintenance	47-2141	Silver	Moderate-term on-the-job training	170	0	-169
Billing and Posting Clerks and Machine Operators	43-3021	Silver	Moderate-term on-the-job training	249	83	-166
Production, Planning, and Expediting Clerks	43-5061	Silver	Moderate-term on-the-job training	98	0	-97
Installation, Maintenance, and Repair Workers, All Other	49-9099		Moderate-term on-the-job training	82	0	-82
Laundry and Dry-Cleaning Workers	51-6011		Moderate-term on-the-job training	72	0	-72
Highway Maintenance Workers	47-4051		Moderate-term on-the-job training	65	0	-64
Printing Machine Operators	51-5023		Moderate-term on-the-job training	64	1	-63
Data Entry Keyers	43-9021	Silver	Moderate-term on-the-job training	87	27	-59
Dispatchers, Except Police, Fire, and Ambulance	43-5032	Gold	Moderate-term on-the-job training	61	6	-55
Bus Drivers, School	53-3022		Moderate-term on-the-job training	124	73	-51
Floral Designers	27-1023	Bronze	Moderate-term on-the-job training	51	0	-51
Roofers	47-2181	Silver	Moderate-term on-the-job training	42	0	-42
Structural Metal Fabricators and Fitters	51-2041		Moderate-term on-the-job training	43	0	-42
Excavating and Loading Machine and Dragline Operators	53-7032		Moderate-term on-the-job training	42	0	-41
Hazardous Materials Removal Workers	47-4041		Moderate-term on-the-job training	40	0	-40
Maintenance Workers, Machinery	49-9043	Bronze	Moderate-term on-the-job training	29	0	-28

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Construction and Related Workers, All Other	47-4099		Moderate-term on-the-job training	26	0	-25
Septic Tank Servicers and Sewer Pipe Cleaners	47-4071	Silver	Moderate-term on-the-job training	24	0	-23
Merchandise Displayers and Window Trimmers	27-1026		Moderate-term on-the-job training	38	18	-20
Insulation Workers, Floor, Ceiling, and Wall	47-2131		Moderate-term on-the-job training	17	0	-16
Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042		Moderate-term on-the-job training	13	0	-12
Mechanical Door Repairers	49-9011		Moderate-term on-the-job training	11	0	-11
Bookbinders	51-5012	Bronze	Moderate-term on-the-job training	6	0	-6
Agricultural Equipment Operators	45-2091	Silver	Moderate-term on-the-job training	6	0	-5
Fishers and Related Fishing Workers	45-3011		Moderate-term on-the-job training	5	0	-5
Chemical Equipment Operators and Tenders	51-9011		Moderate-term on-the-job training	5	0	-4
Tank Car, Truck, and Ship Loaders	53-7121	Silver	Moderate-term on-the-job training	4	0	-4
Tool Grinders, Filers, and Sharpeners	51-4194	Silver	Moderate-term on-the-job training	2	0	-1
Forest and Conservation Workers	45-4011		Moderate-term on-the-job training	3	6	4
Automotive Service Technicians and Mechanics	49-3023	Silver	Postsecondary vocational award	332	267	-65
Mechanical Drafters	17-3013	Gold	Postsecondary vocational award	51	0	-50
Electrical and Electronics Drafters	17-3012		Postsecondary vocational award	22	0	-21
Prepress Technicians and Workers	51-5022		Postsecondary vocational award	17	3	-14
Sound Engineering Technicians	27-4014		Postsecondary vocational award	16	2	-14
Architectural and Civil Drafters	17-3011	Gold	Postsecondary vocational award	53	219	166
Cashiers	41-2011	Silver	Short-term on-the-job training	3,561	0	-3,561
Retail Salespersons	41-2031	Gold	Short-term on-the-job training	2,825	0	-2,825
Waiters and Waitresses	35-3031	Silver	Short-term on-the-job training	2,753	0	-2,753
Office Clerks, General	43-9061	Silver	Short-term on-the-job training	1,633	0	-1,633

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Stock Clerks and Order Fillers	43-5081	Silver	Short-term on-the-job training	1,075	0	-1,074
Landscaping and Groundskeeping Workers	37-3011	Silver	Short-term on-the-job training	826	0	-826
Teacher Assistants	25-9041	Silver	Short-term on-the-job training	622	0	-621
Bartenders	35-3011	Silver	Short-term on-the-job training	464	0	-463
Personal and Home Care Aides	39-9021		Short-term on-the-job training	345	0	-345
Shipping, Receiving, and Traffic Clerks	43-5071	Silver	Short-term on-the-job training	282	0	-282
Helpers—Installation, Maintenance, and Repair Workers	49-9098	Silver	Short-term on-the-job training	250	0	-249
Counter and Rental Clerks	41-2021	Silver	Short-term on-the-job training	219	0	-219
Hotel, Motel, and Resort Desk Clerks	43-4081	Silver	Short-term on-the-job training	206	0	-206
Information and Record Clerks, All Other	43-4199		Short-term on-the-job training	172	0	-172
Office and Administrative Support Workers, All Other	43-9199	Silver	Short-term on-the-job training	104	0	-103
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	Bronze	Short-term on-the-job training	87	0	-86
Order Clerks	43-4151	Silver	Short-term on-the-job training	83	0	-83
Helpers—Electricians	47-3013	Bronze	Short-term on-the-job training	87	8	-79
Grounds Maintenance Workers, All Other	37-3019		Short-term on-the-job training	48	7	-40
Helpers—Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011		Short-term on-the-job training	38	0	-38
Postal Service Clerks	43-5051		Short-term on-the-job training	34	0	-34
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111		Short-term on-the-job training	22	0	-22
Farmworkers, Farm and Ranch Animals	45-2093		Short-term on-the-job training	21	0	-20
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011		Work experience in a related occupation	849	7	-842
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	Gold	Work experience in a related occupation	853	22	-831

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	Gold	Work experience in a related occupation	649	7	-642
Executive Secretaries and Administrative Assistants	43-6011	Silver	Work experience in a related occupation	618	82	-536
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011		Work experience in a related occupation	508	167	-340
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	Silver	Work experience in a related occupation	291	64	-227
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012		Work experience in a related occupation	188	0	-187
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011		Work experience in a related occupation	136	0	-135
Construction and Building Inspectors	47-4011	Silver	Work experience in a related occupation	136	37	-98
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	Silver	Work experience in a related occupation	108	24	-84
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	Silver	Work experience in a related occupation	69	15	-53
Real Estate Brokers	41-9021		Work experience in a related occupation	59	9	-50
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	Silver	Work experience in a related occupation	62	14	-48
First-Line Supervisors/Managers of Correctional Officers	33-1011		Work experience in a related occupation	21	0	-20
Emergency Management Specialists	13-1061		Work experience in a related occupation	7	3	-3
Transportation, Storage, and Distribution Managers	11-3071	Silver	Work experience in a related occupation	52	107	56
Industrial Production Managers	11-3051		Work experience in a related occupation	56	117	62

Table A10: Maryland Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Managers, All Other	11-9199		Work experience in a related occupation	598	1,339	742
Physicians and Surgeons, All Other	29-1069		N/A	256	0	-255
Vocational Education Teachers, Postsecondary	25-1194	Gold	N/A	13	0	-13
Architecture Teachers, Postsecondary	25-1031		N/A	1	0	0
Mathematical Science Teachers, Postsecondary	25-1022		N/A	25	55	31
Postsecondary Teachers, All Other	25-1199	Platinum	N/A	20	5,541	5,521

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Accountants and Auditors	13-2011	3.7%	40	N/A	17.1%	187	59	79.1%	863	793
Administrative Services Managers	11-3011	21.4%	46	N/A	38.8%	83	91	39.9%	85	344
Advertising and Promotions Managers	11-2011	7.1%	1	N/A	17.5%	3	0	75.5%	12	16
Agricultural and Food Science Technicians	19-4011	42.7%	7	N/A	25.6%	4	0	31.6%	5	28
Agricultural Equipment Operators	45-2091	86.3%	5	N/A	9.7%	1	0	4.0%	0	0
Architects, Except Landscape and Naval	17-1011	1.6%	1	N/A	10.1%	8	0	88.3%	68	41
Architectural and Civil Drafters	17-3011	13.0%	7	N/A	62.4%	33	219	24.6%	13	0
Architecture Teachers, Postsecondary	25-1031	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Art Directors	27-1011	13.6%	3	N/A	28.5%	7	0	58.0%	13	15
Athletes and Sports Competitors	27-2021	13.7%	3	N/A	26.4%	5	0	59.9%	12	3
Automotive Body and Related Repairers	49-3021	74.3%	66	N/A	22.5%	20	0	3.1%	3	0
Automotive Service Technicians and Mechanics	49-3023	62.4%	207	N/A	33.7%	112	267	3.9%	13	0
Bartenders	35-3011	41.9%	194	N/A	40.9%	190	0	17.3%	80	0
Billing and Posting Clerks and Machine Operators	43-3021	36.1%	90	N/A	48.5%	121	83	15.4%	38	0
Biomedical Engineers	17-2031	0.0%	0	N/A	18.0%	9	0	75.7%	39	30
Bookbinders	51-5012	70.4%	4	N/A	22.6%	1	0	7.1%	0	0

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Bookkeeping, Accounting, and Auditing Clerks	43-3031	33.7%	221	N/A	50.3%	330	221	16.0%	105	50
Bus Drivers, School	53-3022	60.8%	75	N/A	34.9%	43	73	4.3%	5	0
Business Operations Specialists, All Other	13-1199	18.2%	134	N/A	33.2%	245	0	48.7%	360	3
Cabinetmakers and Bench Carpenters	51-7011	71.7%	20	N/A	24.2%	7	0	4.1%	1	0
Carpenters	47-2031	72.8%	263	N/A	21.6%	78	0	5.5%	20	0
Cashiers	41-2011	62.8%	2,236	N/A	27.7%	986	0	9.5%	338	0
Chemical Engineers	17-2041	0.0%	0	N/A	5.9%	1	0	91.4%	17	13
Chemical Equipment Operators and Tenders	51-9011	52.8%	2	N/A	33.1%	1	0	14.1%	1	0
Chemists	19-2031	0.0%	0	N/A	6.5%	9	0	93.2%	122	134
Chief Executives	11-1011	13.0%	21	N/A	21.8%	36	23	65.2%	107	940
Civil Engineers	17-2051	2.7%	9	N/A	10.0%	34	0	87.3%	301	99
Claims Adjusters, Examiners, and Investigators	13-1031	18.3%	42	N/A	35.1%	80	0	46.7%	107	0
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	14.0%	34	N/A	27.9%	67	2	58.0%	140	22
Computer and Information Systems Managers	11-3021	4.6%	11	N/A	23.0%	57	132	72.5%	179	464
Computer Programmers	15-1021	5.5%	9	N/A	21.8%	35	210	72.7%	118	139

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Computer Software Engineers, Applications	15-1031	2.2%	10	N/A	13.0%	57	7	84.8%	370	90
Computer Specialists, All Other	15-1099	7.0%	21	N/A	24.6%	75	114	68.4%	209	514
Computer Support Specialists	15-1041	13.4%	68	N/A	44.0%	225	8	42.6%	218	0
Conservation Scientists	19-1031	0.0%	0	N/A	14.0%	1	2	85.7%	7	31
Construction and Building Inspectors	47-4011	30.5%	41	N/A	46.4%	63	29	23.0%	31	8
Construction and Related Workers, All Other	47-4099	75.1%	19	N/A	21.1%	5	0	3.8%	1	0
Construction Laborers	47-2061	78.5%	396	N/A	16.8%	85	0	4.7%	24	0
Construction Managers	11-9021	39.5%	105	N/A	31.1%	82	110	29.4%	78	450
Correctional Officers and Jailers	33-3012	40.1%	119	N/A	49.2%	147	10	10.6%	32	3
Cost Estimators	13-1051	27.5%	58	N/A	40.2%	85	88	32.3%	68	523
Counter and Rental Clerks	41-2021	53.4%	117	N/A	30.3%	66	0	16.3%	36	0
Craft Artists	27-1012	13.6%	0	N/A	28.5%	1	0	58.0%	1	13
Customer Service Representatives	43-4051	33.8%	574	N/A	44.2%	750	7	22.0%	373	0
Data Entry Keyers	43-9021	35.2%	30	N/A	47.0%	41	27	17.7%	15	0
Dispatchers, Except Police, Fire, and Ambulance	43-5032	44.0%	27	N/A	45.1%	28	0	10.9%	7	6
Economists	19-3011	0.0%	0	N/A	0.0%	0	0	99.7%	7	63

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Education Administrators, Postsecondary	11-9033	6.4%	5	N/A	15.2%	12	0	78.4%	61	63
Education Administrators, Preschool and Child Care Center/Program	11-9031	6.4%	4	N/A	15.2%	9	0	78.4%	45	45
Electrical and Electronic Engineering Technicians	17-3023	27.2%	23	N/A	54.4%	45	260	18.4%	15	6
Electrical and Electronics Drafters	17-3012	13.0%	3	N/A	62.4%	13	0	24.6%	5	0
Electrical Engineers	17-2071	2.9%	3	N/A	16.5%	17	0	80.5%	83	137
Electricians	47-2111	50.7%	266	N/A	42.4%	223	46	6.8%	36	0
Elevator Installers and Repairers	47-4021	48.0%	14	N/A	42.2%	13	0	9.8%	3	0
Emergency Management Specialists	13-1061	18.2%	1	N/A	33.2%	2	0	48.7%	3	2
Engineering Technicians, Except Drafters, All Other	17-3029	27.2%	24	N/A	54.4%	47	21	18.4%	16	5
Engineers, All Other	17-2199	3.0%	6	N/A	14.7%	29	44	82.4%	162	312
Environmental Engineering Technicians	17-3025	27.2%	6	N/A	54.4%	11	0	18.4%	4	0
Environmental Engineers	17-2081	0.0%	0	N/A	9.9%	8	0	86.4%	69	16
Environmental Science and Protection Technicians, Including Health	19-4091	19.4%	7	N/A	34.9%	12	7	45.7%	16	16
Environmental Scientists and Specialists, Including Health	19-2041	0.0%	0	N/A	6.9%	9	1	93.0%	122	59

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Excavating and Loading Machine and Dragline Operators	53-7032	78.8%	33	N/A	17.7%	7	0	3.5%	1	0
Executive Secretaries and Administrative Assistants	43-6011	33.0%	204	N/A	48.7%	301	82	18.3%	113	0
Farm Equipment Mechanics	49-3041	61.8%	5	N/A	35.0%	3	0	3.2%	0	0
Farm, Ranch, and Other Agricultural Managers	11-9011	44.6%	8	N/A	29.4%	5	0	26.0%	4	23
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	86.3%	75	N/A	9.7%	8	0	4.0%	3	0
Farmworkers, Farm and Ranch Animals	45-2093	86.3%	18	N/A	9.7%	2	0	4.0%	1	0
Financial Analysts	13-2051	3.1%	7	N/A	9.6%	22	0	87.3%	199	137
Financial Managers	11-3031	12.9%	33	N/A	27.2%	70	12	59.9%	155	161
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	59.5%	302	N/A	30.1%	153	167	10.3%	52	0
First-Line Supervisors/Managers of Correctional Officers	33-1011	25.9%	5	N/A	49.2%	10	0	24.9%	5	0
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	46.6%	29	N/A	36.5%	23	0	16.9%	10	14

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011	58.0%	79	N/A	31.5%	43	0	10.5%	14	0
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012	53.7%	101	N/A	31.3%	59	0	15.0%	28	0
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	43.2%	126	N/A	43.6%	127	0	13.2%	38	64
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	28.1%	239	N/A	43.1%	366	5	28.9%	245	2
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	52.9%	57	N/A	32.2%	35	0	14.9%	16	24
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	38.8%	331	N/A	36.7%	313	5	24.6%	210	18
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	46.6%	32	N/A	36.5%	25	0	16.9%	12	15
Fishers and Related Fishing Workers	45-3011	66.7%	3	N/A	22.6%	1	0	10.7%	1	0
Floor Layers, Except Carpet, Wood, and Hard Tiles	47-2042	79.7%	10	N/A	17.0%	2	0	3.3%	0	0

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Floral Designers	27-1023	13.9%	7	N/A	31.4%	16	0	54.6%	28	0
Forest and Conservation Workers	45-4011	63.1%	2	N/A	14.7%	0	0	22.2%	1	6
General and Operations Managers	11-1021	19.6%	310	N/A	32.5%	514	671	48.0%	759	2,592
Grounds Maintenance Workers, All Other	37-3019	77.5%	37	N/A	16.7%	8	7	5.8%	3	0
Hazardous Materials Removal Workers	47-4041	63.2%	25	N/A	27.3%	11	0	9.4%	4	0
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111	7.6%	2	N/A	18.5%	5	0	73.9%	19	5
Health Diagnosing and Treating Practitioners, All Other	29-1199	0.0%	0	N/A	0.0%	0	19	93.6%	84	61
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	57.6%	129	N/A	39.0%	88	510	3.4%	8	0
Helpers—Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	47-3011	84.0%	32	N/A	12.9%	5	0	3.1%	1	0
Helpers—Electricians	47-3013	84.0%	73	N/A	12.9%	11	8	3.1%	3	0
Helpers—Installation, Maintenance, and Repair Workers	49-9098	76.9%	192	N/A	17.7%	44	0	0.0%	0	0
Highway Maintenance Workers	47-4051	69.0%	45	N/A	26.0%	17	0	5.0%	3	0
Hotel, Motel, and Resort Desk Clerks	43-4081	43.5%	90	N/A	42.2%	87	0	14.2%	29	0

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	14.1%	34	N/A	30.4%	73	24	55.5%	133	37
Industrial Engineering Technicians	17-3026	27.2%	5	N/A	54.4%	10	0	18.4%	3	0
Industrial Engineers	17-2112	7.6%	8	N/A	18.5%	19	0	73.9%	74	3
Industrial Production Managers	11-3051	25.4%	14	N/A	31.6%	18	23	43.0%	24	94
Information and Record Clerks, All Other	43-4199	26.8%	46	N/A	52.3%	90	0	20.9%	36	0
Installation, Maintenance, and Repair Workers, All Other	49-9099	61.1%	50	N/A	30.1%	25	0	8.8%	7	0
Insulation Workers, Floor, Ceiling, and Wall	47-2131	79.7%	13	N/A	15.9%	3	0	0.0%	0	0
Interior Designers	27-1025	13.9%	9	N/A	31.4%	20	26	54.6%	34	7
Interpreters and Translators	27-3091	15.9%	8	N/A	36.3%	18	24	47.8%	24	317
Job Printers	51-5021	62.0%	2	N/A	31.3%	1	0	6.7%	0	0
Landscape Architects	17-1012	1.6%	0	N/A	10.1%	3	0	88.3%	24	4
Landscaping and Groundskeeping Workers	37-3011	77.5%	640	N/A	16.7%	138	0	5.8%	48	0
Laundry and Dry-Cleaning Workers	51-6011	79.1%	57	N/A	15.7%	11	0	5.2%	4	0
Lawyers	23-1011	0.2%	1	N/A	0.7%	2	0	99.1%	265	113
Librarians	25-4021	0.0%	0	N/A	15.3%	21	0	84.5%	115	133

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Logisticians	13-1081	19.2%	28	N/A	37.9%	56	0	42.9%	63	45
Machinists	51-4041	59.5%	25	N/A	37.3%	15	0	3.2%	1	0
Maintenance and Repair Workers, General	49-9042	58.3%	358	N/A	35.6%	219	2	6.1%	37	0
Maintenance Workers, Machinery	49-9043	56.6%	16	N/A	39.3%	11	0	0.0%	0	0
Management Analysts	13-1111	6.6%	50	N/A	15.9%	121	315	77.5%	588	1,122
Managers, All Other	11-9199	17.3%	103	N/A	27.3%	163	268	55.4%	331	1,071
Mathematical Science Teachers, Postsecondary	25-1022	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mechanical Door Repairers	49-9011	55.1%	6	N/A	38.0%	4	0	6.9%	1	0
Mechanical Drafters	17-3013	13.0%	7	N/A	62.4%	32	0	24.6%	12	0
Mechanical Engineers	17-2141	3.5%	6	N/A	18.3%	33	0	78.2%	142	157
Meeting and Convention Planners	13-1121	10.6%	7	N/A	22.0%	14	0	67.4%	44	0
Merchandise Displayers and Window Trimmers	27-1026	13.9%	5	N/A	31.4%	12	18	54.6%	21	0
Natural Sciences Managers	11-9121	0.0%	0	N/A	0.0%	0	19	92.8%	88	1,270
Occupational Health and Safety Specialists	29-9011	9.4%	4	N/A	18.3%	7	35	72.4%	29	16
Office and Administrative Support Workers, All Other	43-9199	24.7%	26	N/A	43.3%	45	0	31.9%	33	0
Office Clerks, General	43-9061	36.0%	588	N/A	45.3%	740	0	18.7%	305	0

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Operations Research Analysts	15-2031	6.6%	7	N/A	22.7%	25	1	70.7%	79	54
Order Clerks	43-4151	46.8%	39	N/A	36.7%	30	0	16.4%	14	0
Painters, Construction and Maintenance	47-2141	76.4%	129	N/A	17.3%	29	0	6.3%	11	0
Paralegals and Legal Assistants	23-2011	12.7%	13	N/A	42.7%	43	137	44.6%	45	28
Personal and Home Care Aides	39-9021	58.5%	202	N/A	31.9%	110	0	9.6%	33	0
Pharmacists	29-1051	0.0%	0	N/A	2.9%	6	0	97.0%	193	2
Physicians and Surgeons, All Other	29-1069	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plumbers, Pipefitters, and Steamfitters	47-2152	67.6%	251	N/A	28.5%	106	0	3.9%	14	0
Postal Service Clerks	43-5051	42.6%	14	N/A	46.0%	16	0	11.3%	4	0
Postsecondary Teachers, All Other	25-1199	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Power Distributors and Dispatchers	51-8012	36.1%	5	N/A	43.6%	7	0	20.4%	3	0
Power Plant Operators	51-8013	36.1%	6	N/A	43.6%	8	0	20.4%	4	0
Prepress Technicians and Workers	51-5022	45.8%	8	N/A	38.3%	7	1	15.9%	3	2
Printing Machine Operators	51-5023	66.2%	42	N/A	28.4%	18	1	5.5%	4	0
Producers and Directors	27-2012	6.1%	5	N/A	19.4%	15	0	74.5%	57	161
Production, Planning, and Expediting Clerks	43-5061	30.0%	29	N/A	39.7%	39	0	30.3%	30	0

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Property, Real Estate, and Community Association Managers	11-9141	27.3%	36	N/A	36.5%	48	0	36.2%	48	20
Public Relations Managers	11-2031	8.7%	3	N/A	16.3%	6	0	75.0%	27	0
Public Relations Specialists	27-3031	5.3%	8	N/A	13.9%	22	1	80.8%	129	396
Purchasing Agents and Buyers, Farm Products	13-1021	35.5%	2	N/A	42.5%	2	0	0.0%	0	0
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	21.8%	63	N/A	35.8%	104	0	42.4%	123	0
Purchasing Managers	11-3061	14.9%	8	N/A	28.1%	14	0	57.0%	29	3
Radio Mechanics	49-2021	36.4%	1	N/A	50.7%	1	0	12.9%	0	0
Real Estate Brokers	41-9021	17.9%	11	N/A	37.4%	22	0	44.7%	26	9
Registered Nurses	29-1111	1.0%	20	N/A	42.7%	872	1,342	56.2%	1,147	1,550
Rehabilitation Counselors	21-1015	8.9%	10	N/A	18.3%	21	0	72.8%	85	0
Retail Salespersons	41-2031	38.4%	1,085	N/A	36.5%	1,031	0	25.2%	712	0
Roofers	47-2181	85.7%	36	N/A	11.4%	5	0	2.8%	1	0
Sales Managers	11-2022	9.2%	21	N/A	22.1%	50	95	68.7%	154	569
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	20.6%	134	N/A	28.0%	182	3	51.4%	334	4

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Secretaries, Except Legal, Medical, and Executive	43-6014	33.0%	190	N/A	48.7%	280	30	18.3%	105	0
Septic Tank Servicers and Sewer Pipe Cleaners	47-4071	75.1%	18	N/A	21.1%	5	0	3.8%	1	0
Sheet Metal Workers	47-2211	63.4%	51	N/A	32.4%	26	0	4.2%	3	0
Shipping, Receiving, and Traffic Clerks	43-5071	64.3%	181	N/A	29.6%	83	0	6.1%	17	0
Soil and Plant Scientists	19-1013	0.0%	0	N/A	17.7%	2	0	82.0%	7	18
Sound Engineering Technicians	27-4014	21.2%	3	N/A	43.9%	7	1	35.0%	6	1
Stationary Engineers and Boiler Operators	51-8021	55.9%	16	N/A	34.0%	10	0	10.1%	3	0
Stock Clerks and Order Fillers	43-5081	63.2%	679	N/A	29.1%	313	0	7.7%	83	0
Structural Metal Fabricators and Fitters	51-2041	56.9%	24	N/A	33.6%	14	0	0.0%	0	0
Surveyors	17-1022	0.0%	0	N/A	17.8%	9	6	81.6%	41	0
Tank Car, Truck, and Ship Loaders	53-7121	70.4%	3	N/A	24.1%	1	0	5.5%	0	0
Teacher Assistants	25-9041	37.4%	232	N/A	44.7%	278	0	17.9%	111	0
Tool Grinders, Filers, and Sharpeners	51-4194	59.7%	1	N/A	38.1%	1	0	0.0%	0	0
Training and Development Managers	11-3042	14.8%	5	N/A	27.8%	9	3	57.5%	19	132
Training and Development Specialists	13-1073	14.1%	31	N/A	30.4%	68	18	55.5%	123	34
Transportation, Storage, and Distribution Managers	11-3071	38.5%	20	N/A	36.4%	19	24	25.1%	13	83

Table A11: Maryland Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Truck Drivers, Heavy and Tractor-Trailer	53-3032	70.7%	341	N/A	25.2%	121	282	4.1%	20	0
Urban and Regional Planners	19-3051	0.0%	0	N/A	0.0%	0	0	92.2%	30	1
Vocational Education Teachers, Postsecondary	25-1194	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Waiters and Waitresses	35-3031	50.8%	1,399	N/A	35.1%	966	0	14.1%	388	0
Water and Liquid Waste Treatment Plant and System Operators	51-8031	51.7%	35	N/A	40.6%	28	0	7.8%	5	0
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111	54.9%	12	N/A	32.6%	7	0	12.5%	3	0
Wholesale and Retail Buyers, Except Farm Products	13-1022	27.8%	20	N/A	36.2%	26	0	36.0%	25	0
Writers and Authors	27-3043	3.5%	3	N/A	12.4%	10	3	84.1%	67	404
Accountants and Auditors	13-2011	3.7%	40	N/A	17.1%	187	59	79.1%	863	793

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Chief Executives	111011	$166,160	4,480	Management Analysts	131111	$87,980	18,530	1
Chief Executives	111011	$166,160	4,480	Aerospace Engineers	172011	$115,310	2,690	2
Chief Executives	111011	$166,160	4,480	Materials Scientists	192032	$92,670	210	3
Chief Executives	111011	$166,160	4,480	Computer and Information Scientists, Research	151011	$108,610	1,730	4
Chief Executives	111011	$166,160	4,480	Nursing Instructors and Teachers, Postsecondary	251072	$68,580	510	5
General and Operations Managers	111021	$117,300	52,550	Opticians, Dispensing	292081	$35,340	1,140	1
General and Operations Managers	111021	$117,300	52,550	Film and Video Editors	274032	$51,530	190	2
General and Operations Managers	111021	$117,300	52,550	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	512011	$36,780	1,450	3
General and Operations Managers	111021	$117,300	52,550	Highway Maintenance Workers	474051	$34,700	1,850	4
General and Operations Managers	111021	$117,300	52,550	Loan Interviewers and Clerks	434131	$36,970	3,320	5
Advertising and Promotions Managers	112011	$85,530	530	Makeup Artists, Theatrical and Performance	395091	$24,010	50	1
Advertising and Promotions Managers	112011	$85,530	530	Lay-Out Workers, Metal and Plastic	514192	$50,240	30	2
Advertising and Promotions Managers	112011	$85,530	530	Dental Hygienists	292021	$71,860	2,430	3
Advertising and Promotions Managers	112011	$85,530	530	Metal-Refining Furnace Operators and Tenders	514051	$42,320	280	4
Advertising and Promotions Managers	112011	$85,530	530	Computer-Controlled Machine Tool Operators, Metal and Plastic	514011	$34,170	490	5
Sales Managers	112022	$113,820	5,790	Painters, Transportation Equipment	519122	$45,060	810	1
Sales Managers	112022	$113,820	5,790	Occupational Therapists	291122	$78,990	2,040	2
Sales Managers	112022	$113,820	5,790	Network and Computer Systems Administrators	151071	$80,100	9,230	3
Sales Managers	112022	$113,820	5,790	Environmental Scientists and Specialists, Including Health	192041	$73,410	2,270	4
Sales Managers	112022	$113,820	5,790	Claims Adjusters, Examiners, and Investigators	131031	$63,170	7,030	5
Public Relations Managers	112031	$100,920	920	Industrial Engineers	172112	$89,030	2,350	1
Public Relations Managers	112031	$100,920	920	Aircraft Mechanics and Service Technicians	493011	$55,770	2,140	2
Public Relations Managers	112031	$100,920	920	Claims Adjusters, Examiners, and Investigators	131031	$63,170	7,030	3
Public Relations Managers	112031	$100,920	920	Foreign Language and Literature Teachers, Postsecondary	251124	$61,880	830	4
Public Relations Managers	112031	$100,920	920	Occupational Therapist Assistants	312011	$56,080	450	5

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Administrative Services Managers	113011	$77,520	6,840	Electronic Home Entertainment Equipment Installers and Repairers	492097	$38,590	430	1
Administrative Services Managers	113011	$77,520	6,840	Respiratory Therapists	291126	$65,430	1,820	2
Administrative Services Managers	113011	$77,520	6,840	Transportation Inspectors	536051	$63,600	480	3
Administrative Services Managers	113011	$77,520	6,840	Broadcast News Analysts	273021	$65,760	90	4
Administrative Services Managers	113011	$77,520	6,840	Wholesale and Retail Buyers, Except Farm Products	131022	$54,050	2,410	5
Computer and Information Systems Managers	113021	$125,110	7,620	Veterinary Technologists and Technicians	292056	$31,250	1,600	1
Computer and Information Systems Managers	113021	$125,110	7,620	Crane and Tower Operators	537021	$52,310	630	2
Computer and Information Systems Managers	113021	$125,110	7,620	Adult Literacy, Remedial Education, and GED Teachers and Instructors	253011	$46,180	760	3
Computer and Information Systems Managers	113021	$125,110	7,620	Commercial and Industrial Designers	271021	$46,160	350	4
Computer and Information Systems Managers	113021	$125,110	7,620	First-Line Supervisors/Managers of Non-Retail Sales Workers	411012	$79,860	4,310	5
Financial Managers	113031	$105,050	9,530	First-Line Supervisors/Managers of Production and Operating Workers	511011	$57,550	7,270	1
Financial Managers	113031	$105,050	9,530	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	514023	$48,910	460	2
Financial Managers	113031	$105,050	9,530	Police and Sheriff's Patrol Officers	333051	$56,500	15,650	3
Financial Managers	113031	$105,050	9,530	Recreation and Fitness Studies Teachers, Postsecondary	251193	$64,840	460	4
Financial Managers	113031	$105,050	9,530	Recreation Workers	399032	$26,050	5,400	5
Training and Development Managers	113042	$100,260	780	Veterinary Assistants and Laboratory Animal Caretakers	319096	$27,120	2,260	1
Training and Development Managers	113042	$100,260	780	Cooks, Short Order	352015	$21,790	3,190	2
Training and Development Managers	113042	$100,260	780	Hairdressers, Hairstylists, and Cosmetologists	395012	$30,000	9,080	3
Training and Development Managers	113042	$100,260	780	Compensation and Benefits Managers	113041	$85,740	610	4
Training and Development Managers	113042	$100,260	780	Civil Engineers	172051	$85,660	6,840	5
Industrial Production Managers	113051	$97,340	1,490	Payroll and Timekeeping Clerks	433051	$39,740	3,230	1
Industrial Production Managers	113051	$97,340	1,490	Athletes and Sports Competitors	272021	$51,140	610	2
Industrial Production Managers	113051	$97,340	1,490	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	513091	$28,600	290	3
Industrial Production Managers	113051	$97,340	1,490	Medical and Public Health Social Workers	211022	$58,590	2,750	4

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Industrial Production Managers	113051	$97,340	1,490	Pharmacy Aides	319095	$22,450	580	5
Purchasing Managers	113061	$105,900	1,420	Urban and Regional Planners	193051	$64,690	920	1
Purchasing Managers	113061	$105,900	1,420	Home Appliance Repairers	499031	$35,530	680	2
Purchasing Managers	113061	$105,900	1,420	Cementing and Gluing Machine Operators and Tenders	519191	$29,260	140	3
Purchasing Managers	113061	$105,900	1,420	Financial Examiners	132061	$66,260	490	4
Purchasing Managers	113061	$105,900	1,420	Commercial and Industrial Designers	271021	$46,160	350	5
Transportation, Storage, and Distribution Managers	113071	$74,690	1,700	Electrical and Electronic Engineering Technicians	173023	$63,310	4,290	1
Transportation, Storage, and Distribution Managers	113071	$74,690	1,700	Shipping, Receiving, and Traffic Clerks	435071	$31,130	11,020	2
Transportation, Storage, and Distribution Managers	113071	$74,690	1,700	Real Estate Sales Agents	419022	$54,340	4,100	3
Transportation, Storage, and Distribution Managers	113071	$74,690	1,700	Textile Bleaching and Dyeing Machine Operators and Tenders	516061	$31,310	120	4
Transportation, Storage, and Distribution Managers	113071	$74,690	1,700	Welders, Cutters, Solderers, and Brazers	514121	$39,730	2,960	5
Construction Managers	119021	$89,270	6,130	Mechanical Door Repairers	499011	$38,360	450	1
Construction Managers	119021	$89,270	6,130	Appraisers and Assessors of Real Estate	132021	$52,160	1,310	2
Construction Managers	119021	$89,270	6,130	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	513091	$28,600	290	3
Construction Managers	119021	$89,270	6,130	Pharmacy Aides	319095	$22,450	580	4
Construction Managers	119021	$89,270	6,130	Insurance Underwriters	132053	$66,350	2,030	5
Education Administrators, Preschool and Child Care Center/Program	119031	$43,630	1,460	Chemical Equipment Operators and Tenders	519011	$43,490	500	1
Education Administrators, Preschool and Child Care Center/Program	119031	$43,630	1,460	Recreation Workers	399032	$26,050	5,400	2
Education Administrators, Postsecondary	119033	$89,940		Power Distributors and Dispatchers	518012	$63,160	320	1
Education Administrators, Postsecondary	119033	$89,940		Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$81,030	560	2
Education Administrators, Postsecondary	119033	$89,940		Operations Research Analysts	152031	$85,290	2,320	3
Education Administrators, Postsecondary	119033	$89,940		Audiologists	291121	$71,710	260	4
Education Administrators, Postsecondary	119033	$89,940		Clergy	212011	$48,260	280	5
Natural Sciences Managers	119121	$123,940	2,340	Automotive Service Technicians and Mechanics	493023	$42,680	12,870	1

