

Amanda



GOVERNMENT OF THE UNITED STATES VIRGIN ISLANDS



4401 Sion Farm STE 1
Christiansted, VI 00820-4245
(340)773-1994, Fax (340)773-0094

PO Box 302608-Charlotte Amalie
St. Thomas, VI 00803-2608
(340)776-3700, Fax (340)774-5908

Albert Bryan Jr. – Commissioner

August 27, 2014

Mrs. Holly O' Brien
Regional Administrator
U.S. Department of Labor/ETA
John F. Kennedy Federal Bldg., Rm E-350
Boston, MA 02203

RECEIVED US DOL-ETA
2014 SEP 10 PM 1:13

Dear Mrs. O'Brien:

In accordance with TEGL (Training and Employment Guidance Letter) 3-10, the Virgin Islands Department of Labor hereby submits its PY 2013 Workforce Information Grant Annual Performance Report.

If you have any questions or concerns regarding this information, please feel free to contact Mr. Gary Halyard or me at (340) 773-1994 extension 2101 or 2104, respectively.

Thank you for your continued support, cooperation and assistance.

Sincerely,

Albert Bryan Jr.
Commissioner

Sincerely,

Richard Difede
WIB Chair

cc: Amanda Schaffer, USDOL/ETA
Gary Halyard, Director, VIDOL-BLS

"Labor Works...Let Labor Work For You."

Virgin Islands Workforce Information

PY2013 Annual Performance Report

Over the past program year, labor market information continued to play a role in the daily decision making of the work force center in addition to stakeholders in the local economy. As the area continues to feel the effects of a recessionary climate, the use of the agencies data sets has been key in assisting the entire system. This report details the deliverables and projects accomplished during the program year, and conform to USDOL Employment and Training guidance on reporting annual labor market information delivery.

State's Work deliverable 1: Populate the Workforce Information Database

All core data tables were updated during the cycle with the latest releases of labor economic data for employment, wages, occupations, and projections. The agency upgraded workforce information database production servers, based on depletion, security vulnerabilities, and maintenance factors. This update should be sufficient for the next five program cycles.

State's Work deliverable 2: Produce and disseminate industry and occupational employment projections

Industry and occupational data for the two year cycle, base year 2013- 2015 has been completed. The long term industry and occupational projections were also produced for the 2012 -2022 time period. As per guidance from the projections managing partnership, the Virgin Islands posted the results to the ETA site in June 2014. The agency rolled out the projection results and posted on the agencies workforce information system VIEWS. This data set was posted and interfaced with the agencies labor market analyzer system <https://www.vidolviews.org/analyzer/default.asp>).

State's Work deliverable 3: conduct and publish relevant economic analyses, special workforce information, and or economic studies determined to be of benefit to the governor and state local V.I.Bs

Efforts in conducting studies, analysis, and research continued during the program year. The LMI area participated in several projects, and provided data, and advice on several fronts:

- Assisted the Virgin Islands Bureau of Economic Research with employment and industry data for publications, and solicitation of funds to conduct Territorial research.
- Involved in the Governor's comprehensive economic strategy planning project, for ascertaining new markets, and strategies in moving Virgin Islands towards economic expansion.

- Active member of the Virgin Islands P20-Workforce initiative, that sets up a longitudinal system for tracking individuals from education into the world of work.
- Assisted with research for the Virgin Islands KIDS count data series, which reports on social and economic conditions of the area's Youth population.

State's Work deliverable 4: Post Products, information, and reports on the internet

The LMI shop has continued to use the Labor Market basket portal to publish all relative data sets, post reports, and other relevant economic data to its site.

The integrated services of the workforce investment, employment, and reemployment services along with the labor market information, provide all customers, internal and external with data, regarding employment, wages, occupations, and training providers. This hub continues to be the most comprehensive and effective way of serving the local population and providing customers the ease, and efficiency of use regarding real time regional information.

State's Work deliverable 5: Partner and consult on a continuing basis with workforce investment boards and other key workforce and economic development partners and stakeholders

Consultation and partnering continued during the program year, as the LMI shop assisted several individuals, entities, and the general public with information relative to labor market data. The agency has been assisting the Workforce Investment Board in compiling a new occupational demand list in light of the economy moving towards a service producing sector, and experiencing a dramatic drop in goods producing sectors. The agency has been assisting Bureau of Economic research on several projects related to sector analysis, and data relative to the enhancing marine type activity in the jurisdiction. Other public and private entities have also been consulted, based on their specific research needs, and studies. Workforce agency staff is also part of the continued partnering and outreach process and updated with information regarding labor market information. The labor market institute also assisted with training frontline staff on use of information in serving customer needs and incorporating as part of the service delivery at workforce centers in the Virgin Islands.