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Natural Sciences Managers	119121	$123,940	2,340	First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$52,230	25,790	2
Natural Sciences Managers	119121	$123,940	2,340	Elementary School Teachers, Except Special Education	252021	$61,000	30,530	3
Natural Sciences Managers	119121	$123,940	2,340	Art, Drama, and Music Teachers, Postsecondary	251121	$70,680	1,120	4
Natural Sciences Managers	119121	$123,940	2,340	Foreign Language and Literature Teachers, Postsecondary	251124	$61,880	830	5
Property, Real Estate, and Community Association Managers	119141	$74,460	3,040	Advertising Sales Agents	413011	$64,280	1,770	1
Property, Real Estate, and Community Association Managers	119141	$74,460	3,040	Dietitians and Nutritionists	291031	$64,600	820	2
Property, Real Estate, and Community Association Managers	119141	$74,460	3,040	Electronic Home Entertainment Equipment Installers and Repairers	492097	$38,590	430	3
Property, Real Estate, and Community Association Managers	119141	$74,460	3,040	Training and Development Specialists	131073	$59,940	4,400	4
Property, Real Estate, and Community Association Managers	119141	$74,460	3,040	Real Estate Brokers	419021	$72,130	1,310	5
Purchasing Agents and Buyers, Farm Products	131021	$55,670	190	Job Printers	515021	$42,230	600	1
Purchasing Agents and Buyers, Farm Products	131021	$55,670	190	Residential Advisors	399041	$28,420	2,800	2
Purchasing Agents and Buyers, Farm Products	131021	$55,670	190	Sheet Metal Workers	472211	$41,150	3,050	3
Purchasing Agents and Buyers, Farm Products	131021	$55,670	190	Metal-Refining Furnace Operators and Tenders	514051	$42,320	280	4
Purchasing Agents and Buyers, Farm Products	131021	$55,670	190	Production, Planning, and Expediting Clerks	435061	$48,340	3,530	5
Wholesale and Retail Buyers, Except Farm Products	131022	$54,050	2,410	Food Cooking Machine Operators and Tenders	513093	$24,740	220	1
Wholesale and Retail Buyers, Except Farm Products	131022	$54,050	2,410	Pile-Driver Operators	472072	$45,010	50	2
Wholesale and Retail Buyers, Except Farm Products	131022	$54,050	2,410	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	519021	$34,820	210	3
Wholesale and Retail Buyers, Except Farm Products	131022	$54,050	2,410	Electronic Home Entertainment Equipment Installers and Repairers	492097	$38,590	430	4
Wholesale and Retail Buyers, Except Farm Products	131022	$54,050	2,410	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,840	4,570	5
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,810	6,480	Food Service Managers	119051	$55,020	2,770	1
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,810	6,480	Lay-Out Workers, Metal and Plastic	514192	$50,240	30	2

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,810	6,480	Fine Artists, Including Painters, Sculptors, and Illustrators	271013	$40,250	80	3
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,810	6,480	Medical and Public Health Social Workers	211022	$58,590	2,750	4
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,810	6,480	Historians	193093	$58,780	110	5
Claims Adjusters, Examiners, and Investigators	131031	$63,170	7,030	Title Examiners, Abstractors, and Searchers	232093	$42,890	2,020	1
Claims Adjusters, Examiners, and Investigators	131031	$63,170	7,030	Photographers	274021	$30,100	1,340	2
Claims Adjusters, Examiners, and Investigators	131031	$63,170	7,030	Veterinary Technologists and Technicians	292056	$31,250	1,600	3
Claims Adjusters, Examiners, and Investigators	131031	$63,170	7,030	Crane and Tower Operators	537021	$52,310	630	4
Claims Adjusters, Examiners, and Investigators	131031	$63,170	7,030	Medical Appliance Technicians	519082	$38,030	150	5
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$61,700	5,890	Adult Literacy, Remedial Education, and GED Teachers and Instructors	253011	$46,180	760	1
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$61,700	5,890	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,840	4,570	2
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$61,700	5,890	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	531021	$48,780	3,000	3
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$61,700	5,890	Prepress Technicians and Workers	515022	$38,180	1,230	4
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$61,700	5,890	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	519021	$34,820	210	5
Cost Estimators	131051	$64,010	4,590	Bus Drivers, Transit and Intercity	533021	$35,320	4,280	1
Cost Estimators	131051	$64,010	4,590	Funeral Directors	119061	$62,640	400	2
Cost Estimators	131051	$64,010	4,590	Funeral Attendants	394021	$24,450	610	3
Cost Estimators	131051	$64,010	4,590	Fiberglass Laminators and Fabricators	512091	$39,440	70	4
Cost Estimators	131051	$64,010	4,590	Insulation Workers, Floor, Ceiling, and Wall	472131	$31,810	300	5
Emergency Management Specialists	131061	$68,870	170	Numerical Tool and Process Control Programmers	514012	$44,820	90	1
Emergency Management Specialists	131061	$68,870	170	Architectural and Civil Drafters	173011	$52,460	1,560	2
Emergency Management Specialists	131061	$68,870	170	Procurement Clerks	433061	$42,090	2,050	3

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Emergency Management Specialists	131061	$68,870	170	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,080	3,760	4
Emergency Management Specialists	131061	$68,870	170	Chemical Technicians	194031	$48,710	660	5
Training and Development Specialists	131073	$59,940	4,400	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	514021	$35,060	530	1
Training and Development Specialists	131073	$59,940	4,400	Printing Machine Operators	515023	$40,420	2,760	2
Training and Development Specialists	131073	$59,940	4,400	Real Estate Sales Agents	419022	$54,340	4,100	3
Training and Development Specialists	131073	$59,940	4,400	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514032	$34,930	120	4
Training and Development Specialists	131073	$59,940	4,400	Loan Interviewers and Clerks	434131	$36,970	3,320	5
Logisticians	131081	$82,120	3,320	Educational, Vocational, and School Counselors	211012	$63,560	5,350	1
Logisticians	131081	$82,120	3,320	Electrical and Electronic Engineering Technicians	173023	$63,310	4,290	2
Logisticians	131081	$82,120	3,320	Mathematical Science Teachers, Postsecondary	251022	$75,260	910	3
Logisticians	131081	$82,120	3,320	Health Educators	211091	$81,040	1,700	4
Logisticians	131081	$82,120	3,320	Conservation Scientists	191031	$69,130	420	5
Management Analysts	131111	$87,980	18,530	Clergy	212011	$48,260	280	1
Management Analysts	131111	$87,980	18,530	Social Work Teachers, Postsecondary	251113	$74,130	190	2
Management Analysts	131111	$87,980	18,530	Nursing Instructors and Teachers, Postsecondary	251072	$68,580	510	3
Management Analysts	131111	$87,980	18,530	Respiratory Therapy Technicians	292054	$65,340	610	4
Management Analysts	131111	$87,980	18,530	Education Teachers, Postsecondary	251081	$64,680	850	5
Meeting and Convention Planners	131121	$53,200	1,450	Tire Repairers and Changers	493093	$24,610	1,390	1
Meeting and Convention Planners	131121	$53,200	1,450	Jewelers and Precious Stone and Metal Workers	519071	$26,160	150	2
Meeting and Convention Planners	131121	$53,200	1,450	Bus and Truck Mechanics and Diesel Engine Specialists	493031	$42,150	3,530	3
Meeting and Convention Planners	131121	$53,200	1,450	Animal Control Workers	339011	$38,440	150	4
Meeting and Convention Planners	131121	$53,200	1,450	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514033	$31,390	330	5
Accountants and Auditors	132011	$76,220	22,700	Home Appliance Repairers	499031	$35,530	680	1
Accountants and Auditors	132011	$76,220	22,700	Dental Assistants	319091	$35,170	4,890	2
Accountants and Auditors	132011	$76,220	22,700	Transit and Railroad Police	333052	$41,170	100	3

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Accountants and Auditors	132011	$76,220	22,700	Architectural and Civil Drafters	173011	$52,460	1,560	4
Accountants and Auditors	132011	$76,220	22,700	Statistical Assistants	439111	$43,680	230	5
Financial Analysts	132051	$81,420	5,110	Special Education Teachers, Middle School	252042	$62,960	2,910	1
Financial Analysts	132051	$81,420	5,110	Detectives and Criminal Investigators	333021	$77,910	1,440	2
Financial Analysts	132051	$81,420	5,110	Mechanical Drafters	173013	$51,540	1,430	3
Financial Analysts	132051	$81,420	5,110	Interior Designers	271025	$57,230	1,210	4
Financial Analysts	132051	$81,420	5,110	Audio-Visual Collections Specialists	259011	$76,050	220	5
Computer Programmers	151021	$77,660	8,060	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$61,700	5,890	1
Computer Programmers	151021	$77,660	8,060	Riggers	499096	$50,580	140	2
Computer Programmers	151021	$77,660	8,060	Social Science Research Assistants	194061	$49,410	480	3
Computer Programmers	151021	$77,660	8,060	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$49,010	5,060	4
Computer Programmers	151021	$77,660	8,060	Claims Adjusters, Examiners, and Investigators	131031	$63,170	7,030	5
Computer Software Engineers, Applications	151031	$95,310	11,170	Network and Computer Systems Administrators	151071	$80,100	9,230	1
Computer Software Engineers, Applications	151031	$95,310	11,170	Audiologists	291121	$71,710	260	2
Computer Software Engineers, Applications	151031	$95,310	11,170	Education Teachers, Postsecondary	251081	$64,680	850	3
Computer Software Engineers, Applications	151031	$95,310	11,170	Environmental Science Teachers, Postsecondary	251053	$71,200	80	4
Computer Software Engineers, Applications	151031	$95,310	11,170	English Language and Literature Teachers, Postsecondary	251123	$76,920	1,160	5
Computer Support Specialists	151041	$51,950	12,610	Child Care Workers	399011	$21,940	6,830	1
Computer Support Specialists	151041	$51,950	12,610	Licensed Practical and Licensed Vocational Nurses	292061	$49,310	10,960	2
Computer Support Specialists	151041	$51,950	12,610	Telemarketers	419041	$28,180	3,900	3
Computer Support Specialists	151041	$51,950	12,610	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	519012	$39,890	360	4
Computer Support Specialists	151041	$51,950	12,610	Carpet Installers	472041	$35,600	670	5
Computer Specialists, All Other	151099	$95,190	11,490	Police and Sheriff's Patrol Officers	333051	$56,500	15,650	1
Computer Specialists, All Other	151099	$95,190	11,490	Elementary School Teachers, Except Special Education	252021	$61,000	30,530	2
Computer Specialists, All Other	151099	$95,190	11,490	Conservation Scientists	191031	$69,130	420	3

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Computer Specialists, All Other	151099	$95,190	11,490	Arbitrators, Mediators, and Conciliators	231022	$59,120	190	4
Computer Specialists, All Other	151099	$95,190	11,490	Special Education Teachers, Preschool, Kindergarten, and Elementary School	252041	$61,120	4,780	5
Operations Research Analysts	152031	$85,290	2,320	Education Teachers, Postsecondary	251081	$64,680	850	1
Operations Research Analysts	152031	$85,290	2,320	Anthropology and Archeology Teachers, Postsecondary	251061	$76,220	50	2
Operations Research Analysts	152031	$85,290	2,320	Plasterers and Stucco Masons	472161	$32,210	630	3
Operations Research Analysts	152031	$85,290	2,320	Biological Science Teachers, Postsecondary	251042	$84,610	870	4
Operations Research Analysts	152031	$85,290	2,320	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	331021	$67,090	1,450	5
Architects, Except Landscape and Naval	171011	$81,300	1,880	Clinical, Counseling, and School Psychologists	193031	$71,310	1,840	1
Architects, Except Landscape and Naval	171011	$81,300	1,880	Drywall and Ceiling Tile Installers	472081	$42,980	2,380	2
Architects, Except Landscape and Naval	171011	$81,300	1,880	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$48,360	210	3
Architects, Except Landscape and Naval	171011	$81,300	1,880	Producers and Directors	272012	$67,760	1,560	4
Architects, Except Landscape and Naval	171011	$81,300	1,880	Social and Community Service Managers	119151	$63,400	1,760	5
Landscape Architects	171012	$72,170	570	Museum Technicians and Conservators	254013	$51,190	610	1
Landscape Architects	171012	$72,170	570	Chemical Technicians	194031	$48,710	660	2
Landscape Architects	171012	$72,170	570	Special Education Teachers, Preschool, Kindergarten, and Elementary School	252041	$61,120	4,780	3
Landscape Architects	171012	$72,170	570	Special Education Teachers, Middle School	252042	$62,960	2,910	4
Landscape Architects	171012	$72,170	570	Epidemiologists	191041	$63,510	180	5
Surveyors	171022	$58,190	1,190	Electricians	472111	$50,840	15,510	1
Surveyors	171022	$58,190	1,190	Physical Therapist Assistants	312021	$47,000	1,240	2
Surveyors	171022	$58,190	1,190	Nonfarm Animal Caretakers	392021	$24,150	3,510	3
Surveyors	171022	$58,190	1,190	Photographic Process Workers	519131	$25,530	310	4
Surveyors	171022	$58,190	1,190	Cooks, Institution and Cafeteria	352012	$28,350	4,560	5
Biomedical Engineers	172031	$85,620	560	Orthotists and Prosthetists	292091	$52,420	50	1
Biomedical Engineers	172031	$85,620	560	Athletic Trainers	299091	$45,310	120	2
Biomedical Engineers	172031	$85,620	560	Clergy	212011	$48,260	280	3
Biomedical Engineers	172031	$85,620	560	Anthropology and Archeology Teachers, Postsecondary	251061	$76,220	50	4

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Biomedical Engineers	172031	$85,620	560	Network and Computer Systems Administrators	151071	$80,100	9,230	5
Chemical Engineers	172041	$98,750	660	Electrical Engineers	172071	$90,520	3,830	1
Chemical Engineers	172041	$98,750	660	Anthropology and Archeology Teachers, Postsecondary	251061	$76,220	50	2
Chemical Engineers	172041	$98,750	660	Education Teachers, Postsecondary	251081	$64,680	850	3
Chemical Engineers	172041	$98,750	660	Computer Software Engineers, Applications	151031	$95,310	11,170	4
Chemical Engineers	172041	$98,750	660	Network and Computer Systems Administrators	151071	$80,100	9,230	5
Civil Engineers	172051	$85,660	6,840	Veterinary Assistants and Laboratory Animal Caretakers	319096	$27,120	2,260	1
Civil Engineers	172051	$85,660	6,840	Fallers	454021	$28,440	60	2
Civil Engineers	172051	$85,660	6,840	Outdoor Power Equipment and Other Small Engine Mechanics	493053	$33,560	270	3
Civil Engineers	172051	$85,660	6,840	Network and Computer Systems Administrators	151071	$80,100	9,230	4
Civil Engineers	172051	$85,660	6,840	Automotive Glass Installers and Repairers	493022	$35,330	390	5
Electrical Engineers	172071	$90,520	3,830	Network and Computer Systems Administrators	151071	$80,100	9,230	1
Electrical Engineers	172071	$90,520	3,830	Anthropology and Archeology Teachers, Postsecondary	251061	$76,220	50	2
Electrical Engineers	172071	$90,520	3,830	Athletic Trainers	299091	$45,310	120	3
Electrical Engineers	172071	$90,520	3,830	Environmental Science Teachers, Postsecondary	251053	$71,200	80	4
Electrical Engineers	172071	$90,520	3,830	Radio Mechanics	492021	$54,230	90	5
Environmental Engineers	172081	$88,110	1,370	Carpenters	472031	$43,290	14,890	1
Environmental Engineers	172081	$88,110	1,370	Cooks, Short Order	352015	$21,790	3,190	2
Environmental Engineers	172081	$88,110	1,370	Transportation Attendants, Except Flight Attendants and Baggage Porters	396032	$19,890	90	3
Environmental Engineers	172081	$88,110	1,370	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$61,700	5,890	4
Environmental Engineers	172081	$88,110	1,370	Network and Computer Systems Administrators	151071	$80,100	9,230	5
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$81,030	560	Power Distributors and Dispatchers	518012	$63,160	320	1
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$81,030	560	Audiologists	291121	$71,710	260	2
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$81,030	560	Education Teachers, Postsecondary	251081	$64,680	850	3

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$81,030	560	Anthropology and Archeology Teachers, Postsecondary	251061	$76,220	50	4
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$81,030	560	Fire Fighters	332011	$51,490	4,750	5
Industrial Engineers	172112	$89,030	2,350	Aircraft Mechanics and Service Technicians	493011	$55,770	2,140	1
Industrial Engineers	172112	$89,030	2,350	Statistical Assistants	439111	$43,680	230	2
Industrial Engineers	172112	$89,030	2,350	Broadcast News Analysts	273021	$65,760	90	3
Industrial Engineers	172112	$89,030	2,350	Occupational Therapist Assistants	312011	$56,080	450	4
Industrial Engineers	172112	$89,030	2,350	Architectural and Civil Drafters	173011	$52,460	1,560	5
Mechanical Engineers	172141	$89,410	5,090	Drywall and Ceiling Tile Installers	472081	$42,980	2,380	1
Mechanical Engineers	172141	$89,410	5,090	Producers and Directors	272012	$67,760	1,560	2
Mechanical Engineers	172141	$89,410	5,090	Public Relations Specialists	273031	$62,810	3,350	3
Mechanical Engineers	172141	$89,410	5,090	Speech-Language Pathologists	291127	$80,860	2,520	4
Mechanical Engineers	172141	$89,410	5,090	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$48,360	210	5
Architectural and Civil Drafters	173011	$52,460	1,560	Title Examiners, Abstractors, and Searchers	232093	$42,890	2,020	1
Architectural and Civil Drafters	173011	$52,460	1,560	Procurement Clerks	433061	$42,090	2,050	2
Architectural and Civil Drafters	173011	$52,460	1,560	Maintenance Workers, Machinery	499043	$31,190	1,220	3
Architectural and Civil Drafters	173011	$52,460	1,560	Private Detectives and Investigators	339021	$45,960	820	4
Architectural and Civil Drafters	173011	$52,460	1,560	Home Appliance Repairers	499031	$35,530	680	5
Electrical and Electronics Drafters	173012	$51,970	800	Medical Equipment Preparers	319093	$29,690	470	1
Electrical and Electronics Drafters	173012	$51,970	800	Fitness Trainers and Aerobics Instructors	399031	$36,510	7,130	2
Electrical and Electronics Drafters	173012	$51,970	800	Ophthalmic Laboratory Technicians	519083	$31,100	400	3
Electrical and Electronics Drafters	173012	$51,970	800	Self-Enrichment Education Teachers	253021	$38,990	3,870	4
Electrical and Electronics Drafters	173012	$51,970	800	Job Printers	515021	$42,230	600	5
Mechanical Drafters	173013	$51,540	1,430	Directors, Religious Activities and Education	212021	$42,600	430	1
Mechanical Drafters	173013	$51,540	1,430	Medical and Clinical Laboratory Technicians	292012	$45,870	2,680	2
Mechanical Drafters	173013	$51,540	1,430	Psychiatric Technicians	292053	$36,140	200	3
Mechanical Drafters	173013	$51,540	1,430	Private Detectives and Investigators	339021	$45,960	820	4
Mechanical Drafters	173013	$51,540	1,430	Child, Family, and School Social Workers	211021	$49,600	4,200	5

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Electrical and Electronic Engineering Technicians	173023	$63,310	4,290	Hotel, Motel, and Resort Desk Clerks	434081	$22,340	3,040	1
Electrical and Electronic Engineering Technicians	173023	$63,310	4,290	Social and Human Service Assistants	211093	$33,520	6,970	2
Electrical and Electronic Engineering Technicians	173023	$63,310	4,290	Massage Therapists	319011	$39,910	1,260	3
Electrical and Electronic Engineering Technicians	173023	$63,310	4,290	Physical Therapist Assistants	312021	$47,000	1,240	4
Electrical and Electronic Engineering Technicians	173023	$63,310	4,290	Cement Masons and Concrete Finishers	472051	$38,900	2,830	5
Environmental Engineering Technicians	173025	$51,860	310	Textile Bleaching and Dyeing Machine Operators and Tenders	516061	$31,310	120	1
Environmental Engineering Technicians	173025	$51,860	310	Civil Engineering Technicians	173022	$51,440	2,070	2
Environmental Engineering Technicians	173025	$51,860	310	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514032	$34,930	120	3
Environmental Engineering Technicians	173025	$51,860	310	Chefs and Head Cooks	351011	$44,130	2,830	4
Environmental Engineering Technicians	173025	$51,860	310	Septic Tank Servicers and Sewer Pipe Cleaners	474071	$37,770	440	5
Industrial Engineering Technicians	173026	$52,980	820	First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$52,230	25,790	1
Industrial Engineering Technicians	173026	$52,980	820	Medical and Clinical Laboratory Technicians	292012	$45,870	2,680	2
Industrial Engineering Technicians	173026	$52,980	820	Chemical Plant and System Operators	518091	$49,220	320	3
Industrial Engineering Technicians	173026	$52,980	820	Riggers	499096	$50,580	140	4
Industrial Engineering Technicians	173026	$52,980	820	Electrical and Electronics Installers and Repairers, Transportation Equipment	492093	$52,520	220	5
Soil and Plant Scientists	191013	$86,420	180	Electronic Equipment Installers and Repairers, Motor Vehicles	492096	$29,150	120	1
Soil and Plant Scientists	191013	$86,420	180	Sound Engineering Technicians	274014	$43,540	310	2
Soil and Plant Scientists	191013	$86,420	180	Hydrologists	192043	$81,000	130	3
Soil and Plant Scientists	191013	$86,420	180	Secondary School Teachers, Except Special and Vocational Education	252031	$62,500	26,360	4
Soil and Plant Scientists	191013	$86,420	180	Vocational Education Teachers, Secondary School	252032	$64,550	2,410	5
Conservation Scientists	191031	$69,130	420	Title Examiners, Abstractors, and Searchers	232093	$42,890	2,020	1
Conservation Scientists	191031	$69,130	420	Social Science Research Assistants	194061	$49,410	480	2
Conservation Scientists	191031	$69,130	420	Broadcast News Analysts	273021	$65,760	90	3
Conservation Scientists	191031	$69,130	420	Producers and Directors	272012	$67,760	1,560	4
Conservation Scientists	191031	$69,130	420	Directors, Religious Activities and Education	212021	$42,600	430	5

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Chemists	192031	$96,950	3,570	Athletic Trainers	299091	$45,310	120	1
Chemists	192031	$96,950	3,570	Veterinarians	291131	$95,710	1,210	2
Chemists	192031	$96,950	3,570	Electrical Engineers	172071	$90,520	3,830	3
Chemists	192031	$96,950	3,570	Computer Software Engineers, Applications	151031	$95,310	11,170	4
Chemists	192031	$96,950	3,570	Network and Computer Systems Administrators	151071	$80,100	9,230	5
Environmental Scientists and Specialists, Including Health	192041	$73,410	2,270	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$61,700	5,890	1
Environmental Scientists and Specialists, Including Health	192041	$73,410	2,270	Automotive Glass Installers and Repairers	493022	$35,330	390	2
Environmental Scientists and Specialists, Including Health	192041	$73,410	2,270	Bindery Workers	515011	$33,340	1,040	3
Environmental Scientists and Specialists, Including Health	192041	$73,410	2,270	Pharmacy Aides	319095	$22,450	580	4
Environmental Scientists and Specialists, Including Health	192041	$73,410	2,270	Brokerage Clerks	434011	$41,790	410	5
Economists	193011	$110,100	240	Farm Equipment Mechanics	493041	$37,540	260	1
Economists	193011	$110,100	240	Chemical Technicians	194031	$48,710	660	2
Economists	193011	$110,100	240	Health Technologists and Technicians, All Other	292099	$46,920	1,320	3
Economists	193011	$110,100	240	Landscape Architects	171012	$72,170	570	4
Economists	193011	$110,100	240	Personal Financial Advisors	132052	$91,350	3,250	5
Urban and Regional Planners	193051	$64,690	920	Audio and Video Equipment Technicians	274011	$43,130	910	1
Urban and Regional Planners	193051	$64,690	920	Food Cooking Machine Operators and Tenders	513093	$24,740	220	2
Urban and Regional Planners	193051	$64,690	920	Fitness Trainers and Aerobics Instructors	399031	$36,510	7,130	3
Urban and Regional Planners	193051	$64,690	920	Insurance Sales Agents	413021	$58,760	6,230	4
Urban and Regional Planners	193051	$64,690	920	Electrical Power-Line Installers and Repairers	499051	$56,470	1,580	5
Agricultural and Food Science Technicians	194011	$39,610	290	Cementing and Gluing Machine Operators and Tenders	519191	$29,260	140	1
Agricultural and Food Science Technicians	194011	$39,610	290	Prepress Technicians and Workers	515022	$38,180	1,230	2
Agricultural and Food Science Technicians	194011	$39,610	290	Dental Assistants	319091	$35,170	4,890	3
Agricultural and Food Science Technicians	194011	$39,610	290	Bill and Account Collectors	433011	$35,300	8,650	4
Agricultural and Food Science Technicians	194011	$39,610	290	Rail Car Repairers	493043	$35,410	360	5

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Environmental Science and Protection Technicians, Including Health	194091	$47,100	500	Sawing Machine Setters, Operators, and Tenders, Wood	517041	$33,960	180	1
Environmental Science and Protection Technicians, Including Health	194091	$47,100	500	Painters, Construction and Maintenance	472141	$34,720	4,640	2
Environmental Science and Protection Technicians, Including Health	194091	$47,100	500	Merchandise Displayers and Window Trimmers	271026	$31,000	750	3
Environmental Science and Protection Technicians, Including Health	194091	$47,100	500	Court, Municipal, and License Clerks	434031	$41,550	470	4
Environmental Science and Protection Technicians, Including Health	194091	$47,100	500	Bus Drivers, School	533022	$28,420	4,440	5
Rehabilitation Counselors	211015	$28,720	3,060	Makeup Artists, Theatrical and Performance	395091	$24,010	50	1
Lawyers	231011	$129,240	10,420	Computer Programmers	151021	$77,660	8,060	1
Lawyers	231011	$129,240	10,420	Fire Inspectors and Investigators	332021	$58,170	80	2
Lawyers	231011	$129,240	10,420	Chemical Equipment Operators and Tenders	519011	$43,490	500	3
Lawyers	231011	$129,240	10,420	Financial Managers	113031	$105,050	9,530	4
Lawyers	231011	$129,240	10,420	Commercial Pilots	532012	$91,260	120	5
Paralegals and Legal Assistants	232011	$50,330	5,930	Photographic Process Workers	519131	$25,530	310	1
Paralegals and Legal Assistants	232011	$50,330	5,930	Cooks, Institution and Cafeteria	352012	$28,350	4,560	2
Paralegals and Legal Assistants	232011	$50,330	5,930	Funeral Attendants	394021	$24,450	610	3
Paralegals and Legal Assistants	232011	$50,330	5,930	Insulation Workers, Floor, Ceiling, and Wall	472131	$31,810	300	4
Paralegals and Legal Assistants	232011	$50,330	5,930	Telemarketers	419041	$28,180	3,900	5
Mathematical Science Teachers, Postsecondary	251022	$75,260	910	Educational, Vocational, and School Counselors	211012	$63,560	5,350	1
Mathematical Science Teachers, Postsecondary	251022	$75,260	910	Industrial Engineering Technicians	173026	$52,980	820	2
Mathematical Science Teachers, Postsecondary	251022	$75,260	910	Substance Abuse and Behavioral Disorder Counselors	211011	$40,840	1,960	3
Mathematical Science Teachers, Postsecondary	251022	$75,260	910	Animal Trainers	392011	$28,070	120	4
Mathematical Science Teachers, Postsecondary	251022	$75,260	910	Chemical Plant and System Operators	518091	$49,220	320	5
Vocational Education Teachers, Postsecondary	251194	$55,290	480	Electronic Equipment Installers and Repairers, Motor Vehicles	492096	$29,150	120	1
Librarians	254021	$63,000	4,170	Anthropologists and Archeologists	193091	$45,940	120	1
Librarians	254021	$63,000	4,170	Computer, Automated Teller, and Office Machine Repairers	492011	$47,200	1,960	2
Librarians	254021	$63,000	4,170	Drywall and Ceiling Tile Installers	472081	$42,980	2,380	3

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Librarians	254021	$63,000	4,170	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$48,360	210	4
Librarians	254021	$63,000	4,170	Stationary Engineers and Boiler Operators	518021	$54,610	1,370	5
Teacher Assistants	259041	$27,140	22,730	Helpers--Carpenters	473012	$26,330	1,870	1
Teacher Assistants	259041	$27,140	22,730	Pharmacy Aides	319095	$22,450	580	2
Art Directors	271011	$68,170	340	Security and Fire Alarm Systems Installers	492098	$44,500	1,900	1
Art Directors	271011	$68,170	340	Chemical Technicians	194031	$48,710	660	2
Art Directors	271011	$68,170	340	Museum Technicians and Conservators	254013	$51,190	610	3
Art Directors	271011	$68,170	340	Electric Motor, Power Tool, and Related Repairers	492092	$40,820	200	4
Art Directors	271011	$68,170	340	Epidemiologists	191041	$63,510	180	5
Floral Designers	271023	$29,600	1,140	Preschool Teachers, Except Special Education	252011	$29,000	7,260	1
Floral Designers	271023	$29,600	1,140	Bus Drivers, School	533022	$28,420	4,440	2
Floral Designers	271023	$29,600	1,140	Child Care Workers	399011	$21,940	6,830	3
Interior Designers	271025	$57,230	1,210	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	514035	$38,080	180	1
Interior Designers	271025	$57,230	1,210	Farm Equipment Mechanics	493041	$37,540	260	2
Interior Designers	271025	$57,230	1,210	Statistical Assistants	439111	$43,680	230	3
Interior Designers	271025	$57,230	1,210	Chemical Technicians	194031	$48,710	660	4
Interior Designers	271025	$57,230	1,210	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$28,620	2,600	5
Merchandise Displayers and Window Trimmers	271026	$31,000	750	Helpers--Roofers	473016	$25,830	740	1
Merchandise Displayers and Window Trimmers	271026	$31,000	750	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	516063	$25,720	90	2
Merchandise Displayers and Window Trimmers	271026	$31,000	750	Library Assistants, Clerical	434121	$23,940	2,340	3
Merchandise Displayers and Window Trimmers	271026	$31,000	750	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	473011	$30,210	1,240	4
Merchandise Displayers and Window Trimmers	271026	$31,000	750	Tour Guides and Escorts	396021	$23,290	470	5
Producers and Directors	272012	$67,760	1,560	Special Education Teachers, Preschool, Kindergarten, and Elementary School	252041	$61,120	4,780	1
Producers and Directors	272012	$67,760	1,560	First-Line Supervisors/Managers of Correctional Officers	331011	$67,550	470	2
Producers and Directors	272012	$67,760	1,560	Social Science Research Assistants	194061	$49,410	480	3

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Producers and Directors	272012	$67,760	1,560	Aircraft Cargo Handling Supervisors	531011	$51,270	70	4
Producers and Directors	272012	$67,760	1,560	Automotive Service Technicians and Mechanics	493023	$42,680	12,870	5
Athletes and Sports Competitors	272021	$51,140	610	Hairdressers, Hairstylists, and Cosmetologists	395012	$30,000	9,080	1
Athletes and Sports Competitors	272021	$51,140	610	Parking Enforcement Workers	333041	$34,140	180	2
Athletes and Sports Competitors	272021	$51,140	610	Licensed Practical and Licensed Vocational Nurses	292061	$49,310	10,960	3
Athletes and Sports Competitors	272021	$51,140	610	Police, Fire, and Ambulance Dispatchers	435031	$41,910	1,580	4
Athletes and Sports Competitors	272021	$51,140	610	Tool and Die Makers	514111	$48,910	340	5
Public Relations Specialists	273031	$62,810	3,350	Foreign Language and Literature Teachers, Postsecondary	251124	$61,880	830	1
Public Relations Specialists	273031	$62,810	3,350	Cutting and Slicing Machine Setters, Operators, and Tenders	519032	$33,850	530	2
Public Relations Specialists	273031	$62,810	3,350	Statistical Assistants	439111	$43,680	230	3
Public Relations Specialists	273031	$62,810	3,350	Camera and Photographic Equipment Repairers	499061	$29,890	60	4
Public Relations Specialists	273031	$62,810	3,350	Rail Car Repairers	493043	$35,410	360	5
Interpreters and Translators	273091	$46,170	900	Court, Municipal, and License Clerks	434031	$41,550	470	1
Interpreters and Translators	273091	$46,170	900	Sailors and Marine Oilers	535011	$32,630	440	2
Interpreters and Translators	273091	$46,170	900	Credit Authorizers, Checkers, and Clerks	434041	$36,840	420	3
Interpreters and Translators	273091	$46,170	900	Demonstrators and Product Promoters	419011	$32,860	1,690	4
Interpreters and Translators	273091	$46,170	900	Secretaries, Except Legal, Medical, and Executive	436014	$36,600	34,500	5
Sound Engineering Technicians	274014	$43,540	310	Electronic Equipment Installers and Repairers, Motor Vehicles	492096	$29,150	120	1
Sound Engineering Technicians	274014	$43,540	310	Choreographers	272032	$41,080	190	2
Sound Engineering Technicians	274014	$43,540	310	Recreation Workers	399032	$26,050	5,400	3
Pharmacists	291051	$103,440	5,150	Tax Examiners, Collectors, and Revenue Agents	132081	$61,090	660	1
Pharmacists	291051	$103,440	5,150	Paper Goods Machine Setters, Operators, and Tenders	519196	$33,060	890	2
Pharmacists	291051	$103,440	5,150	Environmental Engineers	172081	$88,110	1,370	3
Pharmacists	291051	$103,440	5,150	Customer Service Representatives	434051	$34,790	35,920	4
Pharmacists	291051	$103,440	5,150	Tree Trimmers and Pruners	373013	$38,700	470	5
Registered Nurses	291111	$76,330	51,620	Accountants and Auditors	132011	$76,220	22,700	1

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Registered Nurses	291111	$76,330	51,620	Library Technicians	254031	$36,430	2,900	2
Registered Nurses	291111	$76,330	51,620	Grinding and Polishing Workers, Hand	519022	$28,700	330	3
Registered Nurses	291111	$76,330	51,620	Painters, Construction and Maintenance	472141	$34,720	4,640	4
Registered Nurses	291111	$76,330	51,620	Credit Authorizers, Checkers, and Clerks	434041	$36,840	420	5
Occupational Health and Safety Specialists	299011	$73,570	940	Vocational Education Teachers, Postsecondary	251194	$55,290	480	1
Occupational Health and Safety Specialists	299011	$73,570	940	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	331021	$67,090	1,450	2
Occupational Health and Safety Specialists	299011	$73,570	940	Electronic Equipment Installers and Repairers, Motor Vehicles	492096	$29,150	120	3
Occupational Health and Safety Specialists	299011	$73,570	940	Sound Engineering Technicians	274014	$43,540	310	4
Occupational Health and Safety Specialists	299011	$73,570	940	Occupational Health and Safety Technicians	299012	$55,530	280	5
First-Line Supervisors/Managers of Correctional Officers	331011	$67,550	470	Telecommunications Equipment Installers and Repairers, Except Line Installers	492022	$50,550	2,400	1
First-Line Supervisors/Managers of Correctional Officers	331011	$67,550	470	Plumbers, Pipefitters, and Steamfitters	472152	$51,250	10,720	2
First-Line Supervisors/Managers of Correctional Officers	331011	$67,550	470	Mental Health Counselors	211014	$40,840	1,530	3
First-Line Supervisors/Managers of Correctional Officers	331011	$67,550	470	Elementary School Teachers, Except Special Education	252021	$61,000	30,530	4
First-Line Supervisors/Managers of Correctional Officers	331011	$67,550	470	Choreographers	272032	$41,080	190	5
Correctional Officers and Jailers	333012	$45,650	10,490	Medical Assistants	319092	$31,570	7,940	1
Correctional Officers and Jailers	333012	$45,650	10,490	Billing and Posting Clerks and Machine Operators	433021	$35,470	8,240	2
Correctional Officers and Jailers	333012	$45,650	10,490	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	419091	$26,620	120	3
Correctional Officers and Jailers	333012	$45,650	10,490	Bailiffs	333011	$33,280	360	4
Correctional Officers and Jailers	333012	$45,650	10,490	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$24,040	45,620	5
Bartenders	353011	$20,400	9,880	Parking Lot Attendants	536021	$20,090	2,260	1
Bartenders	353011	$20,400	9,880	Gaming and Sports Book Writers and Runners	393012	$17,720	100	2
Bartenders	353011	$20,400	9,880	Locker Room, Coatroom, and Dressing Room Attendants	393093	$20,170	480	3
Bartenders	353011	$20,400	9,880	Dishwashers	359021	$18,280	9,130	4
Bartenders	353011	$20,400	9,880	Waiters and Waitresses	353031	$19,340	43,700	5

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Waiters and Waitresses	353031	$19,340	43,700	Gaming and Sports Book Writers and Runners	393012	$17,720	100	1
Waiters and Waitresses	353031	$19,340	43,700	Dishwashers	359021	$18,280	9,130	2
Waiters and Waitresses	353031	$19,340	43,700	Amusement and Recreation Attendants	393091	$19,280	5,650	3
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,840	4,570	Rehabilitation Counselors	211015	$28,720	3,060	1
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,840	4,570	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	519021	$34,820	210	2
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,840	4,570	Residential Advisors	399041	$28,420	2,800	3
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	371012	$43,860	2,780	Manufactured Building and Mobile Home Installers	499095	$33,350	40	1
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	371012	$43,860	2,780	Carpenters	472031	$43,290	14,890	2
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	371012	$43,860	2,780	Sound Engineering Technicians	274014	$43,540	310	3
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$24,040	45,620	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,770	1,190	1
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$24,040	45,620	Shampooers	395093	$17,270	1,340	2
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$24,040	45,620	Cashiers	412011	$19,980	72,520	3
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$24,040	45,620	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$18,610	6,470	4
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$24,040	45,620	Food Preparation Workers	352021	$20,890	14,790	5
Maids and Housekeeping Cleaners	372012	$21,240	14,050	Pressers, Textile, Garment, and Related Materials	516021	$19,610	1,020	1
Maids and Housekeeping Cleaners	372012	$21,240	14,050	Dining Room and Cafeteria Attendants and Bartender Helpers	359011	$18,150	9,700	2
Maids and Housekeeping Cleaners	372012	$21,240	14,050	Ushers, Lobby Attendants, and Ticket Takers	393031	$18,310	2,630	3
Maids and Housekeeping Cleaners	372012	$21,240	14,050	Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,370	44,540	4
Maids and Housekeeping Cleaners	372012	$21,240	14,050	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,800	15,120	5
Landscaping and Groundskeeping Workers	373011	$26,570	16,680	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,770	1,190	1
Landscaping and Groundskeeping Workers	373011	$26,570	16,680	Physical Therapist Aides	312022	$25,790	1,010	2
Landscaping and Groundskeeping Workers	373011	$26,570	16,680	Cashiers	412011	$19,980	72,520	3

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Landscaping and Groundskeeping Workers	373011	$26,570	16,680	Helpers--Production Workers	519198	$25,360	5,660	4
Landscaping and Groundskeeping Workers	373011	$26,570	16,680	Food Preparation Workers	352021	$20,890	14,790	5
Ushers, Lobby Attendants, and Ticket Takers	393031	$18,310	2,630	Dining Room and Cafeteria Attendants and Bartender Helpers	359011	$18,150	9,700	1
Amusement and Recreation Attendants	393091	$19,280	5,650	Dishwashers	359021	$18,280	9,130	1
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,940	23,810	Medical Equipment Preparers	319093	$29,690	470	1
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,940	23,810	Ophthalmic Laboratory Technicians	519083	$31,100	400	2
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,940	23,810	Maintenance and Repair Workers, General	499042	$39,070	22,590	3
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,940	23,810	Dental Laboratory Technicians	519081	$38,950	540	4
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,940	23,810	Helpers--Electricians	473013	$31,060	2,370	5
Cashiers	412011	$19,980	72,520	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,800	15,120	1
Cashiers	412011	$19,980	72,520	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$18,610	6,470	2
Cashiers	412011	$19,980	72,520	Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,370	44,540	3
Cashiers	412011	$19,980	72,520	Ushers, Lobby Attendants, and Ticket Takers	393031	$18,310	2,630	4
Cashiers	412011	$19,980	72,520	Gaming and Sports Book Writers and Runners	393012	$17,720	100	5
Counter and Rental Clerks	412021	$26,160	7,670	Graders and Sorters, Agricultural Products	452041	$26,150	120	1
Counter and Rental Clerks	412021	$26,160	7,670	Maids and Housekeeping Cleaners	372012	$21,240	14,050	2
Counter and Rental Clerks	412021	$26,160	7,670	Sewing Machine Operators	516031	$24,080	1,400	3
Counter and Rental Clerks	412021	$26,160	7,670	Dining Room and Cafeteria Attendants and Bartender Helpers	359011	$18,150	9,700	4
Counter and Rental Clerks	412021	$26,160	7,670	Pressers, Textile, Garment, and Related Materials	516021	$19,610	1,020	5
Parts Salespersons	412022	$31,870	3,590	Bakers	513011	$28,720	2,670	1
Parts Salespersons	412022	$31,870	3,590	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	513091	$28,600	290	2
Parts Salespersons	412022	$31,870	3,590	Textile Bleaching and Dyeing Machine Operators and Tenders	516061	$31,310	120	3
Retail Salespersons	412031	$24,450	75,610	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,800	15,120	1

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Retail Salespersons	412031	$24,450	75,610	Cashiers	412011	$19,980	72,520	2
Retail Salespersons	412031	$24,450	75,610	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$18,610	6,470	3
Retail Salespersons	412031	$24,450	75,610	Stock Clerks and Order Fillers	435081	$24,050	33,380	4
Retail Salespersons	412031	$24,450	75,610	Parking Lot Attendants	536021	$20,090	2,260	5
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$65,890	21,510	Production, Planning, and Expediting Clerks	435061	$48,340	3,530	1
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$65,890	21,510	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514081	$36,940	490	2
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$65,890	21,510	Lay-Out Workers, Metal and Plastic	514192	$50,240	30	3
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$65,890	21,510	Helpers--Electricians	473013	$31,060	2,370	4
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$65,890	21,510	Pest Control Workers	372021	$35,180	1,080	5
Real Estate Brokers	419021	$72,130	1,310	Residential Advisors	399041	$28,420	2,800	1
Real Estate Brokers	419021	$72,130	1,310	Stonemasons	472022	$35,650	880	2
Real Estate Brokers	419021	$72,130	1,310	Musical Instrument Repairers and Tuners	499063	$40,670	220	3
Real Estate Brokers	419021	$72,130	1,310	Telecommunications Line Installers and Repairers	499052	$52,610	4,380	4
Real Estate Brokers	419021	$72,130	1,310	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514034	$36,810	160	5
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$52,230	25,790	Mechanical Drafters	173013	$51,540	1,430	1
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$52,230	25,790	Industrial Machinery Mechanics	499041	$47,970	3,180	2
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$52,230	25,790	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$28,620	2,600	3
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$52,230	25,790	Chemical Plant and System Operators	518091	$49,220	320	4
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$52,230	25,790	Fire Fighters	332011	$51,490	4,750	5
Billing and Posting Clerks and Machine Operators	433021	$35,470	8,240	Jewelers and Precious Stone and Metal Workers	519071	$26,160	150	1

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Billing and Posting Clerks and Machine Operators	433021	$35,470	8,240	Automotive Glass Installers and Repairers	493022	$35,330	390	2
Billing and Posting Clerks and Machine Operators	433021	$35,470	8,240	Tire Repairers and Changers	493093	$24,610	1,390	3
Billing and Posting Clerks and Machine Operators	433021	$35,470	8,240	Veterinary Assistants and Laboratory Animal Caretakers	319096	$27,120	2,260	4
Billing and Posting Clerks and Machine Operators	433021	$35,470	8,240	Teacher Assistants	259041	$27,140	22,730	5
Bookkeeping, Accounting, and Auditing Clerks	433031	$39,140	27,260	Cutters and Trimmers, Hand	519031	$28,810	310	1
Bookkeeping, Accounting, and Auditing Clerks	433031	$39,140	27,260	Library Technicians	254031	$36,430	2,900	2
Bookkeeping, Accounting, and Auditing Clerks	433031	$39,140	27,260	Bus Drivers, School	533022	$28,420	4,440	3
Bookkeeping, Accounting, and Auditing Clerks	433031	$39,140	27,260	Tool Grinders, Filers, and Sharpeners	514194	$38,200	40	4
Bookkeeping, Accounting, and Auditing Clerks	433031	$39,140	27,260	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$29,260	280	5
Procurement Clerks	433061	$42,090	2,050	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,840	4,570	1
Procurement Clerks	433061	$42,090	2,050	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	519021	$34,820	210	2
Procurement Clerks	433061	$42,090	2,050	Food Cooking Machine Operators and Tenders	513093	$24,740	220	3
Procurement Clerks	433061	$42,090	2,050	Fitness Trainers and Aerobics Instructors	399031	$36,510	7,130	4
Procurement Clerks	433061	$42,090	2,050	Electronic Home Entertainment Equipment Installers and Repairers	492097	$38,590	430	5
Customer Service Representatives	434051	$34,790	35,920	Teacher Assistants	259041	$27,140	22,730	1
Customer Service Representatives	434051	$34,790	35,920	Skin Care Specialists	395094	$31,600	520	2
Customer Service Representatives	434051	$34,790	35,920	Outdoor Power Equipment and Other Small Engine Mechanics	493053	$33,560	270	3
Customer Service Representatives	434051	$34,790	35,920	Fallers	454021	$28,440	60	4
Customer Service Representatives	434051	$34,790	35,920	Pharmacy Technicians	292052	$30,620	5,850	5
Order Clerks	434151	$33,060	2,790	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$29,260	280	1
Order Clerks	434151	$33,060	2,790	Sailors and Marine Oilers	535011	$32,630	440	2
Order Clerks	434151	$33,060	2,790	Bus Drivers, School	533022	$28,420	4,440	3
Order Clerks	434151	$33,060	2,790	Cutters and Trimmers, Hand	519031	$28,810	310	4
Order Clerks	434151	$33,060	2,790	Food Batchmakers	513092	$27,980	850	5
Couriers and Messengers	435021	$28,020	930	Retail Salespersons	412031	$24,450	75,610	1

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Couriers and Messengers	435021	$28,020	930	Shampooers	395093	$17,270	1,340	2
Couriers and Messengers	435021	$28,020	930	Taxi Drivers and Chauffeurs	533041	$25,620	4,570	3
Couriers and Messengers	435021	$28,020	930	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	473014	$25,590	530	4
Couriers and Messengers	435021	$28,020	930	Cooks, Restaurant	352014	$25,230	11,590	5
Dispatchers, Except Police, Fire, and Ambulance	435032	$40,330	2,800	Bakers	513011	$28,720	2,670	1
Dispatchers, Except Police, Fire, and Ambulance	435032	$40,330	2,800	Pharmacy Technicians	292052	$30,620	5,850	2
Dispatchers, Except Police, Fire, and Ambulance	435032	$40,330	2,800	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	514031	$35,380	1,270	3
Dispatchers, Except Police, Fire, and Ambulance	435032	$40,330	2,800	Floor Layers, Except Carpet, Wood, and Hard Tiles	472042	$34,500	280	4
Dispatchers, Except Police, Fire, and Ambulance	435032	$40,330	2,800	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514034	$36,810	160	5
Postal Service Clerks	435051	$52,300	1,540	Stock Clerks and Order Fillers	435081	$24,050	33,380	1
Postal Service Clerks	435051	$52,300	1,540	Dietetic Technicians	292051	$37,130	1,580	2
Postal Service Clerks	435051	$52,300	1,540	Social Science Research Assistants	194061	$49,410	480	3
Postal Service Clerks	435051	$52,300	1,540	Fabric and Apparel Patternmakers	516092	$28,380	70	4
Postal Service Clerks	435051	$52,300	1,540	Insurance Claims and Policy Processing Clerks	439041	$38,870	3,050	5
Postal Service Mail Sorters, Processors, and Processing Machine Operators	435053	$49,550	3,900	Graders and Sorters, Agricultural Products	452041	$26,150	120	1
Postal Service Mail Sorters, Processors, and Processing Machine Operators	435053	$49,550	3,900	Counter and Rental Clerks	412021	$26,160	7,670	2
Postal Service Mail Sorters, Processors, and Processing Machine Operators	435053	$49,550	3,900	Sewing Machine Operators	516031	$24,080	1,400	3
Postal Service Mail Sorters, Processors, and Processing Machine Operators	435053	$49,550	3,900	Maids and Housekeeping Cleaners	372012	$21,240	14,050	4
Postal Service Mail Sorters, Processors, and Processing Machine Operators	435053	$49,550	3,900	Pressers, Textile, Garment, and Related Materials	516021	$19,610	1,020	5
Production, Planning, and Expediting Clerks	435061	$48,340	3,530	Metal-Refining Furnace Operators and Tenders	514051	$42,320	280	1
Production, Planning, and Expediting Clerks	435061	$48,340	3,530	Ophthalmic Laboratory Technicians	519083	$31,100	400	2
Production, Planning, and Expediting Clerks	435061	$48,340	3,530	Fine Artists, Including Painters, Sculptors, and Illustrators	271013	$40,250	80	3
Production, Planning, and Expediting Clerks	435061	$48,340	3,530	Residential Advisors	399041	$28,420	2,800	4
Production, Planning, and Expediting Clerks	435061	$48,340	3,530	Surveying and Mapping Technicians	173031	$44,390	1,490	5

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Shipping, Receiving, and Traffic Clerks	435071	$31,130	11,020	Conveyor Operators and Tenders	537011	$30,550	260	1
Shipping, Receiving, and Traffic Clerks	435071	$31,130	11,020	Jewelers and Precious Stone and Metal Workers	519071	$26,160	150	2
Shipping, Receiving, and Traffic Clerks	435071	$31,130	11,020	Child Care Workers	399011	$21,940	6,830	3
Shipping, Receiving, and Traffic Clerks	435071	$31,130	11,020	Preschool Teachers, Except Special Education	252011	$29,000	7,260	4
Shipping, Receiving, and Traffic Clerks	435071	$31,130	11,020	Photographic Processing Machine Operators	519132	$21,360	1,190	5
Stock Clerks and Order Fillers	435081	$24,050	33,380	Cleaners of Vehicles and Equipment	537061	$22,070	4,300	1
Stock Clerks and Order Fillers	435081	$24,050	33,380	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,770	1,190	2
Stock Clerks and Order Fillers	435081	$24,050	33,380	Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,370	44,540	3
Stock Clerks and Order Fillers	435081	$24,050	33,380	Food Preparation Workers	352021	$20,890	14,790	4
Stock Clerks and Order Fillers	435081	$24,050	33,380	Ushers, Lobby Attendants, and Ticket Takers	393031	$18,310	2,630	5
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$34,220	600	Service Station Attendants	536031	$23,660	810	1
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$34,220	600	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514033	$31,390	330	2
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$34,220	600	Preschool Teachers, Except Special Education	252011	$29,000	7,260	3
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$34,220	600	Photographic Processing Machine Operators	519132	$21,360	1,190	4
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$34,220	600	Packaging and Filling Machine Operators and Tenders	519111	$32,640	4,270	5
Executive Secretaries and Administrative Assistants	436011	$50,330	24,110	Court, Municipal, and License Clerks	434031	$41,550	470	1
Executive Secretaries and Administrative Assistants	436011	$50,330	24,110	Cooks, Institution and Cafeteria	352012	$28,350	4,560	2
Executive Secretaries and Administrative Assistants	436011	$50,330	24,110	Photographic Process Workers	519131	$25,530	310	3
Executive Secretaries and Administrative Assistants	436011	$50,330	24,110	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	339092	$20,310	1,790	4
Executive Secretaries and Administrative Assistants	436011	$50,330	24,110	Secretaries, Except Legal, Medical, and Executive	436014	$36,600	34,500	5
Secretaries, Except Legal, Medical, and Executive	436014	$36,600	34,500	Bus Drivers, Transit and Intercity	533021	$35,320	4,280	1
Secretaries, Except Legal, Medical, and Executive	436014	$36,600	34,500	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	339092	$20,310	1,790	2

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Secretaries, Except Legal, Medical, and Executive	436014	$36,600	34,500	Cooks, Institution and Cafeteria	352012	$28,350	4,560	3
Secretaries, Except Legal, Medical, and Executive	436014	$36,600	34,500	Child Care Workers	399011	$21,940	6,830	4
Secretaries, Except Legal, Medical, and Executive	436014	$36,600	34,500	Telemarketers	419041	$28,180	3,900	5
Data Entry Keyers	439021	$29,290	3,970	Tellers	433071	$27,240	9,780	1
Data Entry Keyers	439021	$29,290	3,970	Stock Clerks and Order Fillers	435081	$24,050	33,380	2
Data Entry Keyers	439021	$29,290	3,970	Molders, Shapers, and Casters, Except Metal and Plastic	519195	$28,320	320	3
Data Entry Keyers	439021	$29,290	3,970	Library Assistants, Clerical	434121	$23,940	2,340	4
Data Entry Keyers	439021	$29,290	3,970	Nonfarm Animal Caretakers	392021	$24,150	3,510	5
Office Clerks, General	439061	$29,680	67,020	Physical Therapist Aides	312022	$25,790	1,010	1
Office Clerks, General	439061	$29,680	67,020	Switchboard Operators, Including Answering Service	432011	$26,650	3,550	2
Office Clerks, General	439061	$29,680	67,020	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,800	15,120	3
Office Clerks, General	439061	$29,680	67,020	Retail Salespersons	412031	$24,450	75,610	4
Office Clerks, General	439061	$29,680	67,020	Shampooers	395093	$17,270	1,340	5
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,770	1,190	Photographic Processing Machine Operators	519132	$21,360	1,190	1
Farmworkers, Farm and Ranch Animals	452093	$25,670	380	Dishwashers	359021	$18,280	9,130	1
Farmworkers, Farm and Ranch Animals	452093	$25,670	380	Packers and Packagers, Hand	537064	$25,360	6,850	2
Farmworkers, Farm and Ranch Animals	452093	$25,670	380	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,800	15,120	3
Farmworkers, Farm and Ranch Animals	452093	$25,670	380	Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	473014	$25,590	530	4
Farmworkers, Farm and Ranch Animals	452093	$25,670	380	Textile Cutting Machine Setters, Operators, and Tenders	516062	$21,730	140	5
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$63,640	13,450	Radio and Television Announcers	273011	$42,590	390	1
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$63,640	13,450	Proofreaders and Copy Markers	439081	$36,060	540	2
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$63,640	13,450	Medical and Public Health Social Workers	211022	$58,590	2,750	3
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$63,640	13,450	Rehabilitation Counselors	211015	$28,720	3,060	4

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$63,640	13,450	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$61,700	5,890	5
Carpenters	472031	$43,290	14,890	Mental Health Counselors	211014	$40,840	1,530	1
Carpenters	472031	$43,290	14,890	Manufactured Building and Mobile Home Installers	499095	$33,350	40	2
Floor Layers, Except Carpet, Wood, and Hard Tiles	472042	$34,500	280	Teacher Assistants	259041	$27,140	22,730	1
Floor Layers, Except Carpet, Wood, and Hard Tiles	472042	$34,500	280	Reservation and Transportation Ticket Agents and Travel Clerks	434181	$31,810	1,370	2
Floor Layers, Except Carpet, Wood, and Hard Tiles	472042	$34,500	280	Parts Salespersons	412022	$31,870	3,590	3
Floor Layers, Except Carpet, Wood, and Hard Tiles	472042	$34,500	280	Paper Goods Machine Setters, Operators, and Tenders	519196	$33,060	890	4
Floor Layers, Except Carpet, Wood, and Hard Tiles	472042	$34,500	280	Bakers	513011	$28,720	2,670	5
Construction Laborers	472061	$30,300	19,880	Landscaping and Groundskeeping Workers	373011	$26,570	16,680	1
Construction Laborers	472061	$30,300	19,880	Couriers and Messengers	435021	$28,020	930	2
Construction Laborers	472061	$30,300	19,880	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$18,610	6,470	3
Construction Laborers	472061	$30,300	19,880	Office Clerks, General	439061	$29,680	67,020	4
Construction Laborers	472061	$30,300	19,880	Shampooers	395093	$17,270	1,340	5
Electricians	472111	$50,840	15,510	Dietetic Technicians	292051	$37,130	1,580	1
Electricians	472111	$50,840	15,510	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	514122	$37,750	260	2
Electricians	472111	$50,840	15,510	Insulation Workers, Floor, Ceiling, and Wall	472131	$31,810	300	3
Electricians	472111	$50,840	15,510	Driver/Sales Workers	533031	$27,100	7,060	4
Electricians	472111	$50,840	15,510	Amusement and Recreation Attendants	393091	$19,280	5,650	5
Insulation Workers, Floor, Ceiling, and Wall	472131	$31,810	300	File Clerks	434071	$28,960	2,520	1
Insulation Workers, Floor, Ceiling, and Wall	472131	$31,810	300	Photographic Process Workers	519131	$25,530	310	2
Insulation Workers, Floor, Ceiling, and Wall	472131	$31,810	300	Stock Clerks and Order Fillers	435081	$24,050	33,380	3
Insulation Workers, Floor, Ceiling, and Wall	472131	$31,810	300	Manicurists and Pedicurists	395092	$26,110	1,990	4
Insulation Workers, Floor, Ceiling, and Wall	472131	$31,810	300	Nursing Aides, Orderlies, and Attendants	311012	$28,610	30,360	5
Painters, Construction and Maintenance	472141	$34,720	4,640	Hotel, Motel, and Resort Desk Clerks	434081	$22,340	3,040	1

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Painters, Construction and Maintenance	472141	$34,720	4,640	Packaging and Filling Machine Operators and Tenders	519111	$32,640	4,270	2
Painters, Construction and Maintenance	472141	$34,720	4,640	Child Care Workers	399011	$21,940	6,830	3
Painters, Construction and Maintenance	472141	$34,720	4,640	Social and Human Service Assistants	211093	$33,520	6,970	4
Painters, Construction and Maintenance	472141	$34,720	4,640	Grinding and Polishing Workers, Hand	519022	$28,700	330	5
Plumbers, Pipefitters, and Steamfitters	472152	$51,250	10,720	Upholsterers	516093	$38,400	220	1
Plumbers, Pipefitters, and Steamfitters	472152	$51,250	10,720	Telecommunications Equipment Installers and Repairers, Except Line Installers	492022	$50,550	2,400	2
Plumbers, Pipefitters, and Steamfitters	472152	$51,250	10,720	Shampooers	395093	$17,270	1,340	3
Plumbers, Pipefitters, and Steamfitters	472152	$51,250	10,720	Machinists	514041	$46,880	2,890	4
Plumbers, Pipefitters, and Steamfitters	472152	$51,250	10,720	Medical Records and Health Information Technicians	292071	$39,330	2,580	5
Roofers	472181	$39,320	1,810	Proofreaders and Copy Markers	439081	$36,060	540	1
Roofers	472181	$39,320	1,810	Rehabilitation Counselors	211015	$28,720	3,060	2
Roofers	472181	$39,320	1,810	Maintenance Workers, Machinery	499043	$31,190	1,220	3
Sheet Metal Workers	472211	$41,150	3,050	Engine and Other Machine Assemblers	512031	$38,020	110	1
Sheet Metal Workers	472211	$41,150	3,050	Dispatchers, Except Police, Fire, and Ambulance	435032	$40,330	2,800	2
Sheet Metal Workers	472211	$41,150	3,050	Occupational Therapist Aides	312012	$30,620	150	3
Sheet Metal Workers	472211	$41,150	3,050	Loan Interviewers and Clerks	434131	$36,970	3,320	4
Sheet Metal Workers	472211	$41,150	3,050	Teacher Assistants	259041	$27,140	22,730	5
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	473011	$30,210	1,240	Molders, Shapers, and Casters, Except Metal and Plastic	519195	$28,320	320	1
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	473011	$30,210	1,240	Shampooers	395093	$17,270	1,340	2
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	473011	$30,210	1,240	Parking Lot Attendants	536021	$20,090	2,260	3
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	473011	$30,210	1,240	Helpers--Roofers	473016	$25,830	740	4
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	473011	$30,210	1,240	Retail Salespersons	412031	$24,450	75,610	5
Helpers--Electricians	473013	$31,060	2,370	Medical Equipment Preparers	319093	$29,690	470	1
Construction and Building Inspectors	474011	$49,030	2,770	Hotel, Motel, and Resort Desk Clerks	434081	$22,340	3,040	1
Construction and Building Inspectors	474011	$49,030	2,770	Team Assemblers	512092	$30,060	7,980	2

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Construction and Building Inspectors	474011	$49,030	2,770	Medical Transcriptionists	319094	$37,370	1,090	3
Construction and Building Inspectors	474011	$49,030	2,770	Nonfarm Animal Caretakers	392021	$24,150	3,510	4
Construction and Building Inspectors	474011	$49,030	2,770	Massage Therapists	319011	$39,910	1,260	5
Elevator Installers and Repairers	474021	$64,810	1,020	Urban and Regional Planners	193051	$64,690	920	1
Elevator Installers and Repairers	474021	$64,810	1,020	Computer, Automated Teller, and Office Machine Repairers	492011	$47,200	1,960	2
Elevator Installers and Repairers	474021	$64,810	1,020	First-Line Supervisors/Managers of Personal Service Workers	391021	$40,400	2,840	3
Elevator Installers and Repairers	474021	$64,810	1,020	Procurement Clerks	433061	$42,090	2,050	4
Elevator Installers and Repairers	474021	$64,810	1,020	Drywall and Ceiling Tile Installers	472081	$42,980	2,380	5
Hazardous Materials Removal Workers	474041	$33,790	990	Skin Care Specialists	395094	$31,600	520	1
Hazardous Materials Removal Workers	474041	$33,790	990	Child Care Workers	399011	$21,940	6,830	2
Hazardous Materials Removal Workers	474041	$33,790	990	Molders, Shapers, and Casters, Except Metal and Plastic	519195	$28,320	320	3
Hazardous Materials Removal Workers	474041	$33,790	990	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	419091	$26,620	120	4
Hazardous Materials Removal Workers	474041	$33,790	990	Telemarketers	419041	$28,180	3,900	5
Highway Maintenance Workers	474051	$34,700	1,850	Computer-Controlled Machine Tool Operators, Metal and Plastic	514011	$34,170	490	1
Highway Maintenance Workers	474051	$34,700	1,850	Textile Bleaching and Dyeing Machine Operators and Tenders	516061	$31,310	120	2
Highway Maintenance Workers	474051	$34,700	1,850	Parking Enforcement Workers	333041	$34,140	180	3
Highway Maintenance Workers	474051	$34,700	1,850	Hairdressers, Hairstylists, and Cosmetologists	395012	$30,000	9,080	4
Highway Maintenance Workers	474051	$34,700	1,850	Parts Salespersons	412022	$31,870	3,590	5
Septic Tank Servicers and Sewer Pipe Cleaners	474071	$37,770	440	Occupational Therapist Aides	312012	$30,620	150	1
Septic Tank Servicers and Sewer Pipe Cleaners	474071	$37,770	440	Opticians, Dispensing	292081	$35,340	1,140	2
Septic Tank Servicers and Sewer Pipe Cleaners	474071	$37,770	440	Highway Maintenance Workers	474051	$34,700	1,850	3
Septic Tank Servicers and Sewer Pipe Cleaners	474071	$37,770	440	Parts Salespersons	412022	$31,870	3,590	4
Septic Tank Servicers and Sewer Pipe Cleaners	474071	$37,770	440	Textile Bleaching and Dyeing Machine Operators and Tenders	516061	$31,310	120	5
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,960	9,310	Eligibility Interviewers, Government Programs	434061	$46,510	1,390	1

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,960	9,310	Molders, Shapers, and Casters, Except Metal and Plastic	519195	$28,320	320	2
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,960	9,310	Pipelayers	472151	$38,060	1,020	3
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,960	9,310	Hazardous Materials Removal Workers	474041	$33,790	990	4
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,960	9,310	Mechanical Door Repairers	499011	$38,360	450	5
Radio Mechanics	492021	$54,230	90	Marriage and Family Therapists	211013	$45,870	1,350	1
Radio Mechanics	492021	$54,230	90	Rotary Drill Operators, Oil and Gas	475012	$37,640	50	2
Radio Mechanics	492021	$54,230	90	Fire Fighters	332011	$51,490	4,750	3
Radio Mechanics	492021	$54,230	90	Credit Authorizers, Checkers, and Clerks	434041	$36,840	420	4
Automotive Body and Related Repairers	493021	$47,740	2,800	Cooks, Institution and Cafeteria	352012	$28,350	4,560	1
Automotive Body and Related Repairers	493021	$47,740	2,800	Medical Secretaries	436013	$33,900	10,180	2
Automotive Body and Related Repairers	493021	$47,740	2,800	Grinding and Polishing Workers, Hand	519022	$28,700	330	3
Automotive Body and Related Repairers	493021	$47,740	2,800	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$29,260	280	4
Automotive Body and Related Repairers	493021	$47,740	2,800	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	339092	$20,310	1,790	5
Automotive Service Technicians and Mechanics	493023	$42,680	12,870	Structural Iron and Steel Workers	472221	$42,470	810	1
Automotive Service Technicians and Mechanics	493023	$42,680	12,870	Psychiatric Technicians	292053	$36,140	200	2
Automotive Service Technicians and Mechanics	493023	$42,680	12,870	Electrical and Electronic Equipment Assemblers	512022	$33,630	2,990	3
Automotive Service Technicians and Mechanics	493023	$42,680	12,870	Rehabilitation Counselors	211015	$28,720	3,060	4
Automotive Service Technicians and Mechanics	493023	$42,680	12,870	Graduate Teaching Assistants	251191	$33,150	2,920	5
Farm Equipment Mechanics	493041	$37,540	260	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$28,620	2,600	1
Mechanical Door Repairers	499011	$38,360	450	Tailors, Dressmakers, and Custom Sewers	516052	$27,930	570	1
Mechanical Door Repairers	499011	$38,360	450	Billing and Posting Clerks and Machine Operators	433021	$35,470	8,240	2
Mechanical Door Repairers	499011	$38,360	450	Motion Picture Projectionists	393021	$20,790	70	3
Mechanical Door Repairers	499011	$38,360	450	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	513091	$28,600	290	4
Mechanical Door Repairers	499011	$38,360	450	Medical Assistants	319092	$31,570	7,940	5

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$49,010	5,060	Residential Advisors	399041	$28,420	2,800	1
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$49,010	5,060	Mobile Heavy Equipment Mechanics, Except Engines	493042	$47,840	1,690	2
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$49,010	5,060	Health Technologists and Technicians, All Other	292099	$46,920	1,320	3
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$49,010	5,060	Psychiatric Technicians	292053	$36,140	200	4
Maintenance and Repair Workers, General	499042	$39,070	22,590	Dental Laboratory Technicians	519081	$38,950	540	1
Maintenance and Repair Workers, General	499042	$39,070	22,590	Ophthalmic Laboratory Technicians	519083	$31,100	400	2
Maintenance and Repair Workers, General	499042	$39,070	22,590	Stonemasons	472022	$35,650	880	3
Maintenance and Repair Workers, General	499042	$39,070	22,590	Loan Interviewers and Clerks	434131	$36,970	3,320	4
Maintenance and Repair Workers, General	499042	$39,070	22,590	Pharmacy Technicians	292052	$30,620	5,850	5
Maintenance Workers, Machinery	499043	$31,190	1,220	Teacher Assistants	259041	$27,140	22,730	1
Maintenance Workers, Machinery	499043	$31,190	1,220	Preschool Teachers, Except Special Education	252011	$29,000	7,260	2
Maintenance Workers, Machinery	499043	$31,190	1,220	Helpers--Installation, Maintenance, and Repair Workers	499098	$28,380	4,360	3
Maintenance Workers, Machinery	499043	$31,190	1,220	Photographers	274021	$30,100	1,340	4
Helpers--Installation, Maintenance, and Repair Workers	499098	$28,380	4,360	Teacher Assistants	259041	$27,140	22,730	1
First-Line Supervisors/Managers of Production and Operating Workers	511011	$57,550	7,270	Probation Officers and Correctional Treatment Specialists	211092	$53,550	1,860	1
First-Line Supervisors/Managers of Production and Operating Workers	511011	$57,550	7,270	Employment, Recruitment, and Placement Specialists	131071	$56,470	3,140	2
First-Line Supervisors/Managers of Production and Operating Workers	511011	$57,550	7,270	Police and Sheriff's Patrol Officers	333051	$56,500	15,650	3
First-Line Supervisors/Managers of Production and Operating Workers	511011	$57,550	7,270	Kindergarten Teachers, Except Special Education	252012	$47,190	4,690	4
First-Line Supervisors/Managers of Production and Operating Workers	511011	$57,550	7,270	Chemical Equipment Operators and Tenders	519011	$43,490	500	5
Structural Metal Fabricators and Fitters	512041	$35,660	1,250	Etchers and Engravers	519194	$33,470	120	1
Structural Metal Fabricators and Fitters	512041	$35,660	1,250	Parking Enforcement Workers	333041	$34,140	180	2
Structural Metal Fabricators and Fitters	512041	$35,660	1,250	Teacher Assistants	259041	$27,140	22,730	3
Structural Metal Fabricators and Fitters	512041	$35,660	1,250	Makeup Artists, Theatrical and Performance	395091	$24,010	50	4

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Structural Metal Fabricators and Fitters	512041	$35,660	1,250	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$34,220	600	5
Food Cooking Machine Operators and Tenders	513093	$24,740	220	Makeup Artists, Theatrical and Performance	395091	$24,010	50	1
Machinists	514041	$46,880	2,890	Construction Laborers	472061	$30,300	19,880	1
Machinists	514041	$46,880	2,890	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	519051	$33,980	120	2
Machinists	514041	$46,880	2,890	Billing and Posting Clerks and Machine Operators	433021	$35,470	8,240	3
Machinists	514041	$46,880	2,890	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$18,610	6,470	4
Machinists	514041	$46,880	2,890	Nursing Aides, Orderlies, and Attendants	311012	$28,610	30,360	5
Tool Grinders, Filers, and Sharpeners	514194	$38,200	40	Parking Lot Attendants	536021	$20,090	2,260	1
Tool Grinders, Filers, and Sharpeners	514194	$38,200	40	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	339092	$20,310	1,790	2
Tool Grinders, Filers, and Sharpeners	514194	$38,200	40	Cooks, Institution and Cafeteria	352012	$28,350	4,560	3
Tool Grinders, Filers, and Sharpeners	514194	$38,200	40	Nursing Aides, Orderlies, and Attendants	311012	$28,610	30,360	4
Tool Grinders, Filers, and Sharpeners	514194	$38,200	40	Truck Drivers, Light or Delivery Services	533033	$35,810	18,050	5
Bookbinders	515012	$38,230	370	Engine and Other Machine Assemblers	512031	$38,020	110	1
Bookbinders	515012	$38,230	370	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	514031	$35,380	1,270	2
Bookbinders	515012	$38,230	370	Textile Bleaching and Dyeing Machine Operators and Tenders	516061	$31,310	120	3
Bookbinders	515012	$38,230	370	Occupational Therapist Aides	312012	$30,620	150	4
Bookbinders	515012	$38,230	370	Bakers	513011	$28,720	2,670	5
Job Printers	515021	$42,230	600	Musical Instrument Repairers and Tuners	499063	$40,670	220	1
Job Printers	515021	$42,230	600	Insurance Claims and Policy Processing Clerks	439041	$38,870	3,050	2
Job Printers	515021	$42,230	600	Stonemasons	472022	$35,650	880	3
Job Printers	515021	$42,230	600	Receptionists and Information Clerks	434171	$27,870	24,160	4
Job Printers	515021	$42,230	600	Loan Interviewers and Clerks	434131	$36,970	3,320	5
Prepress Technicians and Workers	515022	$38,180	1,230	Bill and Account Collectors	433011	$35,300	8,650	1
Prepress Technicians and Workers	515022	$38,180	1,230	Food Cooking Machine Operators and Tenders	513093	$24,740	220	2
Printing Machine Operators	515023	$40,420	2,760	Bailiffs	333011	$33,280	360	1
Printing Machine Operators	515023	$40,420	2,760	Medical Assistants	319092	$31,570	7,940	2