2013

Virgin Islands Labor Economics Annual Report

Published by Virgin Islands Department of Labor “VI
Labor Market Basket”

Analysis of the 2013 labor market industry and occupational employment trends
and projections



TABLE OF CONTENTS

Economic Summary

Page 2

Provides summary of the Virgin Islands Labor Economic state as of Program Year 2013

Labor Force

Pages 3-8

The Labor force section provides insight on the labor force, employment, unemployment in the Virgin Islands.

Industry Data

Pages 7-11

Contains data on employment and pay by industry classification and establishment growth size.

Current Employment /Payroll Data

Pages 9

Occupational Data

Page 10-13

Details data on the occupations within the Territory and their current wages.

Industry Projection

Pages 14-16

Occupational Projections

Pages 17-20

Economic Summary

The Virgin Islands economy experienced a continued slow pace of growth during the 2013 cycle as the gross territorial product (measure of goods and services in an economy) remained at reduced levels compared to 2012. This change was primarily due to the major shift in import and exports specifically in the manufacturing sector. On the labor market front, employment continued to be marginal with the overall market down in several sectors. Despite seasonal job creation related to tourist and other investment activity, the monthly payroll surveys are still down compared to prior periods. The U.S. Census Bureau 2012 Economic Census for the Virgin Islands (https://www.census.gov/newsroom/releases/archives/economic_census/cb14-132.html), reports that sales declined by \$12.6 billion, or 64.9 percent from 2007's \$19.5 billion. Establishments also contracted over the period and have continued into the 2013 cycle.

All sectors of the economy have been impacted by the sluggish pace of recovery, with a mixed factor of slight growth in demand, offset with declines in other sub sectors of the market. As industries business cycles experienced contraction, this has resulted in changes in the labor force data. Over the long term period, labor force has decreased by approximately 6k, down to an average of 47k, compared to 53k prior to 2013. This decline has been a result of a shift in demand for labor, as persons have become discouraged and marginally attached (*Persons not in the labor force who want and are available for work, and who have looked for a job sometime in the prior 12 months*) to the workforce, and the general decline in worker demand compared to supply in the market. Labor force rates have dropped to -6.4 percent at the end of 2013, another indicator of the contraction in the local economy. Current employment data (monthly count of persons on payrolls) in 2013 was impacted by less productivity hours, and counts of persons on payrolls. Survey's for the period reflected a -4 percent decrease down 38k, compared to 40k in the prior year.

Wage data collected for the 2013 survey panel estimates that the mean annual salary was \$34,780. The estimated entry level annual wage was \$19,890 and the experienced annual wage was \$41,710. Although data collected is not a time series and cannot be compared on an over the year basis, looking at 2012, the average salary was \$36,920, and entry level salaries were \$20,760.

Employment projections for base year employment ending 2013 and projected to fourth quarter 2015; continue to decline, by roughly -0.28 percent. In the long run, out to 2022, all sectors based on current statistical models are expected to decline or remain unchanged.

The labor market continues to feel the effects of industry disruptions related to global and local economic contractions. Employment loss seems to have reached the trough, and expected to remain at current levels, with slight deviations occurring due to normal seasonal patterns. This trend is expected in the near future unless any unforeseen shocks in regional and global markets impact the area, or the development of industries that will spark employment expansion.

Labor Force

The Virgin Islands labor force average for 2013 was 47,558 (not seasonally adjusted), based on data in figure 1, the workforce experienced a decrease over the 12 month period, (based on the population 16 and over exiting labor market) due to reduction in job demand and reduced establishment's monthly payroll. The data in figure 1 also shows that the mean unemployment count was 6,351, with the unemployment upward of 13.0% throughout the year.