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Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Printing Machine Operators	515023	$40,420	2,760	Bartenders	353011	$20,400	9,880	3
Printing Machine Operators	515023	$40,420	2,760	Hazardous Materials Removal Workers	474041	$33,790	990	4
Printing Machine Operators	515023	$40,420	2,760	Floral Designers	271023	$29,600	1,140	5
Laundry and Dry-Cleaning Workers	516011	$21,370	3,820	Cashiers	412011	$19,980	72,520	1
Laundry and Dry-Cleaning Workers	516011	$21,370	3,820	Dishwashers	359021	$18,280	9,130	2
Laundry and Dry-Cleaning Workers	516011	$21,370	3,820	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,800	15,120	3
Laundry and Dry-Cleaning Workers	516011	$21,370	3,820	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$18,610	6,470	4
Laundry and Dry-Cleaning Workers	516011	$21,370	3,820	Ushers, Lobby Attendants, and Ticket Takers	393031	$18,310	2,630	5
Cabinetmakers and Bench Carpenters	517011	$39,100	980	Cutters and Trimmers, Hand	519031	$28,810	310	1
Cabinetmakers and Bench Carpenters	517011	$39,100	980	Demonstrators and Product Promoters	419011	$32,860	1,690	2
Cabinetmakers and Bench Carpenters	517011	$39,100	980	Floor Sanders and Finishers	472043	$34,860	280	3
Cabinetmakers and Bench Carpenters	517011	$39,100	980	Food Batchmakers	513092	$27,980	850	4
Cabinetmakers and Bench Carpenters	517011	$39,100	980	Food Servers, Nonrestaurant	353041	$21,110	3,230	5
Power Distributors and Dispatchers	518012	$63,160	320	Fire Inspectors and Investigators	332021	$58,170	80	1
Power Distributors and Dispatchers	518012	$63,160	320	Plasterers and Stucco Masons	472161	$32,210	630	2
Power Distributors and Dispatchers	518012	$63,160	320	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$48,360	210	3
Power Distributors and Dispatchers	518012	$63,160	320	Credit Authorizers, Checkers, and Clerks	434041	$36,840	420	4
Power Distributors and Dispatchers	518012	$63,160	320	Choreographers	272032	$41,080	190	5
Power Plant Operators	518013	$64,640	390	Psychiatric Aides	311013	$29,490	1,390	1
Power Plant Operators	518013	$64,640	390	Structural Iron and Steel Workers	472221	$42,470	810	2
Power Plant Operators	518013	$64,640	390	Claims Adjusters, Examiners, and Investigators	131031	$63,170	7,030	3
Power Plant Operators	518013	$64,640	390	Loan Counselors	132071	$48,180	660	4
Power Plant Operators	518013	$64,640	390	Architectural and Civil Drafters	173011	$52,460	1,560	5
Stationary Engineers and Boiler Operators	518021	$54,610	1,370	Directors, Religious Activities and Education	212021	$42,600	430	1
Stationary Engineers and Boiler Operators	518021	$54,610	1,370	Education Administrators, Preschool and Child Care Center/Program	119031	$43,630	1,460	2
Stationary Engineers and Boiler Operators	518021	$54,610	1,370	Paralegals and Legal Assistants	232011	$50,330	5,930	3

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Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Stationary Engineers and Boiler Operators	518021	$54,610	1,370	Computer, Automated Teller, and Office Machine Repairers	492011	$47,200	1,960	4
Stationary Engineers and Boiler Operators	518021	$54,610	1,370	Psychiatric Aides	311013	$29,490	1,390	5
Water and Liquid Waste Treatment Plant and System Operators	518031	$42,430	1,560	Dental Assistants	319091	$35,170	4,890	1
Water and Liquid Waste Treatment Plant and System Operators	518031	$42,430	1,560	Agricultural and Food Science Technicians	194011	$39,610	290	2
Water and Liquid Waste Treatment Plant and System Operators	518031	$42,430	1,560	Cutting and Slicing Machine Setters, Operators, and Tenders	519032	$33,850	530	3
Water and Liquid Waste Treatment Plant and System Operators	518031	$42,430	1,560	Court, Municipal, and License Clerks	434031	$41,550	470	4
Water and Liquid Waste Treatment Plant and System Operators	518031	$42,430	1,560	Cementing and Gluing Machine Operators and Tenders	519191	$29,260	140	5
Chemical Equipment Operators and Tenders	519011	$43,490	500	Directors, Religious Activities and Education	212021	$42,600	430	1
Chemical Equipment Operators and Tenders	519011	$43,490	500	Coaches and Scouts	272022	$39,890	2,100	2
Chemical Equipment Operators and Tenders	519011	$43,490	500	Procurement Clerks	433061	$42,090	2,050	3
Chemical Equipment Operators and Tenders	519011	$43,490	500	Psychiatric Aides	311013	$29,490	1,390	4
Chemical Equipment Operators and Tenders	519011	$43,490	500	Transit and Railroad Police	333052	$41,170	100	5
Helpers--Production Workers	519198	$25,360	5,660	Food Preparation Workers	352021	$20,890	14,790	1
Helpers--Production Workers	519198	$25,360	5,660	Machine Feeders and Offbearers	537063	$24,660	910	2
Helpers--Production Workers	519198	$25,360	5,660	Stock Clerks and Order Fillers	435081	$24,050	33,380	3
Helpers--Production Workers	519198	$25,360	5,660	Cooks, Restaurant	352014	$25,230	11,590	4
Helpers--Production Workers	519198	$25,360	5,660	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,770	1,190	5
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	531021	$48,780	3,000	Proofreaders and Copy Markers	439081	$36,060	540	1
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	531021	$48,780	3,000	Ophthalmic Laboratory Technicians	519083	$31,100	400	2
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	531021	$48,780	3,000	Mixing and Blending Machine Setters, Operators, and Tenders	519023	$38,540	1,050	3
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	531021	$48,780	3,000	Fine Artists, Including Painters, Sculptors, and Illustrators	271013	$40,250	80	4
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	531021	$48,780	3,000	Makeup Artists, Theatrical and Performance	395091	$24,010	50	5

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,080	3,760	Mechanical Engineering Technicians	173027	$52,640	1,090	1
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,080	3,760	Psychiatric Aides	311013	$29,490	1,390	2
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,080	3,760	Roofers	472181	$39,320	1,810	3
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,080	3,760	Transit and Railroad Police	333052	$41,170	100	4
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,080	3,760	Numerical Tool and Process Control Programmers	514012	$44,820	90	5
Bus Drivers, School	533022	$28,420	4,440	Stock Clerks and Order Fillers	435081	$24,050	33,380	1
Bus Drivers, School	533022	$28,420	4,440	Food Servers, Nonrestaurant	353041	$21,110	3,230	2
Bus Drivers, School	533022	$28,420	4,440	Funeral Attendants	394021	$24,450	610	3
Bus Drivers, School	533022	$28,420	4,440	Library Assistants, Clerical	434121	$23,940	2,340	4
Bus Drivers, School	533022	$28,420	4,440	Cooks, Institution and Cafeteria	352012	$28,350	4,560	5
Truck Drivers, Heavy and Tractor-Trailer	533032	$40,030	21,890	Demonstrators and Product Promoters	419011	$32,860	1,690	1
Truck Drivers, Heavy and Tractor-Trailer	533032	$40,030	21,890	Service Station Attendants	536031	$23,660	810	2
Truck Drivers, Heavy and Tractor-Trailer	533032	$40,030	21,890	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,770	1,190	3
Truck Drivers, Heavy and Tractor-Trailer	533032	$40,030	21,890	Photographic Processing Machine Operators	519132	$21,360	1,190	4
Truck Drivers, Heavy and Tractor-Trailer	533032	$40,030	21,890	Secretaries, Except Legal, Medical, and Executive	436014	$36,600	34,500	5
Excavating and Loading Machine and Dragline Operators	537032	$41,280	980	Home Health Aides	311011	$24,180	10,610	1
Excavating and Loading Machine and Dragline Operators	537032	$41,280	980	Jewelers and Precious Stone and Metal Workers	519071	$26,160	150	2
Excavating and Loading Machine and Dragline Operators	537032	$41,280	980	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	519012	$39,890	360	3
Excavating and Loading Machine and Dragline Operators	537032	$41,280	980	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	514072	$35,870	790	4

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Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Excavating and Loading Machine and Dragline Operators	537032	$41,280	980	Gaming and Sports Book Writers and Runners	393012	$17,720	100	5
Laborers and Freight, Stock, and Material Movers, Hand	537062	$27,050	35,080	Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,370	44,540	1
Laborers and Freight, Stock, and Material Movers, Hand	537062	$27,050	35,080	Ushers, Lobby Attendants, and Ticket Takers	393031	$18,310	2,630	2
Laborers and Freight, Stock, and Material Movers, Hand	537062	$27,050	35,080	Stock Clerks and Order Fillers	435081	$24,050	33,380	3
Laborers and Freight, Stock, and Material Movers, Hand	537062	$27,050	35,080	Cleaners of Vehicles and Equipment	537061	$22,070	4,300	4
Laborers and Freight, Stock, and Material Movers, Hand	537062	$27,050	35,080	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,800	15,120	5
Machine Feeders and Offbearers	537063	$24,660	910	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,770	1,190	1
Machine Feeders and Offbearers	537063	$24,660	910	Food Preparation Workers	352021	$20,890	14,790	2
Machine Feeders and Offbearers	537063	$24,660	910	Stock Clerks and Order Fillers	435081	$24,050	33,380	3
Machine Feeders and Offbearers	537063	$24,660	910	Cashiers	412011	$19,980	72,520	4
Machine Feeders and Offbearers	537063	$24,660	910	Retail Salespersons	412031	$24,450	75,610	5
Packers and Packagers, Hand	537064	$25,360	6,850	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$18,610	6,470	1
Packers and Packagers, Hand	537064	$25,360	6,850	Textile Cutting Machine Setters, Operators, and Tenders	516062	$21,730	140	2
Packers and Packagers, Hand	537064	$25,360	6,850	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,800	15,120	3
Packers and Packagers, Hand	537064	$25,360	6,850	Cashiers	412011	$19,980	72,520	4
Packers and Packagers, Hand	537064	$25,360	6,850	Dishwashers	359021	$18,280	9,130	5
Refuse and Recyclable Material Collectors	537081	$36,360	2,830	Retail Salespersons	412031	$24,450	75,610	1
Refuse and Recyclable Material Collectors	537081	$36,360	2,830	Switchboard Operators, Including Answering Service	432011	$26,650	3,550	2
Refuse and Recyclable Material Collectors	537081	$36,360	2,830	Office Clerks, General	439061	$29,680	67,020	3
Refuse and Recyclable Material Collectors	537081	$36,360	2,830	Coil Winders, Tapers, and Finishers	512021	$29,020	130	4
Refuse and Recyclable Material Collectors	537081	$36,360	2,830	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,770	1,190	5
Tank Car, Truck, and Ship Loaders	537121	$42,320	120	Funeral Attendants	394021	$24,450	610	1
Tank Car, Truck, and Ship Loaders	537121	$42,320	120	Fabric and Apparel Patternmakers	516092	$28,380	70	2

Table A12: Maryland Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Tank Car, Truck, and Ship Loaders	537121	$42,320	120	Food Servers, Nonrestaurant	353041	$21,110	3,230	3
Tank Car, Truck, and Ship Loaders	537121	$42,320	120	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$29,260	280	4
Tank Car, Truck, and Ship Loaders	537121	$42,320	120	Floor Sanders and Finishers	472043	$34,860	280	5
Chief Executives	111011	$166,160	4,480	Management Analysts	131111	$87,980	18,530	1
Chief Executives	111011	$166,160	4,480	Aerospace Engineers	172011	$115,310	2,690	2
Chief Executives	111011	$166,160	4,480	Materials Scientists	192032	$92,670	210	3
Chief Executives	111011	$166,160	4,480	Computer and Information Scientists, Research	151011	$108,610	1,730	4

6.5. Gap Analysis Detail – Virginia Statewide

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Accountants and Auditors	13-2011	Bronze	BA degree	40,136	50,154	25.0%
Administrative Services Managers	11-3011	Gold	BA degree or higher, plus exper.	4,134	4,821	16.6%
Advertising and Promotions Managers	11-2011	Gold	BA degree or higher, plus exper.	575	586	1.9%
Agents and Business Managers of Artists, Performers, and Athletes	13-1011		BA degree or higher, plus exper.	645	858	33.0%
Agricultural and Food Science Technicians	19-4011		Assoc. degree	410	413	0.7%
Agricultural Equipment Operators	45-2091	Silver	Moderate OJT	2,525	2,287	-9.4%
Airfield Operations Specialists	53-2022		Long-term OJT	129	152	17.8%
Architects, Except Landscape and Naval	17-1011		BA degree	4,051	4,695	15.9%
Architectural and Civil Drafters	17-3011	Gold	Certificate	2,597	2,844	9.5%
Art Directors	27-1011		BA degree or higher, plus exper.	1,279	1,464	14.5%
Audio and Video Equipment Technicians	27-4011		Long-term OJT	1,020	1,268	24.3%
Automotive Body and Related Repairers	49-3021	Bronze	Long-term OJT	3,758	3,770	0.3%
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	23,089	24,071	4.3%
Bartenders	35-3011	Silver	Short-term OJT	6,332	7,139	12.7%
Bookkeeping, Accounting, and Auditing Clerks	43-3031	Silver	Moderate OJT	51,836	58,393	12.6%
Broadcast Technicians	27-4012		Assoc. degree	895	964	7.7%
Business Operations Specialists, All Other	13-1199		BA degree	36,914	42,441	15.0%
Carpenters	47-2031		Long-term OJT	34,743	39,194	12.8%
Cashiers	41-2011	Silver	Short-term OJT	98,705	104,231	5.6%
Chief Executives	11-1011		BA degree or higher, plus exper.	8,641	9,005	4.2%
Child Care Workers	39-9011		Short-term OJT	21,592	24,906	15.3%
Civil Engineers	17-2051		BA degree	10,466	13,265	26.7%
Claims Adjusters, Examiners, and Investigators	13-1031		Long-term OJT	6,285	6,878	9.4%

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	Bronze	Short-term OJT	93,935	112,281	19.5%
Communications Teachers, Postsecondary	25-1122		N/A	463	567	22.5%
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041		Long-term OJT	7,618	10,443	37.1%
Computer and Information Systems Managers	11-3021	Platinum	BA degree or higher, plus exper.	12,726	16,179	27.1%
Computer Software Engineers, Applications	15-1031		BA degree	32,326	45,905	42.0%
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	29,070	41,351	42.2%
Computer Specialists, All Other	15-1099		Assoc. degree	9,598	10,890	13.5%
Computer Systems Analysts	15-1051		BA degree	36,518	47,978	31.4%
Conservation Scientists	19-1031		BA degree	383	444	15.9%
Construction and Building Inspectors	47-4011	Silver	Work exper.	3,676	4,349	18.3%
Construction and Related Workers, All Other	47-4099		Moderate OJT	2,143	2,259	5.4%
Construction Laborers	47-2061	Silver	Moderate OJT	34,906	41,579	19.1%
Construction Managers	11-9021	Silver	BA degree	17,149	19,932	16.2%
Conveyor Operators and Tenders	53-7011	Bronze	Short-term OJT	793	713	-10.1%
Cost Estimators	13-1051		BA degree	7,547	9,521	26.2%
Crane and Tower Operators	53-7021	Bronze	Long-term OJT	1,733	1,703	-1.7%
Customer Service Representatives	43-4051		Moderate OJT	55,720	68,708	23.3%
Data Entry Keyers	43-9021	Silver	Moderate OJT	6,357	6,144	-3.4%
Dishwashers	35-9021		Short-term OJT	15,022	17,408	15.9%
Earth Drillers, Except Oil and Gas	47-5021		Moderate OJT	1,125	1,215	8.0%
Economists	19-3011		Master's degree	471	545	15.7%
Education Administrators, All Other	11-9039		BA degree or higher, plus exper.	944	1,237	31.0%
Education Administrators, Elementary and Secondary School	11-9032	Gold	BA degree or higher, plus exper.	6,526	7,505	15.0%
Education Administrators, Postsecondary	11-9033	Platinum	BA degree or higher, plus exper.	2,759	2,996	8.6%

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Education Administrators, Preschool and Child Care Center/Program	11-9031		BA degree or higher, plus exper.	1,542	1,902	23.3%
Education, Training, and Library Workers, All Other	25-9099	Silver	BA degree	1,524	1,811	18.8%
Educational, Vocational, and School Counselors	21-1012	Silver	Master's degree	6,418	7,675	19.6%
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Assoc. degree	6,491	6,912	6.5%
Electrical and Electronics Drafters	17-3012		Certificate	764	855	11.9%
Electrical Engineers	17-2071	Gold	BA degree	7,795	8,980	15.2%
Electricians	47-2111	Gold	Long-term OJT	22,038	24,771	12.4%
Electronic Home Entertainment Equipment Installers and Repairers	49-2097		Certificate	1,578	1,785	13.1%
Electronics Engineers, Except Computer	17-2072	Platinum	BA degree	5,296	5,994	13.2%
Elevator Installers and Repairers	47-4021	Gold	Long-term OJT	439	480	9.3%
Emergency Management Specialists	13-1061		Work exper.	547	751	37.3%
Engineering Managers	11-9041	Platinum	BA degree or higher, plus exper.	5,208	6,085	16.8%
Engineers, All Other	17-2199		BA degree	5,453	6,318	15.9%
Environmental Engineering Technicians	17-3025	Silver	Assoc. degree	567	733	29.3%
Environmental Engineers	17-2081		BA degree	2,247	2,781	23.8%
Environmental Science and Protection Technicians, Including Health	19-4091		Assoc. degree	471	623	32.3%
Environmental Science Teachers, Postsecondary	25-1053		N/A	147	180	22.4%
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	3,192	4,296	34.6%
Executive Secretaries and Administrative Assistants	43-6011	Silver	Work exper.	27,569	32,908	19.4%
Fallers	45-4021		Moderate OJT	420	350	-16.7%
Farm, Ranch, and Other Agricultural Managers	11-9011		BA degree or higher, plus exper.	9,056	8,881	-1.9%
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	Bronze	Short-term OJT	25,800	23,398	-9.3%
Fence Erectors	47-4031		Moderate OJT	963	1,105	14.7%

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Financial Managers	11-3031	Gold	BA degree or higher, plus exper.	12,482	13,928	11.6%
Fire Fighters	33-2011		Long-term OJT	8,153	10,312	26.5%
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011		Work exper.	25,031	29,211	16.7%
First-Line Supervisors/Managers of Correctional Officers	33-1011		Work exper.	2,565	2,724	6.2%
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	33-1021		Work exper.	1,692	1,953	15.4%
First-Line Supervisors/Managers of Food Preparation and Serving Workers	35-1012	Gold	Work exper.	24,394	27,059	10.9%
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	Silver	Work exper.	3,609	3,731	3.4%
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011		Work exper.	7,738	8,459	9.3%
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012		Work exper.	6,305	7,476	18.6%
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	Silver	Work exper.	12,992	13,918	7.1%
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011		Work exper.	37,913	42,977	13.4%
First-Line Supervisors/Managers of Personal Service Workers	39-1021		Work exper.	5,941	7,101	19.5%
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	Silver	Work exper.	14,303	13,833	-3.3%

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	Gold	Work exper.	47,722	50,578	6.0%
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	Silver	Work exper.	6,066	5,894	-2.8%
Floor Sanders and Finishers	47-2043		Moderate OJT	280	315	12.5%
Food Preparation Workers	35-2021		Short-term OJT	16,108	17,498	8.6%
Food Servers, Nonrestaurant	35-3041	Bronze	Short-term OJT	4,511	5,498	21.9%
Foresters	19-1032		BA degree	322	326	1.2%
Furniture Finishers	51-7021	Bronze	Long-term OJT	964	925	-4.0%
General and Operations Managers	11-1021	Platinum	BA degree or higher, plus exper.	49,272	52,056	5.7%
Geographers	19-3092		Master's degree	83	102	22.9%
Graphic Designers	27-1024	Gold	BA degree	7,998	9,223	15.3%
Grounds Maintenance Workers, All Other	37-3019		Short-term OJT	277	308	11.2%
Hazardous Materials Removal Workers	47-4041		Moderate OJT	743	862	16.0%
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111		BA degree	651	701	7.7%
Healthcare Practitioner and Technical Workers, All Other	29-9099		BA degree	879	1,063	20.9%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	Silver	Long-term OJT	11,887	15,692	32.0%
Helpers—Electricians	47-3013	Bronze	Short-term OJT	4,497	5,660	25.9%
Helpers—Installation, Maintenance, and Repair Workers	49-9098	Silver	Short-term OJT	4,410	4,955	12.4%
Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters	47-3015		Short-term OJT	3,076	3,880	26.1%
Home Appliance Repairers	49-9031		Long-term OJT	2,199	2,202	0.1%
Human Resources Assistants, Except Payroll and Timekeeping	43-4161	Gold	Short-term OJT	5,411	5,702	5.4%

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	9,558	11,981	25.4%
Industrial Machinery Mechanics	49-9041	Silver	Long-term OJT	7,770	8,542	9.9%
Industrial Production Managers	11-3051		Work exper.	2,350	2,220	-5.5%
Installation, Maintenance, and Repair Workers, All Other	49-9099		Moderate OJT	4,138	4,528	9.4%
Insulation Workers, Floor, Ceiling, and Wall	47-2131		Moderate OJT	503	580	15.3%
Interior Designers	27-1025		Assoc. degree	2,139	2,324	8.6%
Landscape Architects	17-1012	Platinum	BA degree	936	1,109	18.5%
Landscaping and Groundskeeping Workers	37-3011	Silver	Short-term OJT	33,074	39,980	20.9%
Life, Physical, and Social Science Technicians, All Other	19-4099		Assoc. degree	1,575	1,786	13.4%
Logging Equipment Operators	45-4022		Moderate OJT	1,825	1,503	-17.6%
Machinists	51-4041	Silver	Long-term OJT	7,548	7,195	-4.7%
Maintenance and Repair Workers, General	49-9042	Gold	Moderate OJT	38,256	46,187	20.7%
Maintenance Workers, Machinery	49-9043	Bronze	Moderate OJT	2,084	2,213	6.2%
Management Analysts	13-1111	Gold	BA degree or higher, plus exper.	57,936	76,597	32.2%
Managers, All Other	11-9199		Work exper.	27,867	30,479	9.4%
Market Research Analysts	19-3021	Gold	BA degree	8,961	12,003	33.9%
Marketing Managers	11-2021		BA degree or higher, plus exper.	4,219	5,204	23.3%
Mechanical Drafters	17-3013	Gold	Certificate	2,651	2,550	-3.8%
Mechanical Engineers	17-2141	Gold	BA degree	7,763	8,316	7.1%
Medical and Clinical Laboratory Technicians	29-2012	Gold	Assoc. degree	3,891	4,700	20.8%
Medical Appliance Technicians	51-9082		Long-term OJT	381	420	10.2%
Medical Assistants	31-9092	Gold	Moderate OJT	9,758	13,128	34.5%
Merchandise Displayers and Window Trimmers	27-1026		Moderate OJT	1,467	1,524	3.9%
Mixing and Blending Machine Setters, Operators, and Tenders	51-9023	Silver	Moderate OJT	2,855	3,183	11.5%

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Molders, Shapers, and Casters, Except Metal and Plastic	51-9195	Silver	Moderate OJT	1,112	1,202	8.1%
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072		Moderate OJT	2,469	2,295	-7.0%
Motor Vehicle Operators, All Other	53-3099		Short-term OJT	2,352	2,621	11.4%
Motorcycle Mechanics	49-3052	Silver	Long-term OJT	457	501	9.6%
Museum Technicians and Conservators	25-4013		BA degree	324	420	29.6%
Natural Sciences Managers	11-9121	Gold	BA degree or higher, plus exper.	982	1,131	15.2%
Network and Computer Systems Administrators	15-1071		BA degree	18,407	25,626	39.2%
Nonfarm Animal Caretakers	39-2021	Silver	Short-term OJT	6,095	7,378	21.1%
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	2,410	2,585	7.3%
Office and Administrative Support Workers, All Other	43-9199	Silver	Short-term OJT	8,572	7,633	-11.0%
Office Clerks, General	43-9061	Silver	Short-term OJT	117,747	137,263	16.6%
Office Machine Operators, Except Computer	43-9071		Short-term OJT	1,551	1,493	-3.7%
Operating Engineers and Other Construction Equipment Operators	47-2073		Moderate OJT	12,462	14,018	12.5%
Operations Research Analysts	15-2031	Gold	Master's degree	4,286	6,075	41.7%
Outdoor Power Equipment and Other Small Engine Mechanics	49-3053		Moderate OJT	1,062	1,185	11.6%
Painters, Transportation Equipment	51-9122		Moderate OJT	1,458	1,533	5.1%
Painting, Coating, and Decorating Workers	51-9123	Bronze	Short-term OJT	735	855	16.3%
Personal Financial Advisors	13-2052		BA degree	4,053	5,641	39.2%
Pesticide Handlers, Sprayers, and Applicators, Vegetation	37-3012		Moderate OJT	367	422	15.0%
Petroleum Engineers	17-2171		BA degree	199	260	30.7%
Physical Therapists	29-1123		Master's degree	4,154	5,477	31.8%
Plumbers, Pipefitters, and Steamfitters	47-2152	Silver	Long-term OJT	16,845	19,210	14.0%
Power Plant Operators	51-8013		Long-term OJT	683	674	-1.3%

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Printing Machine Operators	51-5023		Moderate OJT	4,523	4,351	-3.8%
Producers and Directors	27-2012	Gold	BA degree or higher, plus exper.	2,535	2,818	11.2%
Production, Planning, and Expediting Clerks	43-5061	Silver	Moderate OJT	7,331	7,736	5.5%
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	3,774	3,992	5.8%
Public Relations Managers	11-2031	Silver	BA degree or higher, plus exper.	1,251	1,507	20.5%
Public Relations Specialists	27-3031	Gold	BA degree	8,672	11,560	33.3%
Purchasing Agents and Buyers, Farm Products	13-1021		Long-term OJT	136	121	-11.0%
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	Gold	Long-term OJT	13,290	16,626	25.1%
Purchasing Managers	11-3061	Silver	BA degree or higher, plus exper.	2,207	2,418	9.6%
Recreation and Fitness Studies Teachers, Postsecon	25-1193			696	851	22.3%
Registered Nurses	29-1111		Assoc. degree	60,588	74,765	23.4%
Reinforcing Iron and Rebar Workers	47-2171		Long-term OJT	863	981	13.7%
Retail Salespersons	41-2031	Gold	Short-term OJT	127,463	138,767	8.9%
Roofers	47-2181	Silver	Moderate OJT	3,487	3,632	4.2%
Sales Managers	11-2022	Platinum	BA degree or higher, plus exper.	6,551	7,747	18.3%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	Gold	Work exper.	35,436	39,396	11.2%
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041		Moderate OJT	2,009	1,938	-3.5%
Secretaries, Except Legal, Medical, and Executive	43-6014	Silver	Moderate OJT	17,974	19,103	6.3%
Sheet Metal Workers	47-2211	Silver	Long-term OJT	5,609	5,988	6.8%
Shipping, Receiving, and Traffic Clerks	43-5071	Silver	Short-term OJT	15,867	15,016	-5.4%
Slaughterers and Meat Packers	51-3023		Moderate OJT	1,492	1,534	2.8%
Social and Community Service Managers	11-9151	Gold	BA degree	2,647	3,191	20.6%

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Social and Human Service Assistants	21-1093		Moderate OJT	6,182	7,846	26.9%
Social Science Research Assistants	19-4061		Assoc. degree	634	773	21.9%
Social Scientists and Related Workers, All Other	19-3099		Master's degree	3,637	4,717	29.7%
Soil and Plant Scientists	19-1013		BA degree	219	255	16.4%
Stationary Engineers and Boiler Operators	51-8021		Long-term OJT	982	1,069	8.9%
Stock Clerks and Order Fillers	43-5081	Silver	Short-term OJT	50,129	54,665	9.0%
Structural Iron and Steel Workers	47-2221	Bronze	Long-term OJT	1,670	1,832	9.7%
Structural Metal Fabricators and Fitters	51-2041		Moderate OJT	2,052	2,151	4.8%
Substance Abuse and Behavioral Disorder Counselors	21-1011		BA degree	2,210	2,887	30.6%
Surveying and Mapping Technicians	17-3031		Moderate OJT	2,498	3,075	23.1%
Surveyors	17-1022		BA degree	2,237	2,602	16.3%
Switchboard Operators, Including Answering Service	43-2011	Silver	Short-term OJT	2,975	2,726	-8.4%
Tax Examiners, Collectors, and Revenue Agents	13-2081		BA degree	1,750	1,965	12.3%
Teacher Assistants	25-9041	Silver	Short-term OJT	29,166	34,289	17.6%
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022		Certificate	3,455	3,636	5.2%
Telecommunications Line Installers and Repairers	49-9052	Silver	Long-term OJT	8,033	8,307	3.4%
Telemarketers	41-9041	Silver	Short-term OJT	8,684	8,137	-6.3%
Textile, Apparel, and Furnishings Workers, All Other	51-6099		Short-term OJT	945	954	1.0%
Therapists, All Other	29-1129		BA degree	315	336	6.7%
Tool and Die Makers	51-4111	Gold	Long-term OJT	743	695	-6.5%
Tour Guides and Escorts	39-6021		Moderate OJT	1,694	1,945	14.8%
Training and Development Managers	11-3042	Silver	BA degree or higher, plus exper.	1,331	1,555	16.8%
Training and Development Specialists	13-1073	Gold	BA degree or higher, plus exper.	8,836	11,530	30.5%
Transportation Attendants, Except Flight Attendants and Baggage Porters	39-6032		Short-term OJT	493	604	22.5%

Table A13: Virginia Statewide – Green-Related Occupation Profile

Occupation	SOC	CRC	Education	Current Emp.	Projected Emp.	% Change
Transportation, Storage, and Distribution Managers	11-3071	Silver	Work exper.	1,917	1,825	-4.8%
Tree Trimmers and Pruners	37-3013		Short-term OJT	2,075	2,652	27.8%
Truck Drivers, Heavy and Tractor-Trailer	53-3032		Moderate OJT	43,600	48,648	11.6%
Urban and Regional Planners	19-3051		Master's degree	1,428	1,757	23.0%
Vocational Education Teachers, Postsecondary	25-1194	Gold	N/A	1,582	1,932	22.1%
Water and Liquid Waste Treatment Plant and System Operators	51-8031	Silver	Long-term OJT	2,711	3,386	24.9%
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111		Short-term OJT	1,708	1,547	-9.4%
Wholesale and Retail Buyers, Except Farm Products	13-1022	Gold	Long-term OJT	2,967	2,903	-2.2%
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042		Moderate OJT	3,473	3,632	4.6%
Writers and Authors	27-3043		BA degree	4,913	5,897	20.0%
Zoologists and Wildlife Biologists	19-1023		BA degree	275	288	4.7%

Table A14: Virginia Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Life, Physical, and Social Science Technicians, All Other	19-4099		Assoc. degree	89	0	-89
Medical and Clinical Laboratory Technicians	29-2012	Gold	Assoc. degree	155	108	-47
Broadcast Technicians	27-4012		Assoc. degree	34	1	-33
Environmental Engineering Technicians	17-3025	Silver	Assoc. degree	28	0	-28
Interior Designers	27-1025		Assoc. degree	85	73	-12
Environmental Science and Protection Technicians, Including Health	19-4091		Assoc. degree	35	37	2
Agricultural and Food Science Technicians	19-4011		Assoc. degree	14	17	3
Computer Specialists, All Other	15-1099		Assoc. degree	336	399	63
Social Science Research Assistants	19-4061		Assoc. degree	41	126	85

Table A14: Virginia Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Electrical and Electronic Engineering Technicians	17-3023	Platinum	Assoc. degree	165	580	415
Registered Nurses	29-1111		Assoc. degree	2,477	4,257	1,780
Business Operations Specialists, All Other	13-1199		BA degree	1,373	7	-1,366
Computer Systems Analysts	15-1051		BA degree	1,933	733	-1,200
Computer Software Engineers, Systems Software	15-1032	Gold	BA degree	1,473	306	-1,167
Computer Software Engineers, Applications	15-1031		BA degree	1,630	830	-800
Network and Computer Systems Administrators	15-1071		BA degree	1,029	690	-339
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	Gold	BA degree	492	185	-307
Accountants and Auditors	13-2011	Bronze	BA degree	1,680	1,407	-273
Civil Engineers	17-2051		BA degree	457	318	-139
Electrical Engineers	17-2071	Gold	BA degree	298	176	-122
Mechanical Engineers	17-2141	Gold	BA degree	254	153	-101
Occupational Health and Safety Specialists	29-9011	Gold	BA degree	99	0	-99
Surveyors	17-1022		BA degree	94	0	-94
Personal Financial Advisors	13-2052		BA degree	203	109	-94
Environmental Engineers	17-2081		BA degree	100	7	-93
Property, Real Estate, and Community Association Managers	11-9141	Gold	BA degree	87	0	-87
Electronics Engineers, Except Computer	17-2072	Platinum	BA degree	192	113	-79
Education, Training, and Library Workers, All Other	25-9099	Silver	BA degree	63	8	-55
Landscape Architects	17-1012	Platinum	BA degree	33	5	-28
Graphic Designers	27-1024	Gold	BA degree	369	343	-26
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111		BA degree	22	2	-20
Tax Examiners, Collectors, and Revenue Agents	13-2081		BA degree	84	70	-14
Petroleum Engineers	17-2171		BA degree	10	0	-10
Zoologists and Wildlife Biologists	19-1023		BA degree	10	0	-10
Soil and Plant Scientists	19-1013		BA degree	12	14	2
Museum Technicians and Conservators	25-4013		BA degree	20	25	5
Foresters	19-1032		BA degree	3	10	7
Architects, Except Landscape and Naval	17-1011		BA degree	132	141	9
Conservation Scientists	19-1031		BA degree	10	32	22

Table A14: Virginia Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Healthcare Practitioner and Technical Workers, All Other	29-9099		BA degree	47	98	51
Construction Managers	11-9021	Silver	BA degree	412	515	103
Therapists, All Other	29-1129		BA degree	8	201	193
Public Relations Specialists	27-3031	Gold	BA degree	494	689	195
Engineers, All Other	17-2199		BA degree	200	472	272
Cost Estimators	13-1051		BA degree	365	655	290
Substance Abuse and Behavioral Disorder Counselors	21-1011		BA degree	113	504	391
Social and Community Service Managers	11-9151	Gold	BA degree	115	518	403
Writers and Authors	27-3043		BA degree	201	687	486
Market Research Analysts	19-3021	Gold	BA degree	545	1,119	574
Training and Development Specialists	13-1073	Gold	BA degree or higher, plus exper.	500	188	-312
Financial Managers	11-3031	Gold	BA degree or higher, plus exper.	370	230	-140
Computer and Information Systems Managers	11-3021	Platinum	BA degree or higher, plus exper.	552	417	-135
Purchasing Managers	11-3061	Silver	BA degree or higher, plus exper.	84	0	-84
Public Relations Managers	11-2031	Silver	BA degree or higher, plus exper.	55	2	-53
Training and Development Managers	11-3042	Silver	BA degree or higher, plus exper.	50	3	-47
Art Directors	27-1011		BA degree or higher, plus exper.	48	12	-36
Agents and Business Managers of Artists, Performers, and Athletes	13-1011		BA degree or higher, plus exper.	35	1	-34
Advertising and Promotions Managers	11-2011	Gold	BA degree or higher, plus exper.	15	26	11
Farm, Ranch, and Other Agricultural Managers	11-9011		BA degree or higher, plus exper.	184	196	12
Education Administrators, Preschool and Child Care Center/Program	11-9031		BA degree or higher, plus exper.	82	100	18

Table A14: Virginia Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Education Administrators, Postsecondary	11-9033	Platinum	BA degree or higher, plus exper.	107	141	34
Administrative Services Managers	11-3011	Gold	BA degree or higher, plus exper.	156	192	36
Education Administrators, All Other	11-9039		BA degree or higher, plus exper.	57	93	36
Education Administrators, Elementary and Secondary School	11-9032	Gold	BA degree or higher, plus exper.	293	356	63
Producers and Directors	27-2012	Gold	BA degree or higher, plus exper.	107	188	81
Marketing Managers	11-2021		BA degree or higher, plus exper.	190	313	123
Management Analysts	13-1111	Gold	BA degree or higher, plus exper.	2,860	3,127	267
General and Operations Managers	11-1021	Platinum	BA degree or higher, plus exper.	1,706	2,077	371
Sales Managers	11-2022	Platinum	BA degree or higher, plus exper.	261	715	454
Chief Executives	11-1011		BA degree or higher, plus exper.	279	1,543	1,264
Engineering Managers	11-9041	Platinum	BA degree or higher, plus exper.	194	1,637	1,443
Natural Sciences Managers	11-9121	Gold	BA degree or higher, plus exper.	44	2,124	2,080
Carpenters	47-2031		Long-term OJT	878	7	-871
Electricians	47-2111	Gold	Long-term OJT	806	35	-771
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	Gold	Long-term OJT	684	5	-679
Plumbers, Pipefitters, and Steamfitters	47-2152	Silver	Long-term OJT	577	0	-577
Fire Fighters	33-2011		Long-term OJT	466	31	-435
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	Silver	Long-term OJT	572	201	-371
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041		Long-term OJT	364	38	-326

Table A14: Virginia Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Claims Adjusters, Examiners, and Investigators	13-1031		Long-term OJT	218	0	-218
Industrial Machinery Mechanics	49-9041	Silver	Long-term OJT	189	0	-189
Sheet Metal Workers	47-2211	Silver	Long-term OJT	171	0	-171
Telecommunications Line Installers and Repairers	49-9052	Silver	Long-term OJT	151	0	-151
Water and Liquid Waste Treatment Plant and System Operators	51-8031	Silver	Long-term OJT	126	0	-126
Machinists	51-4041	Silver	Long-term OJT	100	4	-96
Automotive Body and Related Repairers	49-3021	Bronze	Long-term OJT	98	8	-90
Wholesale and Retail Buyers, Except Farm Products	13-1022	Gold	Long-term OJT	74	2	-72
Audio and Video Equipment Technicians	27-4011		Long-term OJT	56	0	-56
Structural Iron and Steel Workers	47-2221	Bronze	Long-term OJT	43	0	-43
Crane and Tower Operators	53-7021	Bronze	Long-term OJT	40	0	-40
Home Appliance Repairers	49-9031		Long-term OJT	34	0	-34
Reinforcing Iron and Rebar Workers	47-2171		Long-term OJT	26	0	-26
Stationary Engineers and Boiler Operators	51-8021		Long-term OJT	26	1	-25
Power Plant Operators	51-8013		Long-term OJT	24	0	-24
Furniture Finishers	51-7021	Bronze	Long-term OJT	22	0	-22
Elevator Installers and Repairers	47-4021	Gold	Long-term OJT	16	0	-16
Motorcycle Mechanics	49-3052	Silver	Long-term OJT	14	0	-14
Medical Appliance Technicians	51-9082		Long-term OJT	11	0	-11
Airfield Operations Specialists	53-2022		Long-term OJT	6	0	-6
Tool and Die Makers	51-4111	Gold	Long-term OJT	5	0	-5
Purchasing Agents and Buyers, Farm Products	13-1021		Long-term OJT	3	0	-3
Operations Research Analysts	15-2031	Gold	Master's degree	304	166	-138
Physical Therapists	29-1123		Master's degree	182	58	-124
Urban and Regional Planners	19-3051		Master's degree	61	18	-43
Environmental Scientists and Specialists, Including Health	19-2041		Master's degree	201	210	9
Economists	19-3011		Master's degree	20	102	82
Educational, Vocational, and School Counselors	21-1012	Silver	Master's degree	256	390	134
Geographers	19-3092		Master's degree	6	240	234
Social Scientists and Related Workers, All Other	19-3099		Master's degree	290	914	624
Customer Service Representatives	43-4051		Moderate OJT	3,053	0	-3,053
Maintenance and Repair Workers, General	49-9042	Gold	Moderate OJT	1,382	0	-1,382

Table A14: Virginia Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Truck Drivers, Heavy and Tractor-Trailer	53-3032		Moderate OJT	1,285	71	-1,214
Bookkeeping, Accounting, and Auditing Clerks	43-3031	Silver	Moderate OJT	1,279	211	-1,068
Construction Laborers	47-2061	Silver	Moderate OJT	900	0	-900
Operating Engineers and Other Construction Equipment Operators	47-2073		Moderate OJT	370	0	-370
Secretaries, Except Legal, Medical, and Executive	43-6014	Silver	Moderate OJT	355	21	-334
Production, Planning, and Expediting Clerks	43-5061	Silver	Moderate OJT	222	0	-222
Installation, Maintenance, and Repair Workers, All Other	49-9099		Moderate OJT	103	0	-103
Surveying and Mapping Technicians	17-3031		Moderate OJT	103	6	-97
Printing Machine Operators	51-5023		Moderate OJT	95	0	-95
Tour Guides and Escorts	39-6021		Moderate OJT	96	3	-93
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042		Moderate OJT	87	0	-87
Construction and Related Workers, All Other	47-4099		Moderate OJT	84	0	-84
Mixing and Blending Machine Setters, Operators, and Tenders	51-9023	Silver	Moderate OJT	82	0	-82
Roofers	47-2181	Silver	Moderate OJT	72	0	-72
Agricultural Equipment Operators	45-2091	Silver	Moderate OJT	68	0	-68
Data Entry Keyers	43-9021	Silver	Moderate OJT	132	65	-67
Structural Metal Fabricators and Fitters	51-2041		Moderate OJT	53	0	-53
Slaughterers and Meat Packers	51-3023		Moderate OJT	52	0	-52
Merchandise Displayers and Window Trimmers	27-1026		Moderate OJT	51	1	-50
Maintenance Workers, Machinery	49-9043	Bronze	Moderate OJT	45	0	-45
Painters, Transportation Equipment	51-9122		Moderate OJT	46	4	-42
Logging Equipment Operators	45-4022		Moderate OJT	49	12	-37
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041		Moderate OJT	36	0	-36
Outdoor Power Equipment and Other Small Engine Mechanics	49-3053		Moderate OJT	34	0	-34
Hazardous Materials Removal Workers	47-4041		Moderate OJT	32	0	-32
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072		Moderate OJT	51	22	-29
Earth Drillers, Except Oil and Gas	47-5021		Moderate OJT	28	0	-28
Molders, Shapers, and Casters, Except Metal and Plastic	51-9195	Silver	Moderate OJT	64	39	-25

Table A14: Virginia Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Insulation Workers, Floor, Ceiling, and Wall	47-2131		Moderate OJT	25	0	-25
Fence Erectors	47-4031		Moderate OJT	25	0	-25
Floor Sanders and Finishers	47-2043		Moderate OJT	11	0	-11
Pesticide Handlers, Sprayers, and Applicators, Vegetation	37-3012		Moderate OJT	10	0	-10
Fallers	45-4021		Moderate OJT	11	3	-8
Social and Human Service Assistants	21-1093		Moderate OJT	297	1,322	1,025
Medical Assistants	31-9092	Gold	Moderate OJT	446	2,485	2,039
Vocational Education Teachers, Postsecondary	25-1194	Gold	N/A	63	39	-24
Recreation and Fitness Studies Teachers, Postsecon	25-1193		N/A	28	25	-3
Environmental Science Teachers, Postsecondary	25-1053		N/A	6	6	0
Communications Teachers, Postsecondary	25-1122		N/A	18	60	42
Automotive Service Technicians and Mechanics	49-3023	Silver	Certificate	539	270	-269
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022		Certificate	79	0	-79
Mechanical Drafters	17-3013	Gold	Certificate	57	4	-53
Electronic Home Entertainment Equipment Installers and Repairers	49-2097		Certificate	48	0	-48
Electrical and Electronics Drafters	17-3012		Certificate	25	0	-25
Architectural and Civil Drafters	17-3011	Gold	Certificate	81	245	164
Cashiers	41-2011	Silver	Short-term OJT	4,986	0	-4,986
Retail Salespersons	41-2031	Gold	Short-term OJT	4,685	32	-4,653
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	Bronze	Short-term OJT	3,827	18	-3,809
Office Clerks, General	43-9061	Silver	Short-term OJT	3,557	0	-3,557
Stock Clerks and Order Fillers	43-5081	Silver	Short-term OJT	1,609	0	-1,609
Teacher Assistants	25-9041	Silver	Short-term OJT	1,129	7	-1,122
Landscaping and Groundskeeping Workers	37-3011	Silver	Short-term OJT	1,089	0	-1,089
Dishwashers	35-9021		Short-term OJT	857	4	-853
Food Preparation Workers	35-2021		Short-term OJT	716	13	-703
Child Care Workers	39-9011		Short-term OJT	963	305	-658
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	Bronze	Short-term OJT	696	40	-656
Shipping, Receiving, and Traffic Clerks	43-5071	Silver	Short-term OJT	394	0	-394
Bartenders	35-3011	Silver	Short-term OJT	307	0	-307
Helpers—Installation, Maintenance, and Repair Workers	49-9098	Silver	Short-term OJT	267	0	-267

Table A14: Virginia Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
Nonfarm Animal Caretakers	39-2021	Silver	Short-term OJT	261	0	-261
Telemarketers	41-9041	Silver	Short-term OJT	218	1	-217
Helpers—Electricians	47-3013	Bronze	Short-term OJT	210	9	-201
Human Resources Assistants, Except Payroll and Timekeeping	43-4161	Gold	Short-term OJT	182	0	-182
Food Servers, Nonrestaurant	35-3041	Bronze	Short-term OJT	176	0	-176
Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters	47-3015		Short-term OJT	144	0	-144
Tree Trimmers and Pruners	37-3013		Short-term OJT	83	0	-83
Motor Vehicle Operators, All Other	53-3099		Short-term OJT	68	0	-68
Switchboard Operators, Including Answering Service	43-2011	Silver	Short-term OJT	61	0	-61
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111		Short-term OJT	60	0	-60
Office Machine Operators, Except Computer	43-9071		Short-term OJT	51	0	-51
Painting, Coating, and Decorating Workers	51-9123	Bronze	Short-term OJT	31	8	-23
Conveyor Operators and Tenders	53-7011	Bronze	Short-term OJT	23	0	-23
Transportation Attendants, Except Flight Attendants and Baggage Porters	39-6032		Short-term OJT	22	0	-22
Textile, Apparel, and Furnishings Workers, All Other	51-6099		Short-term OJT	14	0	-14
Grounds Maintenance Workers, All Other	37-3019		Short-term OJT	6	9	3
Office and Administrative Support Workers, All Other	43-9199	Silver	Short-term OJT	197	377	180
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	Gold	Work exper.	1,310	8	-1,302
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011		Work exper.	1,361	69	-1,292
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	Gold	Work exper.	1,217	45	-1,172
Executive Secretaries and Administrative Assistants	43-6011	Silver	Work exper.	905	72	-833
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011		Work exper.	902	72	-830
First-Line Supervisors/Managers of Food Preparation and Serving Workers	35-1012	Gold	Work exper.	499	7	-492
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	Silver	Work exper.	433	0	-433
First-Line Supervisors/Managers of Personal Service Workers	39-1021		Work exper.	278	0	-278

Table A14: Virginia Statewide – Green-Related Occupation Gap Summary

Occupation	SOC	CRC	Education	Proj. Annual Openings	Supply	Gap
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	Silver	Work exper.	193	0	-193
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012		Work exper.	185	0	-185
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011		Work exper.	152	0	-152
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	33-1021		Work exper.	112	3	-109
First-Line Supervisors/Managers of Correctional Officers	33-1011		Work exper.	109	3	-106
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	Silver	Work exper.	105	0	-105
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	Silver	Work exper.	75	0	-75
Construction and Building Inspectors	47-4011	Silver	Work exper.	143	90	-53
Emergency Management Specialists	13-1061		Work exper.	32	4	-28
Industrial Production Managers	11-3051		Work exper.	82	89	7
Transportation, Storage, and Distribution Managers	11-3071	Silver	Work exper.	53	85	32
Managers, All Other	11-9199		Work exper.	980	1,970	990

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Accountants and Auditors	13-2011	3.7%	62	N/A	17.1%	287	105	79.1%	1,329	1,303
Administrative Services Managers	11-3011	21.4%	33	N/A	38.8%	61	44	39.9%	62	150
Advertising and Promotions Managers	11-2011	7.1%	1	N/A	17.5%	3	0	75.5%	11	26
Agents and Business Managers of Artists, Performers, and Athletes	13-1011	17.6%	6	N/A	23.0%	8	0	59.4%	21	1
Agricultural and Food Science Technicians	19-4011	42.7%	6	N/A	25.6%	4	0	31.6%	4	17
Agricultural Equipment Operators	45-2091	86.3%	59	N/A	9.7%	7	0	4.0%	3	0
Airfield Operations Specialists	53-2022	12.8%	1	N/A	54.8%	3	0	32.4%	2	0
Architects, Except Landscape and Naval	17-1011	1.6%	2	N/A	10.1%	13	0	88.3%	117	141
Architectural and Civil Drafters	17-3011	13.0%	11	N/A	62.4%	51	245	24.6%	20	0
Art Directors	27-1011	13.6%	7	N/A	28.5%	14	3	58.0%	28	9
Audio and Video Equipment Technicians	27-4011	21.2%	12	N/A	43.9%	25	0	35.0%	20	0
Automotive Body and Related Repairers	49-3021	74.3%	73	N/A	22.5%	22	8	3.1%	3	0
Automotive Service Technicians and Mechanics	49-3023	62.4%	336	N/A	33.7%	182	270	3.9%	21	0
Bartenders	35-3011	41.9%	129	N/A	40.9%	126	0	17.3%	53	0
Bookkeeping, Accounting, and Auditing Clerks	43-3031	33.7%	431	N/A	50.3%	643	211	16.0%	205	0

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Broadcast Technicians	27-4012	21.2%	7	N/A	43.9%	15	1	35.0%	12	0
Business Operations Specialists, All Other	13-1199	18.2%	250	N/A	33.2%	456	0	48.7%	669	7
Carpenters	47-2031	72.8%	639	N/A	21.6%	190	7	5.5%	48	0
Cashiers	41-2011	62.8%	3,131	N/A	27.7%	1,381	0	9.5%	474	0
Chief Executives	11-1011	13.0%	36	N/A	21.8%	61	62	65.2%	182	1,481
Child Care Workers	39-9011	47.7%	459	N/A	37.8%	364	305	14.5%	140	0
Civil Engineers	17-2051	2.7%	12	N/A	10.0%	46	0	87.3%	399	318
Claims Adjusters, Examiners, and Investigators	13-1031	18.3%	40	N/A	35.1%	77	0	46.7%	102	0
Combined Food Preparation and Serving Workers, Including Fast Food	35-3021	71.0%	2,717	N/A	23.8%	911	18	5.2%	199	0
Communications Teachers, Postsecondary	25-1122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	13-1041	14.0%	51	N/A	27.9%	102	2	58.0%	211	36
Computer and Information Systems Managers	11-3021	4.6%	25	N/A	23.0%	127	132	72.5%	400	285
Computer Software Engineers, Applications	15-1031	2.2%	36	N/A	13.0%	212	57	84.8%	1,382	774
Computer Software Engineers, Systems Software	15-1032	2.2%	32	N/A	13.0%	191	53	84.8%	1,249	252
Computer Specialists, All Other	15-1099	7.0%	24	N/A	24.6%	83	136	68.4%	230	264

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Computer Systems Analysts	15-1051	7.0%	135	N/A	24.6%	476	434	68.4%	1,322	299
Conservation Scientists	19-1031	0.0%	0	N/A	14.0%	1	4	85.7%	9	28
Construction and Building Inspectors	47-4011	30.5%	44	N/A	46.4%	66	0	23.0%	33	90
Construction and Related Workers, All Other	47-4099	75.1%	63	N/A	21.1%	18	0	3.8%	3	0
Construction Laborers	47-2061	78.5%	707	N/A	16.8%	151	0	4.7%	42	0
Construction Managers	11-9021	39.5%	163	N/A	31.1%	128	92	29.4%	121	424
Conveyor Operators and Tenders	53-7011	64.3%	15	N/A	32.3%	7	0	0.0%	0	0
Cost Estimators	13-1051	27.5%	100	N/A	40.2%	147	81	32.3%	118	573
Crane and Tower Operators	53-7021	71.6%	29	N/A	26.2%	10	0	0.0%	0	0
Customer Service Representatives	43-4051	33.8%	1,032	N/A	44.2%	1,349	0	22.0%	672	0
Data Entry Keyers	43-9021	35.2%	46	N/A	47.0%	62	65	17.7%	23	0
Dishwashers	35-9021	86.6%	742	N/A	10.2%	87	4	3.2%	27	0
Earth Drillers, Except Oil and Gas	47-5021	77.8%	22	N/A	17.6%	5	0	0.0%	0	0
Economists	19-3011	0.0%	0	N/A	0.0%	0	0	99.7%	20	102
Education Administrators, All Other	11-9039	6.4%	4	N/A	15.2%	9	0	78.4%	45	93
Education Administrators, Elementary and Secondary School	11-9032	6.4%	19	N/A	15.2%	45	0	78.4%	230	356

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Education Administrators, Postsecondary	11-9033	6.4%	7	N/A	15.2%	16	0	78.4%	84	141
Education Administrators, Preschool and Child Care Center/Program	11-9031	6.4%	5	N/A	15.2%	12	0	78.4%	64	100
Education, Training, and Library Workers, All Other	25-9099	4.3%	3	N/A	16.7%	11	0	79.0%	50	8
Educational, Vocational, and School Counselors	21-1012	8.9%	23	N/A	18.3%	47	0	72.8%	186	390
Electrical and Electronic Engineering Technicians	17-3023	27.2%	45	N/A	54.4%	90	526	18.4%	30	54
Electrical and Electronics Drafters	17-3012	13.0%	3	N/A	62.4%	16	0	24.6%	6	0
Electrical Engineers	17-2071	2.9%	9	N/A	16.5%	49	0	80.5%	240	176
Electricians	47-2111	50.7%	409	N/A	42.4%	342	35	6.8%	55	0
Electronic Home Entertainment Equipment Installers and Repairers	49-2097	44.9%	22	N/A	44.0%	21	0	11.1%	5	0
Electronics Engineers, Except Computer	17-2072	2.9%	6	N/A	16.5%	32	0	80.5%	155	113
Elevator Installers and Repairers	47-4021	48.0%	8	N/A	42.2%	7	0	9.8%	2	0
Emergency Management Specialists	13-1061	18.2%	6	N/A	33.2%	11	0	48.7%	16	4
Engineering Managers	11-9041	4.4%	9	N/A	11.9%	23	72	83.7%	162	1,565
Engineers, All Other	17-2199	3.0%	6	N/A	14.7%	29	74	82.4%	165	397
Environmental Engineering Technicians	17-3025	27.2%	8	N/A	54.4%	15	0	18.4%	5	0
Environmental Engineers	17-2081	0.0%	0	N/A	9.9%	10	0	86.4%	86	7

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Environmental Science and Protection Technicians, Including Health	19-4091	19.4%	7	N/A	34.9%	12	0	45.7%	16	37
Environmental Science Teachers, Postsecondary	25-1053	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Environmental Scientists and Specialists, Including Health	19-2041	0.0%	0	N/A	6.9%	14	0	93.0%	187	210
Executive Secretaries and Administrative Assistants	43-6011	33.0%	299	N/A	48.7%	441	72	18.3%	166	0
Fallers	45-4021	83.5%	9	N/A	14.2%	2	0	2.2%	0	3
Farm, Ranch, and Other Agricultural Managers	11-9011	44.6%	82	N/A	29.4%	54	12	26.0%	48	184
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	45-2092	86.3%	601	N/A	9.7%	68	40	4.0%	28	0
Fence Erectors	47-4031	79.0%	20	N/A	17.7%	4	0	3.3%	1	0
Financial Managers	11-3031	12.9%	48	N/A	27.2%	101	5	59.9%	222	224
Fire Fighters	33-2011	22.9%	107	N/A	58.8%	274	31	18.3%	85	0
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	47-1011	59.5%	537	N/A	30.1%	272	72	10.3%	93	0
First-Line Supervisors/Managers of Correctional Officers	33-1011	25.9%	28	N/A	49.2%	54	3	24.9%	27	0
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	33-1021	18.4%	21	N/A	64.3%	72	0	17.3%	19	3

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
First-Line Supervisors/Managers of Food Preparation and Serving Workers	35-1012	51.3%	256	N/A	35.2%	176	7	13.5%	67	0
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	53-1021	46.6%	35	N/A	36.5%	27	0	16.9%	13	0
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	37-1011	58.0%	88	N/A	31.5%	48	0	10.5%	16	0
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	37-1012	53.7%	99	N/A	31.3%	58	0	15.0%	28	0
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	49-1011	43.2%	187	N/A	43.6%	189	0	13.2%	57	0
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	28.1%	382	N/A	43.1%	587	69	28.9%	393	0
First-Line Supervisors/Managers of Personal Service Workers	39-1021	37.4%	104	N/A	36.3%	101	0	26.4%	73	0
First-Line Supervisors/Managers of Production and Operating Workers	51-1011	52.9%	102	N/A	32.2%	62	0	14.9%	29	0

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
First-Line Supervisors/Managers of Retail Sales Workers	41-1011	38.8%	508	N/A	36.7%	481	0	24.6%	322	8
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	53-1031	46.6%	49	N/A	36.5%	38	0	16.9%	18	0
Floor Sanders and Finishers	47-2043	79.7%	9	N/A	17.0%	2	0	3.3%	0	0
Food Preparation Workers	35-2021	1.0%	7	N/A	3.0%	21	13	3.0%	21	0
Food Servers, Nonrestaurant	35-3041	63.8%	112	N/A	27.3%	48	0	8.9%	16	0
Foresters	19-1032	0.0%	0	N/A	14.0%	0	1	85.7%	3	9
Furniture Finishers	51-7021	71.8%	16	N/A	22.9%	5	0	0.0%	0	0
General and Operations Managers	11-1021	19.6%	334	N/A	32.5%	554	387	48.0%	819	1,690
Geographers	19-3092	0.0%	0	N/A	10.2%	1	0	89.8%	5	240
Graphic Designers	27-1024	13.9%	51	N/A	31.4%	116	169	54.6%	201	174
Grounds Maintenance Workers, All Other	37-3019	77.5%	5	N/A	16.7%	1	9	5.8%	0	0
Hazardous Materials Removal Workers	47-4041	63.2%	20	N/A	27.3%	9	0	9.4%	3	0
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	17-2111	7.6%	2	N/A	18.5%	4	0	73.9%	16	2
Healthcare Practitioner and Technical Workers, All Other	29-9099	9.4%	4	N/A	18.3%	9	47	72.4%	34	51

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	49-9021	57.6%	329	N/A	39.0%	223	201	3.4%	19	0
Helpers—Electricians	47-3013	84.0%	176	N/A	12.9%	27	9	3.1%	7	0
Helpers—Installation, Maintenance, and Repair Workers	49-9098	76.9%	205	N/A	17.7%	47	0	0.0%	0	0
Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters	47-3015	84.0%	121	N/A	12.9%	19	0	3.1%	4	0
Home Appliance Repairers	49-9031	50.3%	17	N/A	42.5%	14	0	7.2%	2	0
Human Resources Assistants, Except Payroll and Timekeeping	43-4161	25.0%	46	N/A	46.0%	84	0	29.0%	53	0
Human Resources, Training, and Labor Relations Specialists, All Other	13-1079	14.1%	69	N/A	30.4%	150	3	55.5%	273	182
Industrial Machinery Mechanics	49-9041	55.9%	106	N/A	38.8%	73	0	5.3%	10	0
Industrial Production Managers	11-3051	25.4%	21	N/A	31.6%	26	18	43.0%	35	71
Installation, Maintenance, and Repair Workers, All Other	49-9099	61.1%	63	N/A	30.1%	31	0	8.8%	9	0
Insulation Workers, Floor, Ceiling, and Wall	47-2131	79.7%	20	N/A	15.9%	4	0	0.0%	0	0
Interior Designers	27-1025	13.9%	12	N/A	31.4%	27	8	54.6%	46	65
Landscape Architects	17-1012	1.6%	1	N/A	10.1%	3	0	88.3%	29	5
Landscaping and Groundskeeping Workers	37-3011	77.5%	844	N/A	16.7%	182	0	5.8%	63	0

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Life, Physical, and Social Science Technicians, All Other	19-4099	19.4%	17	N/A	34.9%	31	0	45.7%	41	0
Logging Equipment Operators	45-4022	83.5%	41	N/A	14.2%	7	0	2.2%	1	12
Machinists	51-4041	59.5%	60	N/A	37.3%	37	4	3.2%	3	0
Maintenance and Repair Workers, General	49-9042	58.3%	806	N/A	35.6%	492	0	6.1%	84	0
Maintenance Workers, Machinery	49-9043	56.6%	25	N/A	39.3%	18	0	0.0%	0	0
Management Analysts	13-1111	6.6%	189	N/A	15.9%	455	638	77.5%	2,216	2,490
Managers, All Other	11-9199	17.3%	170	N/A	27.3%	268	776	55.4%	543	1,195
Market Research Analysts	19-3021	4.4%	24	N/A	13.5%	74	0	82.2%	448	1,119
Marketing Managers	11-2021	9.2%	17	N/A	22.1%	42	0	68.7%	131	313
Mechanical Drafters	17-3013	13.0%	7	N/A	62.4%	36	4	24.6%	14	0
Mechanical Engineers	17-2141	3.5%	9	N/A	18.3%	46	0	78.2%	199	153
Medical and Clinical Laboratory Technicians	29-2012	14.2%	22	N/A	35.3%	55	108	50.5%	78	0
Medical Appliance Technicians	51-9082	42.5%	5	N/A	46.0%	5	0	11.5%	1	0
Medical Assistants	31-9092	30.6%	136	N/A	58.9%	263	2,485	10.4%	46	0
Merchandise Displayers and Window Trimmers	27-1026	13.9%	7	N/A	31.4%	16	1	54.6%	28	0
Mixing and Blending Machine Setters, Operators, and Tenders	51-9023	75.2%	62	N/A	20.4%	17	0	4.4%	4	0

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Molders, Shapers, and Casters, Except Metal and Plastic	51-9195	69.1%	44	N/A	20.8%	13	28	10.1%	6	11
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	51-4072	72.2%	37	N/A	25.1%	13	22	0.0%	0	0
Motor Vehicle Operators, All Other	53-3099	70.2%	48	N/A	23.5%	16	0	0.0%	0	0
Motorcycle Mechanics	49-3052	63.5%	9	N/A	32.0%	4	0	4.5%	1	0
Museum Technicians and Conservators	25-4013	5.4%	1	N/A	8.7%	2	0	85.9%	17	25
Natural Sciences Managers	11-9121	0.0%	0	N/A	0.0%	0	648	92.8%	41	1,476
Network and Computer Systems Administrators	15-1071	8.3%	85	N/A	41.5%	427	336	50.2%	517	353
Nonfarm Animal Caretakers	39-2021	46.8%	122	N/A	37.2%	97	0	16.0%	42	0
Occupational Health and Safety Specialists	29-9011	9.4%	9	N/A	18.3%	18	0	72.4%	72	0
Office and Administrative Support Workers, All Other	43-9199	24.7%	49	N/A	43.3%	85	377	31.9%	63	0
Office Clerks, General	43-9061	36.0%	1,281	N/A	45.3%	1,611	0	18.7%	665	0
Office Machine Operators, Except Computer	43-9071	48.9%	25	N/A	37.4%	19	0	13.7%	7	0
Operating Engineers and Other Construction Equipment Operators	47-2073	77.8%	288	N/A	19.6%	73	0	2.6%	10	0
Operations Research Analysts	15-2031	6.6%	20	N/A	22.7%	69	0	70.7%	215	166
Outdoor Power Equipment and Other Small Engine Mechanics	49-3053	63.5%	22	N/A	32.0%	11	0	4.5%	2	0

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Painters, Transportation Equipment	51-9122	75.4%	35	N/A	20.8%	10	4	3.8%	2	0
Painting, Coating, and Decorating Workers	51-9123	75.4%	23	N/A	20.8%	6	2	3.8%	1	6
Personal Financial Advisors	13-2052	4.2%	9	N/A	15.2%	31	0	80.5%	163	109
Pesticide Handlers, Sprayers, and Applicators, Vegetation	37-3012	77.5%	8	N/A	16.7%	2	0	5.8%	1	0
Petroleum Engineers	17-2171	0.0%	0	N/A	17.6%	2	0	79.6%	8	0
Physical Therapists	29-1123	1.8%	3	N/A	8.8%	16	0	89.3%	163	58
Plumbers, Pipefitters, and Steamfitters	47-2152	67.6%	390	N/A	28.5%	164	0	3.9%	23	0
Power Plant Operators	51-8013	36.1%	9	N/A	43.6%	10	0	20.4%	5	0
Printing Machine Operators	51-5023	66.2%	63	N/A	28.4%	27	0	5.5%	5	0
Producers and Directors	27-2012	6.1%	7	N/A	19.4%	21	1	74.5%	80	187
Production, Planning, and Expediting Clerks	43-5061	30.0%	67	N/A	39.7%	88	0	30.3%	67	0
Property, Real Estate, and Community Association Managers	11-9141	27.3%	24	N/A	36.5%	32	0	36.2%	31	0
Public Relations Managers	11-2031	8.7%	5	N/A	16.3%	9	0	75.0%	41	2
Public Relations Specialists	27-3031	5.3%	26	N/A	13.9%	69	1	80.8%	399	688
Purchasing Agents and Buyers, Farm Products	13-1021	35.5%	1	N/A	42.5%	1	0	0.0%	0	0
Purchasing Agents, Except Wholesale, Retail, and Farm Products	13-1023	21.8%	149	N/A	35.8%	245	5	42.4%	290	0

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Purchasing Managers	11-3061	14.9%	13	N/A	28.1%	24	0	57.0%	48	0
Recreation and Fitness Studies Teachers, Postsecon	25-1193	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Registered Nurses	29-1111	1.0%	25	N/A	42.7%	1,058	2,051	56.2%	1,392	2,205
Reinforcing Iron and Rebar Workers	47-2171	82.6%	21	N/A	14.7%	4	0	0.0%	0	0
Retail Salespersons	41-2031	38.4%	1,799	N/A	36.5%	1,710	32	25.2%	1,181	0
Roofers	47-2181	85.7%	62	N/A	11.4%	8	0	2.8%	2	0
Sales Managers	11-2022	9.2%	24	N/A	22.1%	58	58	68.7%	179	657
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	41-4012	20.6%	251	N/A	28.0%	341	8	51.4%	626	37
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041	84.0%	30	N/A	14.1%	5	0	0.0%	0	0
Secretaries, Except Legal, Medical, and Executive	43-6014	33.0%	117	N/A	48.7%	173	21	18.3%	65	0
Sheet Metal Workers	47-2211	63.4%	108	N/A	32.4%	55	0	4.2%	7	0
Shipping, Receiving, and Traffic Clerks	43-5071	64.3%	253	N/A	29.6%	117	0	6.1%	24	0
Slaughterers and Meat Packers	51-3023	82.9%	43	N/A	15.3%	8	0	1.8%	1	0
Social and Community Service Managers	11-9151	8.9%	10	N/A	19.6%	23	27	71.5%	82	489
Social and Human Service Assistants	21-1093	15.6%	46	N/A	26.3%	78	1,252	58.1%	173	70
Social Science Research Assistants	19-4061	19.4%	8	N/A	34.9%	14	101	45.7%	19	25

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Social Scientists and Related Workers, All Other	19-3099	0.0%	0	N/A	10.2%	30	714	89.8%	260	200
Soil and Plant Scientists	19-1013	0.0%	0	N/A	17.7%	2	0	82.0%	10	14
Stationary Engineers and Boiler Operators	51-8021	55.9%	15	N/A	34.0%	9	1	10.1%	3	0
Stock Clerks and Order Fillers	43-5081	63.2%	1,017	N/A	29.1%	468	0	7.7%	124	0
Structural Iron and Steel Workers	47-2221	67.6%	29	N/A	28.6%	12	0	3.8%	2	0
Structural Metal Fabricators and Fitters	51-2041	56.9%	30	N/A	33.6%	18	0	0.0%	0	0
Substance Abuse and Behavioral Disorder Counselors	21-1011	8.9%	10	N/A	18.3%	21	477	72.8%	82	27
Surveying and Mapping Technicians	17-3031	42.2%	43	N/A	51.0%	53	0	6.8%	7	6
Surveyors	17-1022	0.0%	0	N/A	17.8%	17	0	81.6%	77	0
Switchboard Operators, Including Answering Service	43-2011	39.2%	24	N/A	50.7%	31	0	10.1%	6	0
Tax Examiners, Collectors, and Revenue Agents	13-2081	23.1%	19	N/A	34.2%	29	4	42.7%	36	66
Teacher Assistants	25-9041	37.4%	422	N/A	44.7%	505	7	17.9%	202	0
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022	36.4%	29	N/A	50.7%	40	0	12.9%	10	0
Telecommunications Line Installers and Repairers	49-9052	47.9%	72	N/A	44.2%	67	0	7.9%	12	0
Telemarketers	41-9041	50.1%	109	N/A	35.7%	78	1	14.2%	31	0

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Textile, Apparel, and Furnishings Workers, All Other	51-6099	75.3%	11	N/A	14.5%	2	0	10.1%	1	0
Therapists, All Other	29-1129	3.2%	0	N/A	14.2%	1	0	82.6%	7	201
Tool and Die Makers	51-4111	42.9%	2	N/A	52.4%	3	0	4.6%	0	0
Tour Guides and Escorts	39-6021	35.7%	34	N/A	35.9%	34	2	28.5%	27	1
Training and Development Managers	11-3042	14.8%	7	N/A	27.8%	14	0	57.5%	29	3
Training and Development Specialists	13-1073	14.1%	71	N/A	30.4%	152	3	55.5%	278	186
Transportation Attendants, Except Flight Attendants and Baggage Porters	39-6032	24.7%	5	N/A	44.4%	10	0	30.8%	7	0
Transportation, Storage, and Distribution Managers	11-3071	38.5%	20	N/A	36.4%	19	12	25.1%	13	73
Tree Trimmers and Pruners	37-3013	77.5%	64	N/A	16.7%	14	0	5.8%	5	0
Truck Drivers, Heavy and Tractor-Trailer	53-3032	70.7%	908	N/A	25.2%	324	71	4.1%	53	0
Urban and Regional Planners	19-3051	0.0%	0	N/A	0.0%	0	0	92.2%	56	18
Vocational Education Teachers, Postsecondary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water and Liquid Waste Treatment Plant and System Operators	51-8031	51.7%	65	N/A	40.6%	51	0	7.8%	10	0
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	43-5111	54.9%	33	N/A	32.6%	20	0	12.5%	8	0
Wholesale and Retail Buyers, Except Farm Products	13-1022	27.8%	21	N/A	36.2%	27	1	36.0%	27	1

Table A15: Virginia Statewide – Green-Related Occupation Postsecondary Pipeline Detail

Occupation	SOC	HS % emp.	HS Demand	HS Supply	Some College % emp	Some College Demand	Some College Supply	BA and above % emp.	BA and above Demand	BA and above Supply
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042	81.9%	71	N/A	15.3%	13	0	0.0%	0	0
Writers and Authors	27-3043	3.5%	7	N/A	12.4%	25	0	84.1%	169	687
Zoologists and Wildlife Biologists	19-1023	0.0%	0	N/A	5.3%	1	0	94.6%	9	0

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Accountants and Auditors	132011	$69,810	35,180	Home Appliance Repairers	499031	$33,410	1,530	1
Accountants and Auditors	132011	$69,810	35,180	Electricians	472111	$45,820	18,540	2
Accountants and Auditors	132011	$69,810	35,180	Surveyors	171022	$58,050	2,090	3
Accountants and Auditors	132011	$69,810	35,180	Cooks, Institution and Cafeteria	352012	$24,200	7,360	4
Accountants and Auditors	132011	$69,810	35,180	Insurance Claims and Policy Processing Clerks	439041	$34,460	5,410	5
Administrative Services Managers	113011	$84,050	4,100	Electronic Home Entertainment Equipment Installers and Repairers	492097	$37,960	1,090	1
Administrative Services Managers	113011	$84,050	4,100	Detectives and Criminal Investigators	333021	$77,460	3,170	2
Administrative Services Managers	113011	$84,050	4,100	Respiratory Therapists	291126	$54,020	2,310	3
Administrative Services Managers	113011	$84,050	4,100	Patternmakers, Metal and Plastic	514062	$38,850	70	4
Administrative Services Managers	113011	$84,050	4,100	Transportation Inspectors	536051	$61,980	460	5
Advertising and Promotions Managers	112011	$85,520	440	Lay-Out Workers, Metal and Plastic	514192	$42,140	540	1
Advertising and Promotions Managers	112011	$85,520	440	Dental Hygienists	292021	$77,430	3,990	2
Advertising and Promotions Managers	112011	$85,520	440	Metal-Refining Furnace Operators and Tenders	514051	$34,310	210	3
Advertising and Promotions Managers	112011	$85,520	440	Computer-Controlled Machine Tool Operators, Metal and Plastic	514011	$33,010	1,460	4
Advertising and Promotions Managers	112011	$85,520	440	Agents and Business Managers of Artists, Performers, and Athletes	131011	$60,290	340	5
Agents and Business Managers of Artists, Performers, and Athletes	131011	$60,290	340	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	531021	$44,230	3,450	1
Agents and Business Managers of Artists, Performers, and Athletes	131011	$60,290	340	Mixing and Blending Machine Setters, Operators, and Tenders	519023	$34,640	2,670	2
Agents and Business Managers of Artists, Performers, and Athletes	131011	$60,290	340	Psychiatric Technicians	292053	$25,390	3,610	3
Agents and Business Managers of Artists, Performers, and Athletes	131011	$60,290	340	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514081	$31,090	970	4
Agents and Business Managers of Artists, Performers, and Athletes	131011	$60,290	340	Structural Metal Fabricators and Fitters	512041	$32,320	1,890	5
Agricultural and Food Science Technicians	194011	$28,980	270	Cementing and Gluing Machine Operators and Tenders	519191	$28,120	520	1
Agricultural and Food Science Technicians	194011	$28,980	270	Graduate Teaching Assistants	251191	$21,360	1,730	2
Agricultural and Food Science Technicians	194011	$28,980	270	Cutting and Slicing Machine Setters, Operators, and Tenders	519032	$28,770	2,860	3
Agricultural and Food Science Technicians	194011	$28,980	270	Helpers--Installation, Maintenance, and Repair Workers	499098	$25,830	4,140	4