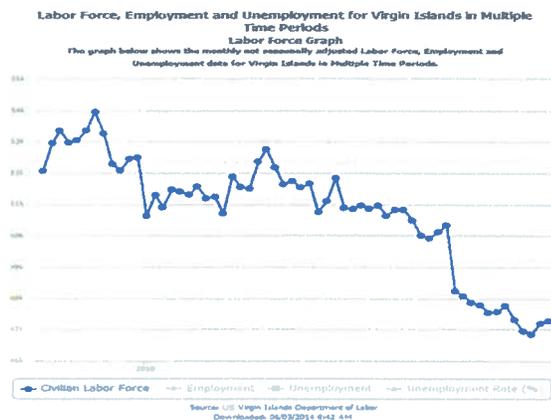
Figure 1

Time Period	Labor Force	Employed	Unemployed	Unemployment Rate
January, 2013	48,250	41,638	6,612	13.7%
February, 2013	48,092	41,790	6,302	13.1%
March, 2013	47,884	41,523	6,361	13.3%
April, 2013	47,803	41,473	6,330	13.2%
May, 2013	47,562	41,261	6,301	13.2%
June, 2013	47,595	41,285	6,310	13.3%
July, 2013	47,783	41,422	6,361	13.3%
August, 2013	47,346	40,949	6,397	13.5%
September, 2013	46,975	40,437	6,538	13.9%
October, 2013	46,875	40,468	6,407	13.7%
November, 2013	47,224	41,075	6,149	13.0%
December, 2013	47,305	41,157	6,148	13.0%

The Labor Force is the total of all civilians, employed or unemployed, except for those under the age of 16, inmates of institutions, or members of the Armed Forces. The unemployment rate is calculated by taking the number of unemployed individuals divided by the total labor force.

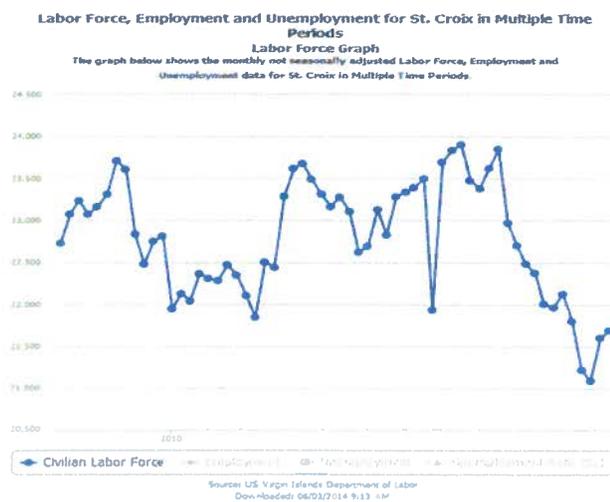
Over a five year period 2009 -2013, the labor force has experienced a contraction from levels of 53k down to 47k at the end of 2013 (see figure 2 chart). This decline has been attributed to major key events in the economy, specifically the manufacturing sector related to oil refinery, and the direct impact of this event on consumption, government spending, lowered capital investment, and drop in net import /export activities.