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Airfield Operations Specialists	532022	$46,520	130	Child, Family, and School Social Workers	211021	$46,140	8,320	1
Airfield Operations Specialists	532022	$46,520	130	Helpers--Electricians	473013	$27,640	4,040	2
Airfield Operations Specialists	532022	$46,520	130	Pourers and Casters, Metal	514052	$25,320	140	3
Airfield Operations Specialists	532022	$46,520	130	Production, Planning, and Expediting Clerks	435061	$45,900	7,110	4
Airfield Operations Specialists	532022	$46,520	130	First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,400	32,320	5
Amusement and Recreation Attendants	393091	$18,380	6,880	Dishwashers	359021	$17,490	14,920	1
Architects, Except Landscape and Naval	171011	$75,390	2,960	Clinical, Counseling, and School Psychologists	193031	$67,120	1,970	1
Architects, Except Landscape and Naval	171011	$75,390	2,960	Drywall and Ceiling Tile Installers	472081	$33,390	3,090	2
Architects, Except Landscape and Naval	171011	$75,390	2,960	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	3
Architects, Except Landscape and Naval	171011	$75,390	2,960	Gas Compressor and Gas Pumping Station Operators	537071	$53,550	180	4
Architects, Except Landscape and Naval	171011	$75,390	2,960	Producers and Directors	272012	$60,320	1,980	5
Architectural and Civil Drafters	173011	$44,830	2,400	Title Examiners, Abstractors, and Searchers	232093	$38,600	1,170	1
Architectural and Civil Drafters	173011	$44,830	2,400	Procurement Clerks	433061	$39,010	2,240	2
Architectural and Civil Drafters	173011	$44,830	2,400	Maintenance Workers, Machinery	499043	$39,280	1,960	3
Architectural and Civil Drafters	173011	$44,830	2,400	Home Appliance Repairers	499031	$33,410	1,530	4
Architectural and Civil Drafters	173011	$44,830	2,400	Agricultural and Food Science Technicians	194011	$28,980	270	5
Art Directors	271011	$70,310	490	Audio-Visual Collections Specialists	259011	$43,930	130	1
Art Directors	271011	$70,310	490	Security and Fire Alarm Systems Installers	492098	$37,500	1,640	2
Art Directors	271011	$70,310	490	Chemical Technicians	194031	$43,750	1,020	3
Art Directors	271011	$70,310	490	Service Unit Operators, Oil, Gas, and Mining	475013	$32,380	150	4
Art Directors	271011	$70,310	490	Rail-Track Laying and Maintenance Equipment Operators	474061	$42,410	240	5
Audio and Video Equipment Technicians	274011	$37,250	890	Semiconductor Processors	519141	$32,770	610	1
Audio and Video Equipment Technicians	274011	$37,250	890	Bill and Account Collectors	433011	$33,370	11,230	2
Audio and Video Equipment Technicians	274011	$37,250	890	Food Cooking Machine Operators and Tenders	513093	$24,950	920	3
Audio and Video Equipment Technicians	274011	$37,250	890	Pest Control Workers	372021	$32,130	1,910	4
Audio and Video Equipment Technicians	274011	$37,250	890	Court, Municipal, and License Clerks	434031	$33,490	1,740	5
Automotive Body and Related Repairers	493021	$47,200	3,150	Cooks, Institution and Cafeteria	352012	$24,200	7,360	1
Automotive Body and Related Repairers	493021	$47,200	3,150	Medical Secretaries	436013	$31,900	5,470	2

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Automotive Body and Related Repairers	493021	$47,200	3,150	Surgical Technologists	292055	$40,860	2,140	3
Automotive Body and Related Repairers	493021	$47,200	3,150	Grinding and Polishing Workers, Hand	519022	$28,800	400	4
Automotive Body and Related Repairers	493021	$47,200	3,150	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$25,550	3,070	5
Automotive Service Technicians and Mechanics	493023	$40,720	18,440	Animal Breeders	452021	$33,600	30	1
Automotive Service Technicians and Mechanics	493023	$40,720	18,440	Structural Iron and Steel Workers	472221	$40,160	1,460	2
Automotive Service Technicians and Mechanics	493023	$40,720	18,440	Psychiatric Technicians	292053	$25,390	3,610	3
Automotive Service Technicians and Mechanics	493023	$40,720	18,440	Health Technologists and Technicians, All Other	292099	$33,310	2,470	4
Automotive Service Technicians and Mechanics	493023	$40,720	18,440	Electrical and Electronic Equipment Assemblers	512022	$31,960	4,020	5
Bartenders	353011	$23,120	6,220	Parking Lot Attendants	536021	$20,490	2,240	1
Bartenders	353011	$23,120	6,220	Taxi Drivers and Chauffeurs	533041	$22,870	4,450	2
Bartenders	353011	$23,120	6,220	Laundry and Dry-Cleaning Workers	516011	$20,330	6,400	3
Bartenders	353011	$23,120	6,220	Locker Room, Coatroom, and Dressing Room Attendants	393093	$21,320	260	4
Bartenders	353011	$23,120	6,220	Dishwashers	359021	$17,490	14,920	5
Bookkeeping, Accounting, and Auditing Clerks	433031	$36,290	45,950	Court, Municipal, and License Clerks	434031	$33,490	1,740	1
Bookkeeping, Accounting, and Auditing Clerks	433031	$36,290	45,950	Cutters and Trimmers, Hand	519031	$23,210	180	2
Bookkeeping, Accounting, and Auditing Clerks	433031	$36,290	45,950	Library Technicians	254031	$36,120	2,360	3
Bookkeeping, Accounting, and Auditing Clerks	433031	$36,290	45,950	Bus Drivers, School	533022	$27,350	17,270	4
Bookkeeping, Accounting, and Auditing Clerks	433031	$36,290	45,950	Tool Grinders, Filers, and Sharpeners	514194	$29,250	290	5
Broadcast Technicians	274012	$31,930	760	Helpers--Electricians	473013	$27,640	4,040	1
Broadcast Technicians	274012	$31,930	760	Pourers and Casters, Metal	514052	$25,320	140	2
Broadcast Technicians	274012	$31,930	760	Food Cooking Machine Operators and Tenders	513093	$24,950	920	3
Carpenters	472031	$39,270	21,250	Forest and Conservation Workers	454011	$31,130	70	1
Carpenters	472031	$39,270	21,250	Model Makers, Wood	517031	$31,250	40	2
Cashiers	412011	$18,600	96,460	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,590	9,480	1
Cashiers	412011	$18,600	96,460	Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,000	94,150	2
Cashiers	412011	$18,600	96,460	Ushers, Lobby Attendants, and Ticket Takers	393031	$17,780	3,120	3
Chief Executives	111011	$180,130	6,420	Management Analysts	131111	$93,740	43,850	1
Chief Executives	111011	$180,130	6,420	Aerospace Engineers	172011	$107,510	2,270	2

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Chief Executives	111011	$180,130	6,420	Materials Scientists	192032	$84,490	130	3
Chief Executives	111011	$180,130	6,420	Orthodontists	291023	$166,400	170	4
Chief Executives	111011	$180,130	6,420	Engineering Teachers, Postsecondary	251032	$91,260	900	5
Child Care Workers	399011	$21,400	10,770	Transportation Attendants, Except Flight Attendants and Baggage Porters	396032	$18,950	490	1
Child Care Workers	399011	$21,400	10,770	Service Station Attendants	536031	$21,090	1,900	2
Civil Engineers	172051	$81,140	9,550	Veterinary Assistants and Laboratory Animal Caretakers	319096	$21,490	3,770	1
Civil Engineers	172051	$81,140	9,550	Fallers	454021	$39,930	270	2
Civil Engineers	172051	$81,140	9,550	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	516064	$24,890	1,850	3
Civil Engineers	172051	$81,140	9,550	Outdoor Power Equipment and Other Small Engine Mechanics	493053	$30,800	890	4
Civil Engineers	172051	$81,140	9,550	Network and Computer Systems Administrators	151071	$78,290	18,460	5
Claims Adjusters, Examiners, and Investigators	131031	$54,410	6,090	Continuous Mining Machine Operators	475041	$44,300	380	1
Claims Adjusters, Examiners, and Investigators	131031	$54,410	6,090	Title Examiners, Abstractors, and Searchers	232093	$38,600	1,170	2
Claims Adjusters, Examiners, and Investigators	131031	$54,410	6,090	Photographers	274021	$41,020	1,220	3
Claims Adjusters, Examiners, and Investigators	131031	$54,410	6,090	Veterinary Technologists and Technicians	292056	$33,230	1,430	4
Claims Adjusters, Examiners, and Investigators	131031	$54,410	6,090	Crane and Tower Operators	537021	$41,950	1,620	5
Cleaners of Vehicles and Equipment	537061	$22,620	7,300	Meat, Poultry, and Fish Cutters and Trimmers	513022	$22,530	4,250	1
Cleaners of Vehicles and Equipment	537061	$22,620	7,300	Pressers, Textile, Garment, and Related Materials	516021	$19,210	1,770	2
Cleaners of Vehicles and Equipment	537061	$22,620	7,300	Maids and Housekeeping Cleaners	372012	$19,240	27,200	3
Cleaners of Vehicles and Equipment	537061	$22,620	7,300	Dining Room and Cafeteria Attendants and Bartender Helpers	359011	$18,940	10,420	4
Cleaners of Vehicles and Equipment	537061	$22,620	7,300	Sewing Machine Operators	516031	$22,070	2,680	5
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	519121	$31,030	1,570	Tour Guides and Escorts	396021	$23,110	1,380	1
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	519121	$31,030	1,570	Tire Repairers and Changers	493093	$25,480	2,090	2
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	519121	$31,030	1,570	Slaughterers and Meat Packers	513023	$22,350	1,460	3
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	519121	$31,030	1,570	Floral Designers	271023	$25,340	1,360	4
Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	519121	$31,030	1,570	Veterinary Assistants and Laboratory Animal Caretakers	319096	$21,490	3,770	5

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,000	94,150	Ushers, Lobby Attendants, and Ticket Takers	393031	$17,780	3,120	1
Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,000	94,150	Gaming Change Persons and Booth Cashiers	412012	$16,380	210	2
Communications Teachers, Postsecondary	251122	$58,890	480	Fashion Designers	271022	$41,940	50	1
Communications Teachers, Postsecondary	251122	$58,890	480	Electronic Equipment Installers and Repairers, Motor Vehicles	492096	$26,540	540	2
Communications Teachers, Postsecondary	251122	$58,890	480	Sound Engineering Technicians	274014	$41,200	190	3
Communications Teachers, Postsecondary	251122	$58,890	480	Criminal Justice and Law Enforcement Teachers, Postsecondary	251111	$53,900	210	4
Communications Teachers, Postsecondary	251122	$58,890	480	Foresters	191032	$57,460	280	5
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$54,740	7,360	Adult Literacy, Remedial Education, and GED Teachers and Instructors	253011	$47,050	1,340	1
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$54,740	7,360	Automotive Service Technicians and Mechanics	493023	$40,720	18,440	2
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$54,740	7,360	Computer Support Specialists	151041	$48,150	18,840	3
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$54,740	7,360	First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,680	5,900	4
Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$54,740	7,360	First-Line Supervisors/Managers of Food Preparation and Serving Workers	351012	$32,320	23,620	5
Computer and Information Systems Managers	113021	$130,800	12,320	Veterinary Technologists and Technicians	292056	$33,230	1,430	1
Computer and Information Systems Managers	113021	$130,800	12,320	Crane and Tower Operators	537021	$41,950	1,620	2
Computer and Information Systems Managers	113021	$130,800	12,320	Adult Literacy, Remedial Education, and GED Teachers and Instructors	253011	$47,050	1,340	3
Computer and Information Systems Managers	113021	$130,800	12,320	Commercial and Industrial Designers	271021	$55,950	350	4
Computer and Information Systems Managers	113021	$130,800	12,320	First-Line Supervisors/Managers of Non-Retail Sales Workers	411012	$84,550	6,800	5
Computer Software Engineers, Applications	151031	$95,420	31,770	Network and Computer Systems Administrators	151071	$78,290	18,460	1
Computer Software Engineers, Applications	151031	$95,420	31,770	Audiologists	291121	$63,640	460	2
Computer Software Engineers, Applications	151031	$95,420	31,770	Education Teachers, Postsecondary	251081	$61,520	1,500	3
Computer Software Engineers, Applications	151031	$95,420	31,770	Environmental Science Teachers, Postsecondary	251053	$68,490	150	4

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Computer Software Engineers, Applications	151031	$95,420	31,770	Chemical Engineers	172041	$87,030	570	5
Computer Software Engineers, Systems Software	151032	$107,100	28,830	Airline Pilots, Copilots, and Flight Engineers	532011	$97,670	2,570	1
Computer Software Engineers, Systems Software	151032	$107,100	28,830	Network and Computer Systems Administrators	151071	$78,290	18,460	2
Computer Software Engineers, Systems Software	151032	$107,100	28,830	Environmental Science Teachers, Postsecondary	251053	$68,490	150	3
Computer Software Engineers, Systems Software	151032	$107,100	28,830	Computer Software Engineers, Applications	151031	$95,420	31,770	4
Computer Software Engineers, Systems Software	151032	$107,100	28,830	Radio Mechanics	492021	$44,160	670	5
Computer Systems Analysts	151051	$92,300	35,030	Fashion Designers	271022	$41,940	50	1
Computer Systems Analysts	151051	$92,300	35,030	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	2
Computer Systems Analysts	151051	$92,300	35,030	Public Relations Specialists	273031	$66,740	8,230	3
Computer Systems Analysts	151051	$92,300	35,030	Petroleum Pump System Operators, Refinery Operators, and Gaugers	518093	$59,830	250	4
Computer Systems Analysts	151051	$92,300	35,030	Statisticians	152041	$80,550	510	5
Conservation Scientists	191031	$66,680	360	Curators	254012	$56,320	300	1
Conservation Scientists	191031	$66,680	360	Social Science Research Assistants	194061	$43,170	700	2
Conservation Scientists	191031	$66,680	360	Title Examiners, Abstractors, and Searchers	232093	$38,600	1,170	3
Conservation Scientists	191031	$66,680	360	Continuous Mining Machine Operators	475041	$44,300	380	4
Conservation Scientists	191031	$66,680	360	Embalmers	394011	$47,540	520	5
Construction and Building Inspectors	474011	$54,260	3,240	Hotel, Motel, and Resort Desk Clerks	434081	$20,610	6,850	1
Construction and Building Inspectors	474011	$54,260	3,240	Funeral Directors	119061	$53,320	380	2
Construction and Building Inspectors	474011	$54,260	3,240	Team Assemblers	512092	$27,550	13,890	3
Construction and Building Inspectors	474011	$54,260	3,240	Medical Transcriptionists	319094	$31,560	1,950	4
Construction and Building Inspectors	474011	$54,260	3,240	Nonfarm Animal Caretakers	392021	$20,540	4,400	5
Construction Laborers	472061	$26,180	24,820	Landscaping and Groundskeeping Workers	373011	$23,760	24,470	1
Construction Laborers	472061	$26,180	24,820	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$19,340	8,670	2
Construction Laborers	472061	$26,180	24,820	Shampooers	395093	$18,660	1,430	3
Construction Laborers	472061	$26,180	24,820	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$22,180	58,670	4
Construction Laborers	472061	$26,180	24,820	Farmworkers, Farm and Ranch Animals	452093	$22,990	1,370	5
Construction Managers	119021	$90,480	6,120	Mechanical Door Repairers	499011	$36,440	240	1
Construction Managers	119021	$90,480	6,120	Appraisers and Assessors of Real Estate	132021	$55,520	2,270	2

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Construction Managers	119021	$90,480	6,120	Pharmacy Aides	319095	$21,430	1,140	3
Construction Managers	119021	$90,480	6,120	Insurance Underwriters	132053	$53,670	1,640	4
Construction Managers	119021	$90,480	6,120	Motion Picture Projectionists	393021	$21,130	150	5
Conveyor Operators and Tenders	537011	$30,230	750	Demonstrators and Product Promoters	419011	$27,150	2,620	1
Conveyor Operators and Tenders	537011	$30,230	750	Shipping, Receiving, and Traffic Clerks	435071	$29,370	15,220	2
Conveyor Operators and Tenders	537011	$30,230	750	Social and Human Service Assistants	211093	$28,430	6,290	3
Conveyor Operators and Tenders	537011	$30,230	750	Hotel, Motel, and Resort Desk Clerks	434081	$20,610	6,850	4
Conveyor Operators and Tenders	537011	$30,230	750	Service Station Attendants	536031	$21,090	1,900	5
Cost Estimators	131051	$60,340	6,920	Bus Drivers, Transit and Intercity	533021	$32,780	5,160	1
Cost Estimators	131051	$60,340	6,920	Funeral Directors	119061	$53,320	380	2
Cost Estimators	131051	$60,340	6,920	Funeral Attendants	394021	$21,500	1,340	3
Cost Estimators	131051	$60,340	6,920	Fiberglass Laminators and Fabricators	512091	$26,110	50	4
Cost Estimators	131051	$60,340	6,920	Insulation Workers, Floor, Ceiling, and Wall	472131	$37,200	460	5
Crane and Tower Operators	537021	$41,950	1,620	Veterinary Technologists and Technicians	292056	$33,230	1,430	1
Crane and Tower Operators	537021	$41,950	1,620	Agricultural and Food Science Technicians	194011	$28,980	270	2
Crane and Tower Operators	537021	$41,950	1,620	Forest and Conservation Technicians	194093	$35,350	350	3
Crane and Tower Operators	537021	$41,950	1,620	Helpers--Installation, Maintenance, and Repair Workers	499098	$25,830	4,140	4
Crane and Tower Operators	537021	$41,950	1,620	Maintenance Workers, Machinery	499043	$39,280	1,960	5
Customer Service Representatives	434051	$31,890	54,150	Teacher Assistants	259041	$23,610	30,230	1
Customer Service Representatives	434051	$31,890	54,150	Skin Care Specialists	395094	$30,080	1,000	2
Customer Service Representatives	434051	$31,890	54,150	Outdoor Power Equipment and Other Small Engine Mechanics	493053	$30,800	890	3
Customer Service Representatives	434051	$31,890	54,150	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	516064	$24,890	1,850	4
Customer Service Representatives	434051	$31,890	54,150	Pharmacy Technicians	292052	$27,390	7,720	5
Data Entry Keyers	439021	$27,990	6,050	Tellers	433071	$25,340	13,950	1
Data Entry Keyers	439021	$27,990	6,050	Upholsterers	516093	$27,310	930	2
Data Entry Keyers	439021	$27,990	6,050	Stock Clerks and Order Fillers	435081	$23,710	49,240	3
Data Entry Keyers	439021	$27,990	6,050	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	473011	$27,320	2,350	4
Data Entry Keyers	439021	$27,990	6,050	Library Assistants, Clerical	434121	$25,840	3,290	5

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Dishwashers	359021	$17,490	14,920	Gaming Change Persons and Booth Cashiers	412012	$16,380	210	1
Earth Drillers, Except Oil and Gas	475021	$38,670	920	Cleaners of Vehicles and Equipment	537061	$22,620	7,300	1
Earth Drillers, Except Oil and Gas	475021	$38,670	920	Maids and Housekeeping Cleaners	372012	$19,240	27,200	2
Earth Drillers, Except Oil and Gas	475021	$38,670	920	Meat, Poultry, and Fish Cutters and Trimmers	513022	$22,530	4,250	3
Earth Drillers, Except Oil and Gas	475021	$38,670	920	Stock Clerks and Order Fillers	435081	$23,710	49,240	4
Earth Drillers, Except Oil and Gas	475021	$38,670	920	Laborers and Freight, Stock, and Material Movers, Hand	537062	$24,640	42,420	5
Economists	193011	$113,550	440	Farm Equipment Mechanics	493041	$32,120	330	1
Economists	193011	$113,550	440	Chemical Technicians	194031	$43,750	1,020	2
Economists	193011	$113,550	440	Health Technologists and Technicians, All Other	292099	$33,310	2,470	3
Economists	193011	$113,550	440	Landscape Architects	171012	$57,910	700	4
Economists	193011	$113,550	440	Personal Financial Advisors	132052	$89,140	2,740	5
Education Administrators, Elementary and Secondary School	119032	$85,820	6,460	Athletic Trainers	299091	$35,300	340	1
Education Administrators, Elementary and Secondary School	119032	$85,820	6,460	Chemists	192031	$78,380	1,870	2
Education Administrators, Elementary and Secondary School	119032	$85,820	6,460	Social Work Teachers, Postsecondary	251113	$61,730	240	3
Education Administrators, Elementary and Secondary School	119032	$85,820	6,460	Network and Computer Systems Administrators	151071	$78,290	18,460	4
Education Administrators, Elementary and Secondary School	119032	$85,820	6,460	Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary	251051	$83,690	220	5
Education Administrators, Postsecondary	119033	$92,730	2,770	Power Distributors and Dispatchers	518012	$58,870	380	1
Education Administrators, Postsecondary	119033	$92,730	2,770	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$75,390	610	2
Education Administrators, Postsecondary	119033	$92,730	2,770	Audiologists	291121	$63,640	460	3
Education Administrators, Postsecondary	119033	$92,730	2,770	Clergy	212011	$42,380	880	4
Education Administrators, Postsecondary	119033	$92,730	2,770	Biological Science Teachers, Postsecondary	251042	$72,160	1,920	5
Education Administrators, Preschool and Child Care Center/Program	119031	$42,240	1,510	Chemical Equipment Operators and Tenders	519011	$41,780	1,420	1
Education Administrators, Preschool and Child Care Center/Program	119031	$42,240	1,510	Recreation Workers	399032	$26,310	9,920	2
Education Administrators, Preschool and Child Care Center/Program	119031	$42,240	1,510	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	514023	$35,190	700	3
Education Administrators, Preschool and Child Care Center/Program	119031	$42,240	1,510	Music Directors and Composers	272041	$38,740	350	4

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Educational, Vocational, and School Counselors	211012	$59,870	6,250	Substance Abuse and Behavioral Disorder Counselors	211011	$43,520	2,170	1
Educational, Vocational, and School Counselors	211012	$59,870	6,250	Animal Trainers	392011	$32,520	360	2
Educational, Vocational, and School Counselors	211012	$59,870	6,250	Structural Iron and Steel Workers	472221	$40,160	1,460	3
Educational, Vocational, and School Counselors	211012	$59,870	6,250	Industrial Engineering Technicians	173026	$46,210	1,300	4
Educational, Vocational, and School Counselors	211012	$59,870	6,250	Set and Exhibit Designers	271027	$46,240	320	5
Electrical and Electronic Engineering Technicians	173023	$57,300	6,300	Hotel, Motel, and Resort Desk Clerks	434081	$20,610	6,850	1
Electrical and Electronic Engineering Technicians	173023	$57,300	6,300	Boilermakers	472011	$48,190	750	2
Electrical and Electronic Engineering Technicians	173023	$57,300	6,300	Social and Human Service Assistants	211093	$28,430	6,290	3
Electrical and Electronic Engineering Technicians	173023	$57,300	6,300	Massage Therapists	319011	$39,170	990	4
Electrical and Electronic Engineering Technicians	173023	$57,300	6,300	Directors, Religious Activities and Education	212021	$45,700	330	5
Electrical and Electronics Drafters	173012	$58,050	710	Medical Equipment Preparers	319093	$27,670	870	1
Electrical and Electronics Drafters	173012	$58,050	710	Pesticide Handlers, Sprayers, and Applicators, Vegetation	373012	$34,510	250	2
Electrical and Electronics Drafters	173012	$58,050	710	Ophthalmic Laboratory Technicians	519083	$26,870	1,040	3
Electrical and Electronics Drafters	173012	$58,050	710	Self-Enrichment Education Teachers	253021	$44,620	3,540	4
Electrical and Electronics Drafters	173012	$58,050	710	Job Printers	515021	$37,490	580	5
Electrical Engineers	172071	$89,490	7,890	Chemical Engineers	172041	$87,030	570	1
Electrical Engineers	172071	$89,490	7,890	Chemists	192031	$78,380	1,870	2
Electrical Engineers	172071	$89,490	7,890	Network and Computer Systems Administrators	151071	$78,290	18,460	3
Electrical Engineers	172071	$89,490	7,890	Anthropology and Archeology Teachers, Postsecondary	251061	$72,220	100	4
Electrical Engineers	172071	$89,490	7,890	Athletic Trainers	299091	$35,300	340	5
Electricians	472111	$45,820	18,540	Dietetic Technicians	292051	$26,700	650	1
Electricians	472111	$45,820	18,540	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	514122	$36,370	1,360	2
Electricians	472111	$45,820	18,540	Insulation Workers, Floor, Ceiling, and Wall	472131	$37,200	460	3
Electricians	472111	$45,820	18,540	Driver/Sales Workers	533031	$29,360	8,500	4
Electricians	472111	$45,820	18,540	Amusement and Recreation Attendants	393091	$18,380	6,880	5
Electronic Home Entertainment Equipment Installers and Repairers	492097	$37,960	1,090	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	519021	$29,630	600	1
Electronic Home Entertainment Equipment Installers and Repairers	492097	$37,960	1,090	Court, Municipal, and License Clerks	434031	$33,490	1,740	2

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Electronic Home Entertainment Equipment Installers and Repairers	492097	$37,960	1,090	Personal and Home Care Aides	399021	$17,510	12,670	3
Electronic Home Entertainment Equipment Installers and Repairers	492097	$37,960	1,090	Bill and Account Collectors	433011	$33,370	11,230	4
Electronic Home Entertainment Equipment Installers and Repairers	492097	$37,960	1,090	Prepress Technicians and Workers	515022	$37,410	1,810	5
Electronics Engineers, Except Computer	172072	$96,760	5,160	Fire Fighters	332011	$46,590	8,120	1
Electronics Engineers, Except Computer	172072	$96,760	5,160	Anthropologists and Archeologists	193091	$50,510	130	2
Electronics Engineers, Except Computer	172072	$96,760	5,160	Network Systems and Data Communications Analysts	151081	$81,640	13,650	3
Electronics Engineers, Except Computer	172072	$96,760	5,160	Rotary Drill Operators, Oil and Gas	475012	$30,830	220	4
Electronics Engineers, Except Computer	172072	$96,760	5,160	Education Teachers, Postsecondary	251081	$61,520	1,500	5
Elevator Installers and Repairers	474021	$61,430	400	Computer, Automated Teller, and Office Machine Repairers	492011	$42,700	3,780	1
Elevator Installers and Repairers	474021	$61,430	400	Lodging Managers	119081	$56,410	800	2
Elevator Installers and Repairers	474021	$61,430	400	First-Line Supervisors/Managers of Personal Service Workers	391021	$40,340	3,670	3
Elevator Installers and Repairers	474021	$61,430	400	Procurement Clerks	433061	$39,010	2,240	4
Elevator Installers and Repairers	474021	$61,430	400	Producers and Directors	272012	$60,320	1,980	5
Emergency Management Specialists	131061	$72,710	540	Numerical Tool and Process Control Programmers	514012	$43,980	140	1
Emergency Management Specialists	131061	$72,710	540	Architectural and Civil Drafters	173011	$44,830	2,400	2
Emergency Management Specialists	131061	$72,710	540	Procurement Clerks	433061	$39,010	2,240	3
Emergency Management Specialists	131061	$72,710	540	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,660	5,850	4
Emergency Management Specialists	131061	$72,710	540	Chemical Technicians	194031	$43,750	1,020	5
Engineering Managers	119041	$126,300	5,130	Securities, Commodities, and Financial Services Sales Agents	413031	$78,660	5,650	1
Engineering Managers	119041	$126,300	5,130	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	531021	$44,230	3,450	2
Engineering Managers	119041	$126,300	5,130	Loan Counselors	132071	$47,200	650	3
Engineering Managers	119041	$126,300	5,130	Agents and Business Managers of Artists, Performers, and Athletes	131011	$60,290	340	4
Engineering Managers	119041	$126,300	5,130	Psychiatric Technicians	292053	$25,390	3,610	5
Environmental Engineering Technicians	173025	$44,570	550	Textile Bleaching and Dyeing Machine Operators and Tenders	516061	$25,070	340	1

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Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Environmental Engineering Technicians	173025	$44,570	550	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514032	$32,050	360	2
Environmental Engineering Technicians	173025	$44,570	550	Archivists	254011	$44,410	90	3
Environmental Engineering Technicians	173025	$44,570	550	Septic Tank Servicers and Sewer Pipe Cleaners	474071	$31,410	440	4
Environmental Engineering Technicians	173025	$44,570	550	Occupational Therapist Aides	312012	$32,110	100	5
Environmental Engineers	172081	$83,540	2,130	Carpenters	472031	$39,270	21,250	1
Environmental Engineers	172081	$83,540	2,130	Transportation Attendants, Except Flight Attendants and Baggage Porters	396032	$18,950	490	2
Environmental Engineers	172081	$83,540	2,130	Microbiologists	191022	$81,990	460	3
Environmental Engineers	172081	$83,540	2,130	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$54,740	7,360	4
Environmental Engineers	172081	$83,540	2,130	Network and Computer Systems Administrators	151071	$78,290	18,460	5
Environmental Science and Protection Technicians, Including Health	194091	$44,110	460	Sawing Machine Setters, Operators, and Tenders, Wood	517041	$29,390	1,700	1
Environmental Science and Protection Technicians, Including Health	194091	$44,110	460	Licensed Practical and Licensed Vocational Nurses	292061	$37,950	19,980	2
Environmental Science and Protection Technicians, Including Health	194091	$44,110	460	Painters, Construction and Maintenance	472141	$34,200	6,720	3
Environmental Science and Protection Technicians, Including Health	194091	$44,110	460	Merchandise Displayers and Window Trimmers	271026	$28,780	1,050	4
Environmental Science and Protection Technicians, Including Health	194091	$44,110	460	Court, Municipal, and License Clerks	434031	$33,490	1,740	5
Environmental Science Teachers, Postsecondary	251053	$68,490	150	Radio Mechanics	492021	$44,160	670	1
Environmental Science Teachers, Postsecondary	251053	$68,490	150	Clergy	212011	$42,380	880	2
Environmental Science Teachers, Postsecondary	251053	$68,490	150	Rotary Drill Operators, Oil and Gas	475012	$30,830	220	3
Environmental Science Teachers, Postsecondary	251053	$68,490	150	Travel Guides	396022	$27,730	230	4
Environmental Science Teachers, Postsecondary	251053	$68,490	150	Fire Fighters	332011	$46,590	8,120	5
Environmental Scientists and Specialists, Including Health	192041	$80,900	3,080	Physical Therapists	291123	$75,880	3,930	1
Environmental Scientists and Specialists, Including Health	192041	$80,900	3,080	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$54,740	7,360	2
Environmental Scientists and Specialists, Including Health	192041	$80,900	3,080	Automotive Glass Installers and Repairers	493022	$35,010	430	3
Environmental Scientists and Specialists, Including Health	192041	$80,900	3,080	Bindery Workers	515011	$33,160	2,070	4

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Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Environmental Scientists and Specialists, Including Health	192041	$80,900	3,080	Pharmacy Aides	319095	$21,430	1,140	5
Executive Secretaries and Administrative Assistants	436011	$46,480	26,650	Court, Municipal, and License Clerks	434031	$33,490	1,740	1
Executive Secretaries and Administrative Assistants	436011	$46,480	26,650	Cooks, Institution and Cafeteria	352012	$24,200	7,360	2
Executive Secretaries and Administrative Assistants	436011	$46,480	26,650	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	339092	$18,540	4,520	3
Executive Secretaries and Administrative Assistants	436011	$46,480	26,650	Secretaries, Except Legal, Medical, and Executive	436014	$34,500	17,300	4
Executive Secretaries and Administrative Assistants	436011	$46,480	26,650	Demonstrators and Product Promoters	419011	$27,150	2,620	5
Fallers	454021	$39,930	270	Helpers--Carpenters	473012	$27,290	3,720	1
Fallers	454021	$39,930	270	Carpenters	472031	$39,270	21,250	2
Fallers	454021	$39,930	270	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	516064	$24,890	1,850	3
Fallers	454021	$39,930	270	Outdoor Power Equipment and Other Small Engine Mechanics	493053	$30,800	890	4
Fallers	454021	$39,930	270	Veterinary Assistants and Laboratory Animal Caretakers	319096	$21,490	3,770	5
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	Ushers, Lobby Attendants, and Ticket Takers	393031	$17,780	3,120	1
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	419091	$20,720	320	2
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	Dining Room and Cafeteria Attendants and Bartender Helpers	359011	$18,940	10,420	3
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	Laundry and Dry-Cleaning Workers	516011	$20,330	6,400	4
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	Packers and Packagers, Hand	537064	$20,150	14,680	5
Fence Erectors	474031	$31,170	650	Tellers	433071	$25,340	13,950	1
Fence Erectors	474031	$31,170	650	Stock Clerks and Order Fillers	435081	$23,710	49,240	2
Fence Erectors	474031	$31,170	650	Tool Grinders, Filers, and Sharpeners	514194	$29,250	290	3
Fence Erectors	474031	$31,170	650	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	419091	$20,720	320	4
Fence Erectors	474031	$31,170	650	Sawing Machine Setters, Operators, and Tenders, Wood	517041	$29,390	1,700	5
Fiberglass Laminators and Fabricators	512091	$26,110	50	Waiters and Waitresses	353031	$21,100	60,580	1
Fiberglass Laminators and Fabricators	512091	$26,110	50	Amusement and Recreation Attendants	393091	$18,380	6,880	2

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Fiberglass Laminators and Fabricators	512091	$26,110	50	Bartenders	353011	$23,120	6,220	3
Fiberglass Laminators and Fabricators	512091	$26,110	50	Stock Clerks and Order Fillers	435081	$23,710	49,240	4
Fiberglass Laminators and Fabricators	512091	$26,110	50	Baggage Porters and Bellhops	396011	$20,900	1,820	5
Financial Managers	113031	$115,670	11,490	Mathematical Science Teachers, Postsecondary	251022	$61,020	1,560	1
Financial Managers	113031	$115,670	11,490	Chemical Technicians	194031	$43,750	1,020	2
Financial Managers	113031	$115,670	11,490	First-Line Supervisors/Managers of Production and Operating Workers	511011	$55,460	12,800	3
Financial Managers	113031	$115,670	11,490	Choreographers	272032	$47,680	1,000	4
Financial Managers	113031	$115,670	11,490	Animal Trainers	392011	$32,520	360	5
Fire Fighters	332011	$46,590	8,120	Security and Fire Alarm Systems Installers	492098	$37,500	1,640	1
Fire Fighters	332011	$46,590	8,120	Service Unit Operators, Oil, Gas, and Mining	475013	$32,380	150	2
Fire Fighters	332011	$46,590	8,120	Electric Motor, Power Tool, and Related Repairers	492092	$40,610	630	3
Fire Fighters	332011	$46,590	8,120	Industrial Machinery Mechanics	499041	$44,360	7,180	4
Fire Fighters	332011	$46,590	8,120	Rail-Track Laying and Maintenance Equipment Operators	474061	$42,410	240	5
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$58,680	18,520	Radio and Television Announcers	273011	$38,670	800	1
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$58,680	18,520	Continuous Mining Machine Operators	475041	$44,300	380	2
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$58,680	18,520	Proofreaders and Copy Markers	439081	$34,740	400	3
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$58,680	18,520	Medical and Public Health Social Workers	211022	$48,000	2,120	4
First-Line Supervisors/Managers of Construction Trades and Extraction Workers	471011	$58,680	18,520	Rehabilitation Counselors	211015	$32,230	4,960	5
First-Line Supervisors/Managers of Correctional Officers	331011	$50,060	2,210	Animal Breeders	452021	$33,600	30	1
First-Line Supervisors/Managers of Correctional Officers	331011	$50,060	2,210	Plumbers, Pipefitters, and Steamfitters	472152	$41,790	13,740	2
First-Line Supervisors/Managers of Correctional Officers	331011	$50,060	2,210	Mental Health Counselors	211014	$47,070	4,910	3
First-Line Supervisors/Managers of Correctional Officers	331011	$50,060	2,210	Choreographers	272032	$47,680	1,000	4
First-Line Supervisors/Managers of Correctional Officers	331011	$50,060	2,210	Coaches and Scouts	272022	$35,910	4,780	5
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	Medical Equipment Repairers	499062	$42,090	690	1

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$43,050	9,380	2
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	Statistical Assistants	439111	$40,530	80	3
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	Music Directors and Composers	272041	$38,740	350	4
First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	Drywall and Ceiling Tile Installers	472081	$33,390	3,090	5
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	331021	$73,440	1,690	Anthropologists and Archeologists	193091	$50,510	130	1
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	331021	$73,440	1,690	Librarians	254021	$61,950	4,710	2
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	331021	$73,440	1,690	Social and Community Service Managers	119151	$68,910	2,580	3
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	331021	$73,440	1,690	Vocational Education Teachers, Postsecondary	251194	$47,110	1,630	4
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	331021	$73,440	1,690	Zoologists and Wildlife Biologists	191023	$56,670	230	5
First-Line Supervisors/Managers of Food Preparation and Serving Workers	351012	$32,320	23,620	Word Processors and Typists	439022	$31,830	2,290	1
First-Line Supervisors/Managers of Food Preparation and Serving Workers	351012	$32,320	23,620	Parking Enforcement Workers	333041	$29,230	230	2
First-Line Supervisors/Managers of Food Preparation and Serving Workers	351012	$32,320	23,620	Foundry Mold and Coremakers	514071	$26,500	100	3
First-Line Supervisors/Managers of Food Preparation and Serving Workers	351012	$32,320	23,620	Floral Designers	271023	$25,340	1,360	4
First-Line Supervisors/Managers of Food Preparation and Serving Workers	351012	$32,320	23,620	Tire Repairers and Changers	493093	$25,480	2,090	5
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,680	5,900	Rehabilitation Counselors	211015	$32,230	4,960	1
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,680	5,900	Hoist and Winch Operators	537041	$32,420	80	2
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,680	5,900	Fitness Trainers and Aerobics Instructors	399031	$35,340	6,700	3
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,680	5,900	Psychiatric Technicians	292053	$25,390	3,610	4
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	371011	$35,680	5,900	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	519021	$29,630	600	5
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	371012	$44,500	3,090	Model Makers, Wood	517031	$31,250	40	1
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	371012	$44,500	3,090	Forest and Conservation Workers	454011	$31,130	70	2

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	371012	$44,500	3,090	Carpenters	472031	$39,270	21,250	3
First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers	371012	$44,500	3,090	Sound Engineering Technicians	274014	$41,200	190	4
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,820	12,500	Eligibility Interviewers, Government Programs	434061	$40,110	3,470	1
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,820	12,500	Molders, Shapers, and Casters, Except Metal and Plastic	519195	$30,750	860	2
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,820	12,500	Pipelayers	472151	$30,990	1,480	3
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,820	12,500	Hazardous Materials Removal Workers	474041	$30,710	730	4
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	491011	$61,820	12,500	Mechanical Door Repairers	499011	$36,440	240	5
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$51,470	36,520	Mechanical Drafters	173013	$44,270	2,510	1
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$51,470	36,520	Industrial Machinery Mechanics	499041	$44,360	7,180	2
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$51,470	36,520	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$27,510	2,780	3
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$51,470	36,520	Fire Fighters	332011	$46,590	8,120	4
First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$51,470	36,520	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	514035	$37,940	230	5
First-Line Supervisors/Managers of Personal Service Workers	391021	$40,340	3,670	Motorboat Mechanics	493051	$35,220	280	1
First-Line Supervisors/Managers of Personal Service Workers	391021	$40,340	3,670	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic	514023	$35,190	700	2
First-Line Supervisors/Managers of Personal Service Workers	391021	$40,340	3,670	Molders, Shapers, and Casters, Except Metal and Plastic	519195	$30,750	860	3
First-Line Supervisors/Managers of Personal Service Workers	391021	$40,340	3,670	Agricultural Equipment Operators	452091	$25,610	90	4
First-Line Supervisors/Managers of Personal Service Workers	391021	$40,340	3,670	Music Directors and Composers	272041	$38,740	350	5
First-Line Supervisors/Managers of Production and Operating Workers	511011	$55,460	12,800	Health Educators	211091	$51,340	1,680	1
First-Line Supervisors/Managers of Production and Operating Workers	511011	$55,460	12,800	Probation Officers and Correctional Treatment Specialists	211092	$41,780	3,420	2
First-Line Supervisors/Managers of Production and Operating Workers	511011	$55,460	12,800	Employment, Recruitment, and Placement Specialists	131071	$53,930	5,630	3
First-Line Supervisors/Managers of Production and Operating Workers	511011	$55,460	12,800	Police and Sheriff's Patrol Officers	333051	$50,190	16,650	4

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Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
First-Line Supervisors/Managers of Production and Operating Workers	511011	$55,460	12,800	Pump Operators, Except Wellhead Pumpers	537072	$36,080	260	5
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,400	32,320	Metal-Refining Furnace Operators and Tenders	514051	$34,310	210	1
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,400	32,320	Job Printers	515021	$37,490	580	2
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,400	32,320	Sheet Metal Workers	472211	$39,320	4,970	3
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,400	32,320	Pesticide Handlers, Sprayers, and Applicators, Vegetation	373012	$34,510	250	4
First-Line Supervisors/Managers of Retail Sales Workers	411011	$40,400	32,320	Medical Equipment Preparers	319093	$27,670	870	5
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,660	5,850	Mechanical Engineering Technicians	173027	$48,310	1,240	1
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,660	5,850	Psychiatric Aides	311013	$21,090	950	2
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,660	5,850	Roofers	472181	$34,900	2,520	3
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,660	5,850	Numerical Tool and Process Control Programmers	514012	$43,980	140	4
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	531031	$55,660	5,850	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	5
Floor Sanders and Finishers	472043	$32,990	170	Bartenders	353011	$23,120	6,220	1
Floor Sanders and Finishers	472043	$32,990	170	Truck Drivers, Light or Delivery Services	533033	$30,490	21,610	2
Floor Sanders and Finishers	472043	$32,990	170	Tank Car, Truck, and Ship Loaders	537121	$25,360	230	3
Floor Sanders and Finishers	472043	$32,990	170	Food Batchmakers	513092	$25,960	1,710	4
Floor Sanders and Finishers	472043	$32,990	170	Waiters and Waitresses	353031	$21,100	60,580	5
Food Cooking Machine Operators and Tenders	513093	$24,950	920	Teacher Assistants	259041	$23,610	30,230	1
Food Preparation Workers	352021	$19,690	16,020	Home Health Aides	311011	$19,620	17,140	1
Food Preparation Workers	352021	$19,690	16,020	Shampooers	395093	$18,660	1,430	2
Food Servers, Nonrestaurant	353041	$21,250	4,510	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	339092	$18,540	4,520	1
Food Servers, Nonrestaurant	353041	$21,250	4,510	Nonfarm Animal Caretakers	392021	$20,540	4,400	2

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Foresters	191032	$57,460	280	Zoologists and Wildlife Biologists	191023	$56,670	230	1
Foresters	191032	$57,460	280	Vocational Education Teachers, Postsecondary	251194	$47,110	1,630	2
Foresters	191032	$57,460	280	Occupational Health and Safety Technicians	299012	$40,460	270	3
Foresters	191032	$57,460	280	Electronic Equipment Installers and Repairers, Motor Vehicles	492096	$26,540	540	4
Foresters	191032	$57,460	280	Farm and Home Management Advisors	259021	$43,240	310	5
Furniture Finishers	517021	$26,660	650	Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,000	94,150	1
Furniture Finishers	517021	$26,660	650	Dining Room and Cafeteria Attendants and Bartender Helpers	359011	$18,940	10,420	2
Furniture Finishers	517021	$26,660	650	Stock Clerks and Order Fillers	435081	$23,710	49,240	3
Furniture Finishers	517021	$26,660	650	Counter and Rental Clerks	412021	$25,850	9,580	4
Furniture Finishers	517021	$26,660	650	Laborers and Freight, Stock, and Material Movers, Hand	537062	$24,640	42,420	5
General and Operations Managers	111021	$120,320	47,700	Opticians, Dispensing	292081	$46,540	1,880	1
General and Operations Managers	111021	$120,320	47,700	Film and Video Editors	274032	$51,900	370	2
General and Operations Managers	111021	$120,320	47,700	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	512011	$46,970	100	3
General and Operations Managers	111021	$120,320	47,700	Highway Maintenance Workers	474051	$33,570	3,700	4
General and Operations Managers	111021	$120,320	47,700	Loan Interviewers and Clerks	434131	$36,370	6,260	5
Geographers	193092	$95,220	80	Paving, Surfacing, and Tamping Equipment Operators	472071	$31,410	1,390	1
Geographers	193092	$95,220	80	Electrical and Electronic Engineering Technicians	173023	$57,300	6,300	2
Geographers	193092	$95,220	80	Truck Drivers, Heavy and Tractor-Trailer	533032	$36,860	37,480	3
Geographers	193092	$95,220	80	Radiation Therapists	291124	$74,080	390	4
Geographers	193092	$95,220	80	Bookkeeping, Accounting, and Auditing Clerks	433031	$36,290	45,950	5
Graphic Designers	271024	$51,850	5,700	Baggage Porters and Bellhops	396011	$20,900	1,820	1
Graphic Designers	271024	$51,850	5,700	Refuse and Recyclable Material Collectors	537081	$26,910	3,370	2
Graphic Designers	271024	$51,850	5,700	Food Preparation Workers	352021	$19,690	16,020	3
Graphic Designers	271024	$51,850	5,700	File Clerks	434071	$25,760	3,380	4
Graphic Designers	271024	$51,850	5,700	Barbers	395011	$29,930	700	5
Hazardous Materials Removal Workers	474041	$30,710	730	Skin Care Specialists	395094	$30,080	1,000	1
Hazardous Materials Removal Workers	474041	$30,710	730	Umpires, Referees, and Other Sports Officials	272023	$29,270	190	2

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Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Hazardous Materials Removal Workers	474041	$30,710	730	Child Care Workers	399011	$21,400	10,770	3
Hazardous Materials Removal Workers	474041	$30,710	730	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	419091	$20,720	320	4
Hazardous Materials Removal Workers	474041	$30,710	730	Telemarketers	419041	$21,500	8,330	5
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$75,390	610	Power Distributors and Dispatchers	518012	$58,870	380	1
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$75,390	610	Home Economics Teachers, Postsecondary	251192	$71,050	50	2
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$75,390	610	Audiologists	291121	$63,640	460	3
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$75,390	610	Biological Science Teachers, Postsecondary	251042	$72,160	1,920	4
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$75,390	610	Signal and Track Switch Repairers	499097	$49,470	450	5
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$43,050	9,380	Residential Advisors	399041	$25,010	1,350	1
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$43,050	9,380	Mobile Heavy Equipment Mechanics, Except Engines	493042	$42,170	3,190	2
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$43,050	9,380	Health Technologists and Technicians, All Other	292099	$33,310	2,470	3
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$43,050	9,380	Plumbers, Pipefitters, and Steamfitters	472152	$41,790	13,740	4
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$43,050	9,380	Psychiatric Technicians	292053	$25,390	3,610	5
Helpers--Electricians	473013	$27,640	4,040	Pourers and Casters, Metal	514052	$25,320	140	1
Helpers--Installation, Maintenance, and Repair Workers	499098	$25,830	4,140	Teacher Assistants	259041	$23,610	30,230	1
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$27,510	2,780	Cooling and Freezing Equipment Operators and Tenders	519193	$23,460	480	1
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$27,510	2,780	Graduate Teaching Assistants	251191	$21,360	1,730	2
Helpers--Production Workers	519198	$22,430	8,560	Food Preparation Workers	352021	$19,690	16,020	1
Helpers--Production Workers	519198	$22,430	8,560	Cooks, Restaurant	352014	$22,420	24,980	2
Helpers--Production Workers	519198	$22,430	8,560	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	3
Helpers--Production Workers	519198	$22,430	8,560	Cashiers	412011	$18,600	96,460	4
Helpers--Production Workers	519198	$22,430	8,560	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$22,180	58,670	5
Home Appliance Repairers	499031	$33,410	1,530	Agricultural and Food Science Technicians	194011	$28,980	270	1

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Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Home Appliance Repairers	499031	$33,410	1,530	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$28,850	1,570	2
Home Appliance Repairers	499031	$33,410	1,530	Cutting and Slicing Machine Setters, Operators, and Tenders	519032	$28,770	2,860	3
Home Appliance Repairers	499031	$33,410	1,530	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	519021	$29,630	600	4
Home Appliance Repairers	499031	$33,410	1,530	Camera and Photographic Equipment Repairers	499061	$30,420	100	5
Human Resources Assistants, Except Payroll and Timekeeping	434161	$40,760	5,340	Bus Drivers, School	533022	$27,350	17,270	1
Human Resources Assistants, Except Payroll and Timekeeping	434161	$40,760	5,340	Packaging and Filling Machine Operators and Tenders	519111	$25,740	6,010	2
Human Resources Assistants, Except Payroll and Timekeeping	434161	$40,760	5,340	Parking Enforcement Workers	333041	$29,230	230	3
Human Resources Assistants, Except Payroll and Timekeeping	434161	$40,760	5,340	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	519192	$32,580	200	4
Human Resources Assistants, Except Payroll and Timekeeping	434161	$40,760	5,340	Library Technicians	254031	$36,120	2,360	5
Industrial Machinery Mechanics	499041	$44,360	7,180	Security and Fire Alarm Systems Installers	492098	$37,500	1,640	1
Industrial Machinery Mechanics	499041	$44,360	7,180	Service Unit Operators, Oil, Gas, and Mining	475013	$32,380	150	2
Industrial Machinery Mechanics	499041	$44,360	7,180	Electric Motor, Power Tool, and Related Repairers	492092	$40,610	630	3
Industrial Machinery Mechanics	499041	$44,360	7,180	Radio and Television Announcers	273011	$38,670	800	4
Industrial Machinery Mechanics	499041	$44,360	7,180	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$27,510	2,780	5
Industrial Production Managers	113051	$94,760	2,230	Payroll and Timekeeping Clerks	433051	$36,730	4,060	1
Industrial Production Managers	113051	$94,760	2,230	Athletes and Sports Competitors	272021	$57,920	120	2
Industrial Production Managers	113051	$94,760	2,230	Medical and Public Health Social Workers	211022	$48,000	2,120	3
Industrial Production Managers	113051	$94,760	2,230	Pharmacy Aides	319095	$21,430	1,140	4
Industrial Production Managers	113051	$94,760	2,230	Occupational Therapists	291122	$74,950	2,270	5
Insulation Workers, Floor, Ceiling, and Wall	472131	$37,200	460	File Clerks	434071	$25,760	3,380	1
Insulation Workers, Floor, Ceiling, and Wall	472131	$37,200	460	Stock Clerks and Order Fillers	435081	$23,710	49,240	2
Insulation Workers, Floor, Ceiling, and Wall	472131	$37,200	460	Fiberglass Laminators and Fabricators	512091	$26,110	50	3
Insulation Workers, Floor, Ceiling, and Wall	472131	$37,200	460	Manicurists and Pedicurists	395092	$22,540	1,370	4
Insulation Workers, Floor, Ceiling, and Wall	472131	$37,200	460	Medical Records and Health Information Technicians	292071	$34,540	3,500	5
Interior Designers	271025	$52,550	1,460	Bicycle Repairers	493091	$23,980	140	1

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Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Interior Designers	271025	$52,550	1,460	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	514035	$37,940	230	2
Interior Designers	271025	$52,550	1,460	Audio-Visual Collections Specialists	259011	$43,930	130	3
Interior Designers	271025	$52,550	1,460	Farm Equipment Mechanics	493041	$32,120	330	4
Interior Designers	271025	$52,550	1,460	Statistical Assistants	439111	$40,530	80	5
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$22,180	58,670	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	1
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$22,180	58,670	Shampooers	395093	$18,660	1,430	2
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$22,180	58,670	Cashiers	412011	$18,600	96,460	3
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$22,180	58,670	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$19,340	8,670	4
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$22,180	58,670	Food Preparation Workers	352021	$19,690	16,020	5
Laborers and Freight, Stock, and Material Movers, Hand	537062	$24,640	42,420	Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,000	94,150	1
Laborers and Freight, Stock, and Material Movers, Hand	537062	$24,640	42,420	Gaming Change Persons and Booth Cashiers	412012	$16,380	210	2
Laborers and Freight, Stock, and Material Movers, Hand	537062	$24,640	42,420	Ushers, Lobby Attendants, and Ticket Takers	393031	$17,780	3,120	3
Laborers and Freight, Stock, and Material Movers, Hand	537062	$24,640	42,420	Stock Clerks and Order Fillers	435081	$23,710	49,240	4
Laborers and Freight, Stock, and Material Movers, Hand	537062	$24,640	42,420	Cleaners of Vehicles and Equipment	537061	$22,620	7,300	5
Landscape Architects	171012	$57,910	700	Museum Technicians and Conservators	254013	$37,990	310	1
Landscape Architects	171012	$57,910	700	Chemical Technicians	194031	$43,750	1,020	2
Landscape Architects	171012	$57,910	700	Rail-Track Laying and Maintenance Equipment Operators	474061	$42,410	240	3
Landscape Architects	171012	$57,910	700	Audio-Visual Collections Specialists	259011	$43,930	130	4
Landscape Architects	171012	$57,910	700	Service Unit Operators, Oil, Gas, and Mining	475013	$32,380	150	5
Landscaping and Groundskeeping Workers	373011	$23,760	24,470	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	1
Landscaping and Groundskeeping Workers	373011	$23,760	24,470	Cashiers	412011	$18,600	96,460	2
Landscaping and Groundskeeping Workers	373011	$23,760	24,470	Helpers--Production Workers	519198	$22,430	8,560	3
Landscaping and Groundskeeping Workers	373011	$23,760	24,470	Food Preparation Workers	352021	$19,690	16,020	4
Landscaping and Groundskeeping Workers	373011	$23,760	24,470	Stock Clerks and Order Fillers	435081	$23,710	49,240	5

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Logging Equipment Operators	454022	$29,250	1,170	Coil Winders, Tapers, and Finishers	512021	$27,170	510	1
Logging Equipment Operators	454022	$29,250	1,170	Dining Room and Cafeteria Attendants and Bartender Helpers	359011	$18,940	10,420	2
Logging Equipment Operators	454022	$29,250	1,170	Furniture Finishers	517021	$26,660	650	3
Logging Equipment Operators	454022	$29,250	1,170	Cooks, Restaurant	352014	$22,420	24,980	4
Logging Equipment Operators	454022	$29,250	1,170	Counter and Rental Clerks	412021	$25,850	9,580	5
Machine Feeders and Offbearers	537063	$28,630	3,200	Landscaping and Groundskeeping Workers	373011	$23,760	24,470	1
Machine Feeders and Offbearers	537063	$28,630	3,200	Taxi Drivers and Chauffeurs	533041	$22,870	4,450	2
Machine Feeders and Offbearers	537063	$28,630	3,200	Helpers--Production Workers	519198	$22,430	8,560	3
Machine Feeders and Offbearers	537063	$28,630	3,200	Furniture Finishers	517021	$26,660	650	4
Machine Feeders and Offbearers	537063	$28,630	3,200	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	5
Machinists	514041	$39,820	7,230	Construction Laborers	472061	$26,180	24,820	1
Machinists	514041	$39,820	7,230	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	519051	$39,080	470	2
Machinists	514041	$39,820	7,230	Billing and Posting Clerks and Machine Operators	433021	$34,460	12,740	3
Machinists	514041	$39,820	7,230	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$19,340	8,670	4
Machinists	514041	$39,820	7,230	Nursing Aides, Orderlies, and Attendants	311012	$23,460	33,560	5
Maids and Housekeeping Cleaners	372012	$19,240	27,200	Pressers, Textile, Garment, and Related Materials	516021	$19,210	1,770	1
Maids and Housekeeping Cleaners	372012	$19,240	27,200	Dining Room and Cafeteria Attendants and Bartender Helpers	359011	$18,940	10,420	2
Maids and Housekeeping Cleaners	372012	$19,240	27,200	Gaming Change Persons and Booth Cashiers	412012	$16,380	210	3
Maids and Housekeeping Cleaners	372012	$19,240	27,200	Ushers, Lobby Attendants, and Ticket Takers	393031	$17,780	3,120	4
Maids and Housekeeping Cleaners	372012	$19,240	27,200	Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,000	94,150	5
Maintenance and Repair Workers, General	499042	$39,360	36,950	Metal-Refining Furnace Operators and Tenders	514051	$34,310	210	1
Maintenance and Repair Workers, General	499042	$39,360	36,950	Job Printers	515021	$37,490	580	2
Maintenance and Repair Workers, General	499042	$39,360	36,950	Ophthalmic Laboratory Technicians	519083	$26,870	1,040	3
Maintenance and Repair Workers, General	499042	$39,360	36,950	Loan Interviewers and Clerks	434131	$36,370	6,260	4
Maintenance and Repair Workers, General	499042	$39,360	36,950	Pharmacy Technicians	292052	$27,390	7,720	5
Maintenance Workers, Machinery	499043	$39,280	1,960	Insurance Claims and Policy Processing Clerks	439041	$34,460	5,410	1
Maintenance Workers, Machinery	499043	$39,280	1,960	Teacher Assistants	259041	$23,610	30,230	2

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Maintenance Workers, Machinery	499043	$39,280	1,960	Preschool Teachers, Except Special Education	252011	$27,100	13,550	3
Maintenance Workers, Machinery	499043	$39,280	1,960	New Accounts Clerks	434141	$32,150	1,780	4
Maintenance Workers, Machinery	499043	$39,280	1,960	Veterinary Technologists and Technicians	292056	$33,230	1,430	5
Management Analysts	131111	$93,740	43,850	Materials Scientists	192032	$84,490	130	1
Management Analysts	131111	$93,740	43,850	Clergy	212011	$42,380	880	2
Management Analysts	131111	$93,740	43,850	Engineering Teachers, Postsecondary	251032	$91,260	900	3
Management Analysts	131111	$93,740	43,850	Education Administrators, Postsecondary	119033	$92,730	2,770	4
Management Analysts	131111	$93,740	43,850	Social Work Teachers, Postsecondary	251113	$61,730	240	5
Market Research Analysts	193021	$67,540	8,280	Tax Preparers	132082	$32,540	1,710	1
Market Research Analysts	193021	$67,540	8,280	Floor Layers, Except Carpet, Wood, and Hard Tiles	472042	$34,930	200	2
Market Research Analysts	193021	$67,540	8,280	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514032	$32,050	360	3
Market Research Analysts	193021	$67,540	8,280	Motorcycle Mechanics	493052	$37,420	370	4
Market Research Analysts	193021	$67,540	8,280	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	514021	$30,160	1,800	5
Marketing Managers	112021	$131,610	3,990	Preschool Teachers, Except Special Education	252011	$27,100	13,550	1
Marketing Managers	112021	$131,610	3,990	Service Station Attendants	536031	$21,090	1,900	2
Marketing Managers	112021	$131,610	3,990	Detectives and Criminal Investigators	333021	$77,460	3,170	3
Marketing Managers	112021	$131,610	3,990	Cargo and Freight Agents	435011	$37,610	1,600	4
Marketing Managers	112021	$131,610	3,990	Electrical and Electronic Engineering Technicians	173023	$57,300	6,300	5
Mechanical Drafters	173013	$44,270	2,510	Medical and Clinical Laboratory Technicians	292012	$37,440	3,950	1
Mechanical Drafters	173013	$44,270	2,510	Geological and Petroleum Technicians	194041	$36,240	70	2
Mechanical Drafters	173013	$44,270	2,510	Psychiatric Technicians	292053	$25,390	3,610	3
Mechanical Drafters	173013	$44,270	2,510	Bicycle Repairers	493091	$23,980	140	4
Mechanical Drafters	173013	$44,270	2,510	Statistical Assistants	439111	$40,530	80	5
Mechanical Engineers	172141	$90,140	7,640	Drywall and Ceiling Tile Installers	472081	$33,390	3,090	1
Mechanical Engineers	172141	$90,140	7,640	Producers and Directors	272012	$60,320	1,980	2
Mechanical Engineers	172141	$90,140	7,640	Public Relations Specialists	273031	$66,740	8,230	3
Mechanical Engineers	172141	$90,140	7,640	Speech-Language Pathologists	291127	$75,010	2,700	4
Mechanical Engineers	172141	$90,140	7,640	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	5

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Medical and Clinical Laboratory Technicians	292012	$37,440	3,950	Geological and Petroleum Technicians	194041	$36,240	70	1
Medical and Clinical Laboratory Technicians	292012	$37,440	3,950	Psychiatric Aides	311013	$21,090	950	2
Medical and Clinical Laboratory Technicians	292012	$37,440	3,950	Bicycle Repairers	493091	$23,980	140	3
Medical and Clinical Laboratory Technicians	292012	$37,440	3,950	Farm Equipment Mechanics	493041	$32,120	330	4
Medical Appliance Technicians	519082	$49,100	350	Crane and Tower Operators	537021	$41,950	1,620	1
Medical Appliance Technicians	519082	$49,100	350	Veterinary Technologists and Technicians	292056	$33,230	1,430	2
Medical Appliance Technicians	519082	$49,100	350	Proofreaders and Copy Markers	439081	$34,740	400	3
Medical Appliance Technicians	519082	$49,100	350	Forest and Conservation Technicians	194093	$35,350	350	4
Medical Appliance Technicians	519082	$49,100	350	Photographers	274021	$41,020	1,220	5
Medical Assistants	319092	$29,830	9,930	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$22,180	58,670	1
Medical Assistants	319092	$29,830	9,930	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	419091	$20,720	320	2
Medical Assistants	319092	$29,830	9,930	Furniture Finishers	517021	$26,660	650	3
Medical Assistants	319092	$29,830	9,930	Logging Equipment Operators	454022	$29,250	1,170	4
Medical Assistants	319092	$29,830	9,930	Baggage Porters and Bellhops	396011	$20,900	1,820	5
Merchandise Displayers and Window Trimmers	271026	$28,780	1,050	Helpers--Roofers	473016	$25,340	400	1
Merchandise Displayers and Window Trimmers	271026	$28,780	1,050	Textile Knitting and Weaving Machine Setters, Operators, and Tenders	516063	$21,840	580	2
Merchandise Displayers and Window Trimmers	271026	$28,780	1,050	Library Assistants, Clerical	434121	$25,840	3,290	3
Merchandise Displayers and Window Trimmers	271026	$28,780	1,050	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	473011	$27,320	2,350	4
Merchandise Displayers and Window Trimmers	271026	$28,780	1,050	Tour Guides and Escorts	396021	$23,110	1,380	5
Mixing and Blending Machine Setters, Operators, and Tenders	519023	$34,640	2,670	Personal and Home Care Aides	399021	$17,510	12,670	1
Mixing and Blending Machine Setters, Operators, and Tenders	519023	$34,640	2,670	Parking Enforcement Workers	333041	$29,230	230	2
Mixing and Blending Machine Setters, Operators, and Tenders	519023	$34,640	2,670	Pharmacy Technicians	292052	$27,390	7,720	3
Mixing and Blending Machine Setters, Operators, and Tenders	519023	$34,640	2,670	Semiconductor Processors	519141	$32,770	610	4
Mixing and Blending Machine Setters, Operators, and Tenders	519023	$34,640	2,670	Food Cooking Machine Operators and Tenders	513093	$24,950	920	5
Molders, Shapers, and Casters, Except Metal and Plastic	519195	$30,750	860	Construction Laborers	472061	$26,180	24,820	1

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Molders, Shapers, and Casters, Except Metal and Plastic	519195	$30,750	860	Refuse and Recyclable Material Collectors	537081	$26,910	3,370	2
Molders, Shapers, and Casters, Except Metal and Plastic	519195	$30,750	860	File Clerks	434071	$25,760	3,380	3
Molders, Shapers, and Casters, Except Metal and Plastic	519195	$30,750	860	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	516064	$24,890	1,850	4
Molders, Shapers, and Casters, Except Metal and Plastic	519195	$30,750	860	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$19,340	8,670	5
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	514072	$30,280	2,320	Stock Clerks and Order Fillers	435081	$23,710	49,240	1
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	514072	$30,280	2,320	Conveyor Operators and Tenders	537011	$30,230	750	2
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	514072	$30,280	2,320	Hotel, Motel, and Resort Desk Clerks	434081	$20,610	6,850	3
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	514072	$30,280	2,320	Social and Human Service Assistants	211093	$28,430	6,290	4
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	514072	$30,280	2,320	Shipping, Receiving, and Traffic Clerks	435071	$29,370	15,220	5
Motorcycle Mechanics	493052	$37,420	370	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	419091	$20,720	320	1
Motorcycle Mechanics	493052	$37,420	370	Pharmacy Technicians	292052	$27,390	7,720	2
Motorcycle Mechanics	493052	$37,420	370	Motion Picture Projectionists	393021	$21,130	150	3
Motorcycle Mechanics	493052	$37,420	370	Pipelayers	472151	$30,990	1,480	4
Motorcycle Mechanics	493052	$37,420	370	Tailors, Dressmakers, and Custom Sewers	516052	$28,960	1,410	5
Museum Technicians and Conservators	254013	$37,990	310	Service Unit Operators, Oil, Gas, and Mining	475013	$32,380	150	1
Museum Technicians and Conservators	254013	$37,990	310	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	514035	$37,940	230	2
Museum Technicians and Conservators	254013	$37,990	310	Security and Fire Alarm Systems Installers	492098	$37,500	1,640	3
Museum Technicians and Conservators	254013	$37,990	310	Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	473015	$27,510	2,780	4
Museum Technicians and Conservators	254013	$37,990	310	Farm Equipment Mechanics	493041	$32,120	330	5
Natural Sciences Managers	119121	$135,990	1,030	Automotive Service Technicians and Mechanics	493023	$40,720	18,440	1
Natural Sciences Managers	119121	$135,990	1,030	First-Line Supervisors/Managers of Office and Administrative Support Workers	431011	$51,470	36,520	2

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Natural Sciences Managers	119121	$135,990	1,030	Elementary School Teachers, Except Special Education	252021	$58,320	41,000	3
Natural Sciences Managers	119121	$135,990	1,030	Art, Drama, and Music Teachers, Postsecondary	251121	$65,750	2,410	4
Natural Sciences Managers	119121	$135,990	1,030	Foreign Language and Literature Teachers, Postsecondary	251124	$52,190	980	5
Network and Computer Systems Administrators	151071	$78,290	18,460	Police and Sheriff's Patrol Officers	333051	$50,190	16,650	1
Network and Computer Systems Administrators	151071	$78,290	18,460	Brokerage Clerks	434011	$37,780	1,190	2
Network and Computer Systems Administrators	151071	$78,290	18,460	Camera Operators, Television, Video, and Motion Picture	274031	$53,130	430	3
Network and Computer Systems Administrators	151071	$78,290	18,460	Detectives and Criminal Investigators	333021	$77,460	3,170	4
Network and Computer Systems Administrators	151071	$78,290	18,460	Paralegals and Legal Assistants	232011	$50,310	6,810	5
Nonfarm Animal Caretakers	392021	$20,540	4,400	Cooks, Fast Food	352011	$17,500	9,020	1
Occupational Health and Safety Specialists	299011	$62,080	2,210	Vocational Education Teachers, Postsecondary	251194	$47,110	1,630	1
Occupational Health and Safety Specialists	299011	$62,080	2,210	Farm and Home Management Advisors	259021	$43,240	310	2
Occupational Health and Safety Specialists	299011	$62,080	2,210	Foresters	191032	$57,460	280	3
Occupational Health and Safety Specialists	299011	$62,080	2,210	Electronic Equipment Installers and Repairers, Motor Vehicles	492096	$26,540	540	4
Occupational Health and Safety Specialists	299011	$62,080	2,210	Sociology Teachers, Postsecondary	251067	$59,140	460	5
Office Clerks, General	439061	$28,810	114,940	Shoe and Leather Workers and Repairers	516041	$27,620	190	1
Office Clerks, General	439061	$28,810	114,940	Physical Therapist Aides	312022	$26,020	810	2
Office Clerks, General	439061	$28,810	114,940	Switchboard Operators, Including Answering Service	432011	$24,900	2,900	3
Office Clerks, General	439061	$28,810	114,940	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,590	9,480	4
Office Clerks, General	439061	$28,810	114,940	Retail Salespersons	412031	$24,500	119,650	5
Operating Engineers and Other Construction Equipment Operators	472073	$36,730	11,230	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514032	$32,050	360	1
Operating Engineers and Other Construction Equipment Operators	472073	$36,730	11,230	Child Care Workers	399011	$21,400	10,770	2
Operating Engineers and Other Construction Equipment Operators	472073	$36,730	11,230	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	533011	$23,200	430	3
Operating Engineers and Other Construction Equipment Operators	472073	$36,730	11,230	Paper Goods Machine Setters, Operators, and Tenders	519196	$36,130	2,630	4
Operating Engineers and Other Construction Equipment Operators	472073	$36,730	11,230	Floor Layers, Except Carpet, Wood, and Hard Tiles	472042	$34,930	200	5
Operations Research Analysts	152031	$103,140	4,350	Computer Hardware Engineers	172061	$97,600	1,580	1

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Operations Research Analysts	152031	$103,140	4,350	Education Teachers, Postsecondary	251081	$61,520	1,500	2
Operations Research Analysts	152031	$103,140	4,350	Anthropology and Archeology Teachers, Postsecondary	251061	$72,220	100	3
Operations Research Analysts	152031	$103,140	4,350	Plasterers and Stucco Masons	472161	$34,320	150	4
Operations Research Analysts	152031	$103,140	4,350	Biological Science Teachers, Postsecondary	251042	$72,160	1,920	5
Outdoor Power Equipment and Other Small Engine Mechanics	493053	$30,800	890	Tour Guides and Escorts	396021	$23,110	1,380	1
Outdoor Power Equipment and Other Small Engine Mechanics	493053	$30,800	890	Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	516064	$24,890	1,850	2
Outdoor Power Equipment and Other Small Engine Mechanics	493053	$30,800	890	Veterinary Assistants and Laboratory Animal Caretakers	319096	$21,490	3,770	3
Outdoor Power Equipment and Other Small Engine Mechanics	493053	$30,800	890	Helpers--Carpenters	473012	$27,290	3,720	4
Outdoor Power Equipment and Other Small Engine Mechanics	493053	$30,800	890	Umpires, Referees, and Other Sports Officials	272023	$29,270	190	5
Painters, Transportation Equipment	519122	$47,110	1,320	Executive Secretaries and Administrative Assistants	436011	$46,480	26,650	1
Painters, Transportation Equipment	519122	$47,110	1,320	Social and Human Service Assistants	211093	$28,430	6,290	2
Painters, Transportation Equipment	519122	$47,110	1,320	Carpenters	472031	$39,270	21,250	3
Painters, Transportation Equipment	519122	$47,110	1,320	Umpires, Referees, and Other Sports Officials	272023	$29,270	190	4
Painters, Transportation Equipment	519122	$47,110	1,320	Environmental Science and Protection Technicians, Including Health	194091	$44,110	460	5
Painting, Coating, and Decorating Workers	519123	$25,890	670	Cooks, Fast Food	352011	$17,500	9,020	1
Painting, Coating, and Decorating Workers	519123	$25,890	670	Locker Room, Coatroom, and Dressing Room Attendants	393093	$21,320	260	2
Painting, Coating, and Decorating Workers	519123	$25,890	670	Parking Lot Attendants	536021	$20,490	2,240	3
Painting, Coating, and Decorating Workers	519123	$25,890	670	Retail Salespersons	412031	$24,500	119,650	4
Painting, Coating, and Decorating Workers	519123	$25,890	670	File Clerks	434071	$25,760	3,380	5
Personal Financial Advisors	132052	$89,140	2,740	Dental Assistants	319091	$34,730	7,680	1
Personal Financial Advisors	132052	$89,140	2,740	Kindergarten Teachers, Except Special Education	252012	$55,320	5,080	2
Personal Financial Advisors	132052	$89,140	2,740	Industrial Engineers	172112	$81,300	5,760	3
Personal Financial Advisors	132052	$89,140	2,740	Cementing and Gluing Machine Operators and Tenders	519191	$28,120	520	4
Personal Financial Advisors	132052	$89,140	2,740	Architectural and Civil Drafters	173011	$44,830	2,400	5
Pesticide Handlers, Sprayers, and Applicators, Vegetation	373012	$34,510	250	Medical Equipment Preparers	319093	$27,670	870	1

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Pesticide Handlers, Sprayers, and Applicators, Vegetation	373012	$34,510	250	Ophthalmic Laboratory Technicians	519083	$26,870	1,040	2
Pesticide Handlers, Sprayers, and Applicators, Vegetation	373012	$34,510	250	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$28,850	1,570	3
Pesticide Handlers, Sprayers, and Applicators, Vegetation	373012	$34,510	250	Metal-Refining Furnace Operators and Tenders	514051	$34,310	210	4
Pesticide Handlers, Sprayers, and Applicators, Vegetation	373012	$34,510	250	Teacher Assistants	259041	$23,610	30,230	5
Petroleum Engineers	172171	$109,700	210	Anthropologists and Archeologists	193091	$50,510	130	1
Petroleum Engineers	172171	$109,700	210	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	172111	$75,390	610	2
Petroleum Engineers	172171	$109,700	210	Power Distributors and Dispatchers	518012	$58,870	380	3
Petroleum Engineers	172171	$109,700	210	Computer Hardware Engineers	172061	$97,600	1,580	4
Petroleum Engineers	172171	$109,700	210	Audiologists	291121	$63,640	460	5
Physical Therapists	291123	$75,880	3,930	Bindery Workers	515011	$33,160	2,070	1
Physical Therapists	291123	$75,880	3,930	Desktop Publishers	439031	$36,810	510	2
Physical Therapists	291123	$75,880	3,930	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	131041	$54,740	7,360	3
Physical Therapists	291123	$75,880	3,930	Carpenters	472031	$39,270	21,250	4
Physical Therapists	291123	$75,880	3,930	First-Line Supervisors/Managers of Food Preparation and Serving Workers	351012	$32,320	23,620	5
Plumbers, Pipefitters, and Steamfitters	472152	$41,790	13,740	Upholsterers	516093	$27,310	930	1
Plumbers, Pipefitters, and Steamfitters	472152	$41,790	13,740	Shampooers	395093	$18,660	1,430	2
Plumbers, Pipefitters, and Steamfitters	472152	$41,790	13,740	Machinists	514041	$39,820	7,230	3
Plumbers, Pipefitters, and Steamfitters	472152	$41,790	13,740	Medical Records and Health Information Technicians	292071	$34,540	3,500	4
Plumbers, Pipefitters, and Steamfitters	472152	$41,790	13,740	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	519051	$39,080	470	5
Power Plant Operators	518013	$53,780	670	Psychiatric Aides	311013	$21,090	950	1
Power Plant Operators	518013	$53,780	670	Structural Iron and Steel Workers	472221	$40,160	1,460	2
Power Plant Operators	518013	$53,780	670	Loan Counselors	132071	$47,200	650	3
Power Plant Operators	518013	$53,780	670	Architectural and Civil Drafters	173011	$44,830	2,400	4
Power Plant Operators	518013	$53,780	670	Boilermakers	472011	$48,190	750	5
Printing Machine Operators	515023	$35,900	4,090	Bailiffs	333011	$34,910	270	1

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Printing Machine Operators	515023	$35,900	4,090	Medical Assistants	319092	$29,830	9,930	2
Printing Machine Operators	515023	$35,900	4,090	Bartenders	353011	$23,120	6,220	3
Printing Machine Operators	515023	$35,900	4,090	Hazardous Materials Removal Workers	474041	$30,710	730	4
Printing Machine Operators	515023	$35,900	4,090	Floral Designers	271023	$25,340	1,360	5
Producers and Directors	272012	$60,320	1,980	First-Line Supervisors/Managers of Correctional Officers	331011	$50,060	2,210	1
Producers and Directors	272012	$60,320	1,980	Social Science Research Assistants	194061	$43,170	700	2
Producers and Directors	272012	$60,320	1,980	Aircraft Cargo Handling Supervisors	531011	$55,920	110	3
Producers and Directors	272012	$60,320	1,980	Automotive Service Technicians and Mechanics	493023	$40,720	18,440	4
Producers and Directors	272012	$60,320	1,980	Mobile Heavy Equipment Mechanics, Except Engines	493042	$42,170	3,190	5
Production, Planning, and Expediting Clerks	435061	$45,900	7,110	Metal-Refining Furnace Operators and Tenders	514051	$34,310	210	1
Production, Planning, and Expediting Clerks	435061	$45,900	7,110	Ophthalmic Laboratory Technicians	519083	$26,870	1,040	2
Production, Planning, and Expediting Clerks	435061	$45,900	7,110	Fine Artists, Including Painters, Sculptors, and Illustrators	271013	$39,610	430	3
Production, Planning, and Expediting Clerks	435061	$45,900	7,110	Residential Advisors	399041	$25,010	1,350	4
Production, Planning, and Expediting Clerks	435061	$45,900	7,110	Surveying and Mapping Technicians	173031	$38,550	2,250	5
Property, Real Estate, and Community Association Managers	119141	$84,680	1,980	Advertising Sales Agents	413011	$54,670	2,950	1
Property, Real Estate, and Community Association Managers	119141	$84,680	1,980	Roof Bolters, Mining	475061	$51,170	240	2
Property, Real Estate, and Community Association Managers	119141	$84,680	1,980	Dietitians and Nutritionists	291031	$52,140	1,200	3
Property, Real Estate, and Community Association Managers	119141	$84,680	1,980	Electronic Home Entertainment Equipment Installers and Repairers	492097	$37,960	1,090	4
Property, Real Estate, and Community Association Managers	119141	$84,680	1,980	Tire Builders	519197	$39,400	1,150	5
Public Relations Managers	112031	$126,670	1,230	Industrial Engineers	172112	$81,300	5,760	1
Public Relations Managers	112031	$126,670	1,230	Aircraft Mechanics and Service Technicians	493011	$51,630	1,880	2
Public Relations Managers	112031	$126,670	1,230	Claims Adjusters, Examiners, and Investigators	131031	$54,410	6,090	3
Public Relations Managers	112031	$126,670	1,230	Foreign Language and Literature Teachers, Postsecondary	251124	$52,190	980	4
Public Relations Managers	112031	$126,670	1,230	Occupational Therapist Assistants	312011	$54,870	680	5
Public Relations Specialists	273031	$66,740	8,230	Foreign Language and Literature Teachers, Postsecondary	251124	$52,190	980	1

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Public Relations Specialists	273031	$66,740	8,230	Cutting and Slicing Machine Setters, Operators, and Tenders	519032	$28,770	2,860	2
Public Relations Specialists	273031	$66,740	8,230	Statistical Assistants	439111	$40,530	80	3
Public Relations Specialists	273031	$66,740	8,230	Camera and Photographic Equipment Repairers	499061	$30,420	100	4
Public Relations Specialists	273031	$66,740	8,230	Rail Car Repairers	493043	$52,120	380	5
Purchasing Agents and Buyers, Farm Products	131021	$62,550	120	Job Printers	515021	$37,490	580	1
Purchasing Agents and Buyers, Farm Products	131021	$62,550	120	Residential Advisors	399041	$25,010	1,350	2
Purchasing Agents and Buyers, Farm Products	131021	$62,550	120	Sheet Metal Workers	472211	$39,320	4,970	3
Purchasing Agents and Buyers, Farm Products	131021	$62,550	120	Metal-Refining Furnace Operators and Tenders	514051	$34,310	210	4
Purchasing Agents and Buyers, Farm Products	131021	$62,550	120	Loan Officers	132072	$59,230	9,030	5
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,300	12,900	Food Service Managers	119051	$55,610	3,510	1
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,300	12,900	Lay-Out Workers, Metal and Plastic	514192	$42,140	540	2
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,300	12,900	Fine Artists, Including Painters, Sculptors, and Illustrators	271013	$39,610	430	3
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,300	12,900	Medical and Public Health Social Workers	211022	$48,000	2,120	4
Purchasing Agents, Except Wholesale, Retail, and Farm Products	131023	$67,300	12,900	Job Printers	515021	$37,490	580	5
Purchasing Managers	113061	$102,920	2,080	Urban and Regional Planners	193051	$61,490	1,410	1
Purchasing Managers	113061	$102,920	2,080	Home Appliance Repairers	499031	$33,410	1,530	2
Purchasing Managers	113061	$102,920	2,080	Cementing and Gluing Machine Operators and Tenders	519191	$28,120	520	3
Purchasing Managers	113061	$102,920	2,080	Financial Examiners	132061	$72,830	490	4
Purchasing Managers	113061	$102,920	2,080	Commercial and Industrial Designers	271021	$55,950	350	5
Recreation and Fitness Studies Teachers, Postsecondary	251193	$50,510	730	Pump Operators, Except Wellhead Pumpers	537072	$36,080	260	1
Recreation and Fitness Studies Teachers, Postsecondary	251193	$50,510	730	Education Administrators, Preschool and Child Care Center/Program	119031	$42,240	1,510	2
Recreation and Fitness Studies Teachers, Postsecondary	251193	$50,510	730	Chemical Equipment Operators and Tenders	519011	$41,780	1,420	3
Recreation and Fitness Studies Teachers, Postsecondary	251193	$50,510	730	Recreation Workers	399032	$26,310	9,920	4
Recreation and Fitness Studies Teachers, Postsecondary	251193	$50,510	730	Mental Health and Substance Abuse Social Workers	211023	$46,020	3,150	5

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Refuse and Recyclable Material Collectors	537081	$26,910	3,370	Retail Salespersons	412031	$24,500	119,650	1
Refuse and Recyclable Material Collectors	537081	$26,910	3,370	Switchboard Operators, Including Answering Service	432011	$24,900	2,900	2
Refuse and Recyclable Material Collectors	537081	$26,910	3,370	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	3
Refuse and Recyclable Material Collectors	537081	$26,910	3,370	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$19,340	8,670	4
Refuse and Recyclable Material Collectors	537081	$26,910	3,370	Food Preparation Workers	352021	$19,690	16,020	5
Registered Nurses	291111	$63,270	60,230	Library Technicians	254031	$36,120	2,360	1
Registered Nurses	291111	$63,270	60,230	Grinding and Polishing Workers, Hand	519022	$28,800	400	2
Registered Nurses	291111	$63,270	60,230	Painters, Construction and Maintenance	472141	$34,200	6,720	3
Registered Nurses	291111	$63,270	60,230	Credit Authorizers, Checkers, and Clerks	434041	$33,850	1,250	4
Registered Nurses	291111	$63,270	60,230	Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	519192	$32,580	200	5
Reinforcing Iron and Rebar Workers	472171	$42,870	780	Office Machine Operators, Except Computer	439071	$27,920	1,500	1
Reinforcing Iron and Rebar Workers	472171	$42,870	780	Mechanical Door Repairers	499011	$36,440	240	2
Reinforcing Iron and Rebar Workers	472171	$42,870	780	Skin Care Specialists	395094	$30,080	1,000	3
Reinforcing Iron and Rebar Workers	472171	$42,870	780	Pipelayers	472151	$30,990	1,480	4
Reinforcing Iron and Rebar Workers	472171	$42,870	780	Eligibility Interviewers, Government Programs	434061	$40,110	3,470	5
Retail Salespersons	412031	$24,500	119,650	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,590	9,480	1
Retail Salespersons	412031	$24,500	119,650	Cashiers	412011	$18,600	96,460	2
Retail Salespersons	412031	$24,500	119,650	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	359031	$19,340	8,670	3
Retail Salespersons	412031	$24,500	119,650	Stock Clerks and Order Fillers	435081	$23,710	49,240	4
Retail Salespersons	412031	$24,500	119,650	Parking Lot Attendants	536021	$20,490	2,240	5
Roofers	472181	$34,900	2,520	Proofreaders and Copy Markers	439081	$34,740	400	1
Roofers	472181	$34,900	2,520	Cooling and Freezing Equipment Operators and Tenders	519193	$23,460	480	2
Roofers	472181	$34,900	2,520	Rehabilitation Counselors	211015	$32,230	4,960	3
Sales Managers	112022	$109,150	6,080	Painters, Transportation Equipment	519122	$47,110	1,320	1
Sales Managers	112022	$109,150	6,080	Occupational Therapists	291122	$74,950	2,270	2
Sales Managers	112022	$109,150	6,080	Network and Computer Systems Administrators	151071	$78,290	18,460	3

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Sales Managers	112022	$109,150	6,080	Environmental Scientists and Specialists, Including Health	192041	$80,900	3,080	4
Sales Managers	112022	$109,150	6,080	Claims Adjusters, Examiners, and Investigators	131031	$54,410	6,090	5
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$64,360	32,830	Production, Planning, and Expediting Clerks	435061	$45,900	7,110	1
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$64,360	32,830	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514081	$31,090	970	2
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$64,360	32,830	Lay-Out Workers, Metal and Plastic	514192	$42,140	540	3
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$64,360	32,830	Helpers--Electricians	473013	$27,640	4,040	4
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	414012	$64,360	32,830	Pourers and Casters, Metal	514052	$25,320	140	5
Sawing Machine Setters, Operators, and Tenders, Wood	517041	$29,390	1,700	Home Health Aides	311011	$19,620	17,140	1
Sawing Machine Setters, Operators, and Tenders, Wood	517041	$29,390	1,700	Manicurists and Pedicurists	395092	$22,540	1,370	2
Sawing Machine Setters, Operators, and Tenders, Wood	517041	$29,390	1,700	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	3
Sawing Machine Setters, Operators, and Tenders, Wood	517041	$29,390	1,700	Photographic Processing Machine Operators	519132	$21,680	1,320	4
Sawing Machine Setters, Operators, and Tenders, Wood	517041	$29,390	1,700	Service Station Attendants	536031	$21,090	1,900	5
Secretaries, Except Legal, Medical, and Executive	436014	$34,500	17,300	Bus Drivers, Transit and Intercity	533021	$32,780	5,160	1
Secretaries, Except Legal, Medical, and Executive	436014	$34,500	17,300	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	339092	$18,540	4,520	2
Secretaries, Except Legal, Medical, and Executive	436014	$34,500	17,300	Cooks, Institution and Cafeteria	352012	$24,200	7,360	3
Secretaries, Except Legal, Medical, and Executive	436014	$34,500	17,300	Child Care Workers	399011	$21,400	10,770	4
Secretaries, Except Legal, Medical, and Executive	436014	$34,500	17,300	Telemarketers	419041	$21,500	8,330	5
Service Station Attendants	536031	$21,090	1,900	Hotel, Motel, and Resort Desk Clerks	434081	$20,610	6,850	1
Sheet Metal Workers	472211	$39,320	4,970	Engine and Other Machine Assemblers	512031	$31,140	720	1
Sheet Metal Workers	472211	$39,320	4,970	Dispatchers, Except Police, Fire, and Ambulance	435032	$34,230	4,040	2
Sheet Metal Workers	472211	$39,320	4,970	Occupational Therapist Aides	312012	$32,110	100	3

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Sheet Metal Workers	472211	$39,320	4,970	Loan Interviewers and Clerks	434131	$36,370	6,260	4
Sheet Metal Workers	472211	$39,320	4,970	Teacher Assistants	259041	$23,610	30,230	5
Shipping, Receiving, and Traffic Clerks	435071	$29,370	15,220	Child Care Workers	399011	$21,400	10,770	1
Shipping, Receiving, and Traffic Clerks	435071	$29,370	15,220	Parking Enforcement Workers	333041	$29,230	230	2
Shipping, Receiving, and Traffic Clerks	435071	$29,370	15,220	Preschool Teachers, Except Special Education	252011	$27,100	13,550	3
Shipping, Receiving, and Traffic Clerks	435071	$29,370	15,220	Photographic Processing Machine Operators	519132	$21,680	1,320	4
Slaughterers and Meat Packers	513023	$22,350	1,460	Transportation Attendants, Except Flight Attendants and Baggage Porters	396032	$18,950	490	1
Slaughterers and Meat Packers	513023	$22,350	1,460	Veterinary Assistants and Laboratory Animal Caretakers	319096	$21,490	3,770	2
Slaughterers and Meat Packers	513023	$22,350	1,460	Child Care Workers	399011	$21,400	10,770	3
Social and Community Service Managers	119151	$68,910	2,580	Gas Compressor and Gas Pumping Station Operators	537071	$53,550	180	1
Social and Community Service Managers	119151	$68,910	2,580	First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers	451011	$47,720	490	2
Social and Community Service Managers	119151	$68,910	2,580	Music Directors and Composers	272041	$38,740	350	3
Social and Community Service Managers	119151	$68,910	2,580	History Teachers, Postsecondary	251125	$58,580	860	4
Social and Community Service Managers	119151	$68,910	2,580	Drywall and Ceiling Tile Installers	472081	$33,390	3,090	5
Social and Human Service Assistants	211093	$28,430	6,290	Construction Laborers	472061	$26,180	24,820	1
Social and Human Service Assistants	211093	$28,430	6,290	Stock Clerks and Order Fillers	435081	$23,710	49,240	2
Social and Human Service Assistants	211093	$28,430	6,290	Manicurists and Pedicurists	395092	$22,540	1,370	3
Social and Human Service Assistants	211093	$28,430	6,290	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	372011	$22,180	58,670	4
Social and Human Service Assistants	211093	$28,430	6,290	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	5
Social Science Research Assistants	194061	$43,170	700	Automotive Service Technicians and Mechanics	493023	$40,720	18,440	1
Social Science Research Assistants	194061	$43,170	700	Animal Trainers	392011	$32,520	360	2
Social Science Research Assistants	194061	$43,170	700	Electrical and Electronic Equipment Assemblers	512022	$31,960	4,020	3
Social Science Research Assistants	194061	$43,170	700	Medical and Clinical Laboratory Technicians	292012	$37,440	3,950	4
Social Science Research Assistants	194061	$43,170	700	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	499021	$43,050	9,380	5
Soil and Plant Scientists	191013	$62,200	170	Farm and Home Management Advisors	259021	$43,240	310	1
Soil and Plant Scientists	191013	$62,200	170	Electronic Equipment Installers and Repairers, Motor Vehicles	492096	$26,540	540	2

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Soil and Plant Scientists	191013	$62,200	170	Sound Engineering Technicians	274014	$41,200	190	3
Soil and Plant Scientists	191013	$62,200	170	Secondary School Teachers, Except Special and Vocational Education	252031	$59,980	26,300	4
Soil and Plant Scientists	191013	$62,200	170	Vocational Education Teachers, Secondary School	252032	$61,910	3,260	5
Stationary Engineers and Boiler Operators	518021	$45,070	950	Education Administrators, Preschool and Child Care Center/Program	119031	$42,240	1,510	1
Stationary Engineers and Boiler Operators	518021	$45,070	950	Computer, Automated Teller, and Office Machine Repairers	492011	$42,700	3,780	2
Stationary Engineers and Boiler Operators	518021	$45,070	950	Psychiatric Aides	311013	$21,090	950	3
Stationary Engineers and Boiler Operators	518021	$45,070	950	First-Line Supervisors/Managers of Personal Service Workers	391021	$40,340	3,670	4
Stationary Engineers and Boiler Operators	518021	$45,070	950	Geological and Petroleum Technicians	194041	$36,240	70	5
Stock Clerks and Order Fillers	435081	$23,710	49,240	Cleaners of Vehicles and Equipment	537061	$22,620	7,300	1
Stock Clerks and Order Fillers	435081	$23,710	49,240	Meat, Poultry, and Fish Cutters and Trimmers	513022	$22,530	4,250	2
Stock Clerks and Order Fillers	435081	$23,710	49,240	Combined Food Preparation and Serving Workers, Including Fast Food	353021	$18,000	94,150	3
Stock Clerks and Order Fillers	435081	$23,710	49,240	Ushers, Lobby Attendants, and Ticket Takers	393031	$17,780	3,120	4
Stock Clerks and Order Fillers	435081	$23,710	49,240	Gaming Change Persons and Booth Cashiers	412012	$16,380	210	5
Structural Iron and Steel Workers	472221	$40,160	1,460	Medical and Clinical Laboratory Technicians	292012	$37,440	3,950	1
Structural Iron and Steel Workers	472221	$40,160	1,460	Geological and Petroleum Technicians	194041	$36,240	70	2
Structural Iron and Steel Workers	472221	$40,160	1,460	Psychiatric Technicians	292053	$25,390	3,610	3
Structural Iron and Steel Workers	472221	$40,160	1,460	Health Technologists and Technicians, All Other	292099	$33,310	2,470	4
Structural Metal Fabricators and Fitters	512041	$32,320	1,890	Broadcast Technicians	274012	$31,930	760	1
Structural Metal Fabricators and Fitters	512041	$32,320	1,890	Parking Enforcement Workers	333041	$29,230	230	2
Structural Metal Fabricators and Fitters	512041	$32,320	1,890	Teacher Assistants	259041	$23,610	30,230	3
Structural Metal Fabricators and Fitters	512041	$32,320	1,890	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$28,850	1,570	4
Structural Metal Fabricators and Fitters	512041	$32,320	1,890	Helpers--Electricians	473013	$27,640	4,040	5
Substance Abuse and Behavioral Disorder Counselors	211011	$43,520	2,170	Medical and Clinical Laboratory Technicians	292012	$37,440	3,950	1
Substance Abuse and Behavioral Disorder Counselors	211011	$43,520	2,170	Geological and Petroleum Technicians	194041	$36,240	70	2
Substance Abuse and Behavioral Disorder Counselors	211011	$43,520	2,170	Animal Trainers	392011	$32,520	360	3

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Substance Abuse and Behavioral Disorder Counselors	211011	$43,520	2,170	Structural Iron and Steel Workers	472221	$40,160	1,460	4
Substance Abuse and Behavioral Disorder Counselors	211011	$43,520	2,170	Bicycle Repairers	493091	$23,980	140	5
Surveying and Mapping Technicians	173031	$38,550	2,250	Pesticide Handlers, Sprayers, and Applicators, Vegetation	373012	$34,510	250	1
Surveying and Mapping Technicians	173031	$38,550	2,250	Correctional Officers and Jailers	333012	$37,970	15,690	2
Surveying and Mapping Technicians	173031	$38,550	2,250	Medical Equipment Preparers	319093	$27,670	870	3
Surveying and Mapping Technicians	173031	$38,550	2,250	Manicurists and Pedicurists	395092	$22,540	1,370	4
Surveying and Mapping Technicians	173031	$38,550	2,250	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514081	$31,090	970	5
Surveyors	171022	$58,050	2,090	Electricians	472111	$45,820	18,540	1
Surveyors	171022	$58,050	2,090	Physical Therapist Assistants	312021	$50,050	1,610	2
Surveyors	171022	$58,050	2,090	Nonfarm Animal Caretakers	392021	$20,540	4,400	3
Surveyors	171022	$58,050	2,090	Cooks, Institution and Cafeteria	352012	$24,200	7,360	4
Surveyors	171022	$58,050	2,090	Insulation Workers, Floor, Ceiling, and Wall	472131	$37,200	460	5
Switchboard Operators, Including Answering Service	432011	$24,900	2,900	Retail Salespersons	412031	$24,500	119,650	1
Switchboard Operators, Including Answering Service	432011	$24,900	2,900	Cashiers	412011	$18,600	96,460	2
Switchboard Operators, Including Answering Service	432011	$24,900	2,900	Shampooers	395093	$18,660	1,430	3
Switchboard Operators, Including Answering Service	432011	$24,900	2,900	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	353022	$18,590	9,480	4
Switchboard Operators, Including Answering Service	432011	$24,900	2,900	Stock Clerks and Order Fillers	435081	$23,710	49,240	5
Tax Examiners, Collectors, and Revenue Agents	132081	$48,630	1,590	Veterinary Assistants and Laboratory Animal Caretakers	319096	$21,490	3,770	1
Tax Examiners, Collectors, and Revenue Agents	132081	$48,630	1,590	Bus and Truck Mechanics and Diesel Engine Specialists	493031	$40,780	6,060	2
Tax Examiners, Collectors, and Revenue Agents	132081	$48,630	1,590	Jewelers and Precious Stone and Metal Workers	519071	$37,820	320	3
Tax Examiners, Collectors, and Revenue Agents	132081	$48,630	1,590	Billing and Posting Clerks and Machine Operators	433021	$34,460	12,740	4
Tax Examiners, Collectors, and Revenue Agents	132081	$48,630	1,590	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$28,850	1,570	5
Teacher Assistants	259041	$23,610	30,230	Pharmacy Aides	319095	$21,430	1,140	1
Telecommunications Equipment Installers and Repairers, Except Line Installers	492022	$54,410	3,190	Architectural and Civil Drafters	173011	$44,830	2,400	1

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Telecommunications Equipment Installers and Repairers, Except Line Installers	492022	$54,410	3,190	Residential Advisors	399041	$25,010	1,350	2
Telecommunications Equipment Installers and Repairers, Except Line Installers	492022	$54,410	3,190	Psychiatric Technicians	292053	$25,390	3,610	3
Telecommunications Equipment Installers and Repairers, Except Line Installers	492022	$54,410	3,190	Plumbers, Pipefitters, and Steamfitters	472152	$41,790	13,740	4
Telecommunications Equipment Installers and Repairers, Except Line Installers	492022	$54,410	3,190	Set and Exhibit Designers	271027	$46,240	320	5
Telecommunications Line Installers and Repairers	499052	$50,930	7,520	Jewelers and Precious Stone and Metal Workers	519071	$37,820	320	1
Telecommunications Line Installers and Repairers	499052	$50,930	7,520	Textile Bleaching and Dyeing Machine Operators and Tenders	516061	$25,070	340	2
Telecommunications Line Installers and Repairers	499052	$50,930	7,520	Bookbinders	515012	$24,050	190	3
Telecommunications Line Installers and Repairers	499052	$50,930	7,520	Civil Engineering Technicians	173022	$47,640	2,790	4
Telecommunications Line Installers and Repairers	499052	$50,930	7,520	Maintenance and Repair Workers, General	499042	$39,360	36,950	5
Telemarketers	419041	$21,500	8,330	Hotel, Motel, and Resort Desk Clerks	434081	$20,610	6,850	1
Telemarketers	419041	$21,500	8,330	Child Care Workers	399011	$21,400	10,770	2
Tire Builders	519197	$39,400	1,150	Child Care Workers	399011	$21,400	10,770	1
Tire Builders	519197	$39,400	1,150	Tree Trimmers and Pruners	373013	$33,760	1,550	2
Tire Builders	519197	$39,400	1,150	Umpires, Referees, and Other Sports Officials	272023	$29,270	190	3
Tire Builders	519197	$39,400	1,150	Paper Goods Machine Setters, Operators, and Tenders	519196	$36,130	2,630	4
Tire Builders	519197	$39,400	1,150	Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	419091	$20,720	320	5
Tire Repairers and Changers	493093	$25,480	2,090	Tour Guides and Escorts	396021	$23,110	1,380	1
Tire Repairers and Changers	493093	$25,480	2,090	Veterinary Assistants and Laboratory Animal Caretakers	319096	$21,490	3,770	2
Tire Repairers and Changers	493093	$25,480	2,090	Slaughterers and Meat Packers	513023	$22,350	1,460	3
Tool and Die Makers	514111	$45,390	710	Jewelers and Precious Stone and Metal Workers	519071	$37,820	320	1
Tool and Die Makers	514111	$45,390	710	Bailiffs	333011	$34,910	270	2
Tool and Die Makers	514111	$45,390	710	Umpires, Referees, and Other Sports Officials	272023	$29,270	190	3
Tool and Die Makers	514111	$45,390	710	Shipping, Receiving, and Traffic Clerks	435071	$29,370	15,220	4
Tool and Die Makers	514111	$45,390	710	Bus and Truck Mechanics and Diesel Engine Specialists	493031	$40,780	6,060	5
Tour Guides and Escorts	396021	$23,110	1,380	Cooks, Fast Food	352011	$17,500	9,020	1

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Training and Development Managers	113042	$98,320	1,310	Veterinary Assistants and Laboratory Animal Caretakers	319096	$21,490	3,770	1
Training and Development Managers	113042	$98,320	1,310	Hairdressers, Hairstylists, and Cosmetologists	395012	$29,620	10,550	2
Training and Development Managers	113042	$98,320	1,310	Compensation and Benefits Managers	113041	$91,060	840	3
Training and Development Managers	113042	$98,320	1,310	Civil Engineers	172051	$81,140	9,550	4
Training and Development Managers	113042	$98,320	1,310	Fallers	454021	$39,930	270	5
Training and Development Specialists	131073	$59,490	8,570	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	514021	$30,160	1,800	1
Training and Development Specialists	131073	$59,490	8,570	Printing Machine Operators	515023	$35,900	4,090	2
Training and Development Specialists	131073	$59,490	8,570	Real Estate Sales Agents	419022	$51,100	10,500	3
Training and Development Specialists	131073	$59,490	8,570	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	514032	$32,050	360	4
Training and Development Specialists	131073	$59,490	8,570	Loan Interviewers and Clerks	434131	$36,370	6,260	5
Transportation, Storage, and Distribution Managers	113071	$85,250	1,810	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	533011	$23,200	430	1
Transportation, Storage, and Distribution Managers	113071	$85,250	1,810	Electrical and Electronic Engineering Technicians	173023	$57,300	6,300	2
Transportation, Storage, and Distribution Managers	113071	$85,250	1,810	Real Estate Sales Agents	419022	$51,100	10,500	3
Transportation, Storage, and Distribution Managers	113071	$85,250	1,810	Shipping, Receiving, and Traffic Clerks	435071	$29,370	15,220	4
Transportation, Storage, and Distribution Managers	113071	$85,250	1,810	Textile Bleaching and Dyeing Machine Operators and Tenders	516061	$25,070	340	5
Tree Trimmers and Pruners	373013	$33,760	1,550	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	514021	$30,160	1,800	1
Tree Trimmers and Pruners	373013	$33,760	1,550	Receptionists and Information Clerks	434171	$26,160	29,570	2
Tree Trimmers and Pruners	373013	$33,760	1,550	Telemarketers	419041	$21,500	8,330	3
Tree Trimmers and Pruners	373013	$33,760	1,550	Reservation and Transportation Ticket Agents and Travel Clerks	434181	$29,490	3,890	4
Tree Trimmers and Pruners	373013	$33,760	1,550	Office Machine Operators, Except Computer	439071	$27,920	1,500	5
Truck Drivers, Heavy and Tractor-Trailer	533032	$36,860	37,480	Demonstrators and Product Promoters	419011	$27,150	2,620	1
Truck Drivers, Heavy and Tractor-Trailer	533032	$36,860	37,480	Service Station Attendants	536031	$21,090	1,900	2
Truck Drivers, Heavy and Tractor-Trailer	533032	$36,860	37,480	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	$21,650	910	3
Truck Drivers, Heavy and Tractor-Trailer	533032	$36,860	37,480	Photographic Processing Machine Operators	519132	$21,680	1,320	4
Truck Drivers, Heavy and Tractor-Trailer	533032	$36,860	37,480	Secretaries, Except Legal, Medical, and Executive	436014	$34,500	17,300	5

Table A16: Virginia Statewide – Related Comparably Skilled Occupations

Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Urban and Regional Planners	193051	$61,490	1,410	Audio and Video Equipment Technicians	274011	$37,250	890	1
Urban and Regional Planners	193051	$61,490	1,410	Food Cooking Machine Operators and Tenders	513093	$24,950	920	2
Urban and Regional Planners	193051	$61,490	1,410	Fitness Trainers and Aerobics Instructors	399031	$35,340	6,700	3
Urban and Regional Planners	193051	$61,490	1,410	Insurance Sales Agents	413021	$56,060	7,750	4
Urban and Regional Planners	193051	$61,490	1,410	Electrical Power-Line Installers and Repairers	499051	$48,910	3,200	5
Ushers, Lobby Attendants, and Ticket Takers	393031	$17,780	3,120	Gaming Change Persons and Booth Cashiers	412012	$16,380	210	1
Vocational Education Teachers, Postsecondary	251194	$47,110	1,630	Farm and Home Management Advisors	259021	$43,240	310	1
Vocational Education Teachers, Postsecondary	251194	$47,110	1,630	Occupational Health and Safety Technicians	299012	$40,460	270	2
Vocational Education Teachers, Postsecondary	251194	$47,110	1,630	Electronic Equipment Installers and Repairers, Motor Vehicles	492096	$26,540	540	3
Water and Liquid Waste Treatment Plant and System Operators	518031	$39,660	2,680	Dental Assistants	319091	$34,730	7,680	1
Water and Liquid Waste Treatment Plant and System Operators	518031	$39,660	2,680	Agricultural and Food Science Technicians	194011	$28,980	270	2
Water and Liquid Waste Treatment Plant and System Operators	518031	$39,660	2,680	Cutting and Slicing Machine Setters, Operators, and Tenders	519032	$28,770	2,860	3
Water and Liquid Waste Treatment Plant and System Operators	518031	$39,660	2,680	Court, Municipal, and License Clerks	434031	$33,490	1,740	4
Water and Liquid Waste Treatment Plant and System Operators	518031	$39,660	2,680	Cementing and Gluing Machine Operators and Tenders	519191	$28,120	520	5
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$28,850	1,570	Service Station Attendants	536031	$21,090	1,900	1
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$28,850	1,570	Preschool Teachers, Except Special Education	252011	$27,100	13,550	2
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$28,850	1,570	Photographic Processing Machine Operators	519132	$21,680	1,320	3
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	435111	$28,850	1,570	Packaging and Filling Machine Operators and Tenders	519111	$25,740	6,010	4
Wholesale and Retail Buyers, Except Farm Products	131022	$52,310	2,570	Semiconductor Processors	519141	$32,770	610	1
Wholesale and Retail Buyers, Except Farm Products	131022	$52,310	2,570	Food Cooking Machine Operators and Tenders	513093	$24,950	920	2
Wholesale and Retail Buyers, Except Farm Products	131022	$52,310	2,570	Pile-Driver Operators	472072	$42,420	270	3
Wholesale and Retail Buyers, Except Farm Products	131022	$52,310	2,570	Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	519021	$29,630	600	4
Wholesale and Retail Buyers, Except Farm Products	131022	$52,310	2,570	Electronic Home Entertainment Equipment Installers and Repairers	492097	$37,960	1,090	5

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Green-Related Occupation				Comparably Skilled Occupation				
Occupation	SOC	Annual Wage	2010:Q2 Empl.	Occupation	SOC	Annual Wage	2010:Q2 Empl.	Dist.
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$25,550	3,070	Tellers	433071	$25,340	13,950	1
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$25,550	3,070	Tank Car, Truck, and Ship Loaders	537121	$25,360	230	2
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$25,550	3,070	Baggage Porters and Bellhops	396011	$20,900	1,820	3
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$25,550	3,070	Home Health Aides	311011	$19,620	17,140	4
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	517042	$25,550	3,070	Food Servers, Nonrestaurant	353041	$21,250	4,510	5
Zoologists and Wildlife Biologists	191023	$56,670	230	Survey Researchers	193022	$52,250	150	1
Zoologists and Wildlife Biologists	191023	$56,670	230	Stationary Engineers and Boiler Operators	518021	$45,070	950	2
Zoologists and Wildlife Biologists	191023	$56,670	230	Occupational Health and Safety Technicians	299012	$40,460	270	3
Zoologists and Wildlife Biologists	191023	$56,670	230	Computer, Automated Teller, and Office Machine Repairers	492011	$42,700	3,780	4
Zoologists and Wildlife Biologists	191023	$56,670	230	Anthropologists and Archeologists	193091	$50,510	130	5