Figure2



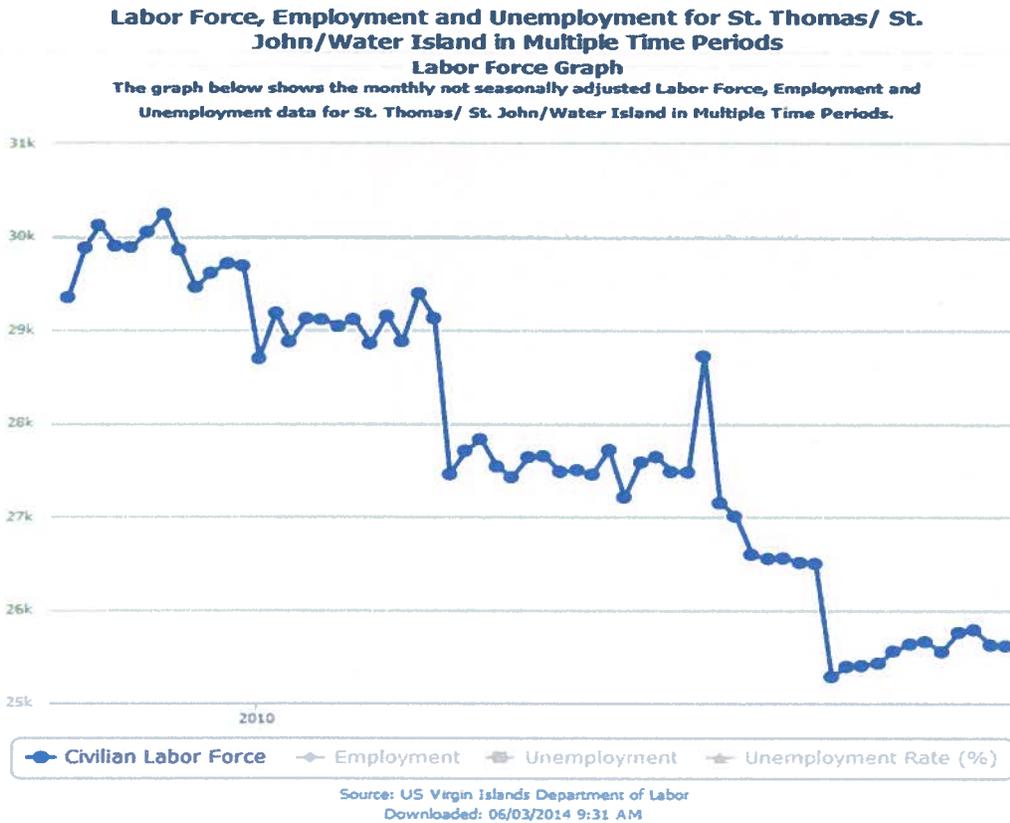
Looking at the labor force at an island district level (County equivalency), the St. Croix district counts over a five year period 2009-2013 were approximately 23k but have subsequently declined to 21k.

Figure3



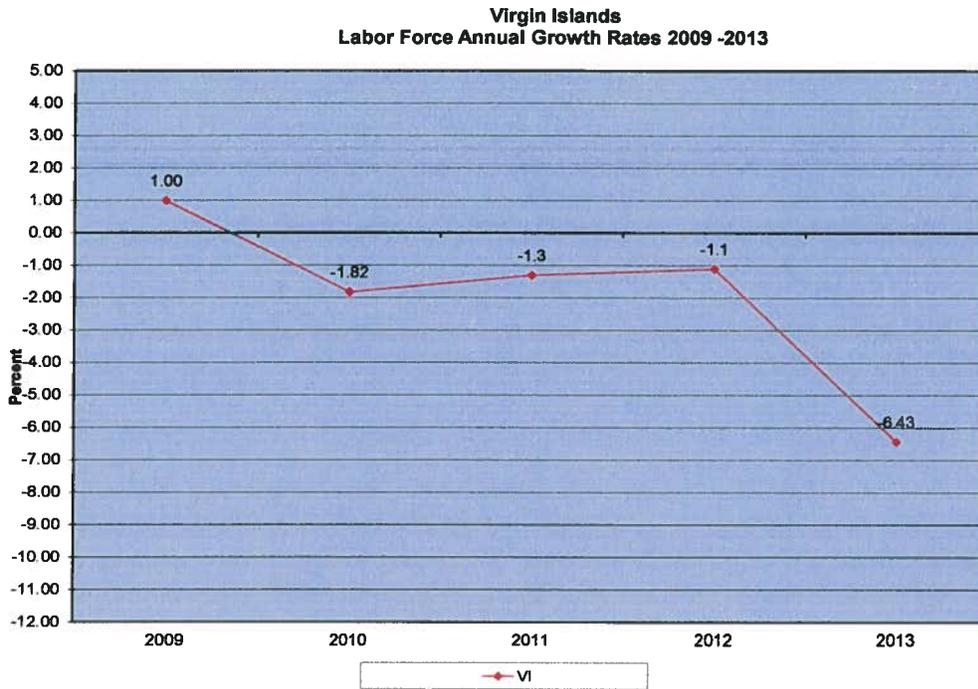
The St. Thomas and St. John district labor force also experienced contraction over a five year timeframe, although the labor force count was higher compared to St. Croix, counts were as high as 30k but have declined to around 25k by end of 2013.

Figure4



Evidence of the continued drop in the labor force is apparent when the overall growth rate of the labor force is calculated. At the end of 2009, the labor force experienced a 1.0% growth rate, however, this pattern declined in succeeding years with rates reflecting negative growth factors and ending at -6.43 at the end of 2013. The annual growth rate chart in figure 5 plots the change of the labor at December of each year illustrates the percent change over the period.

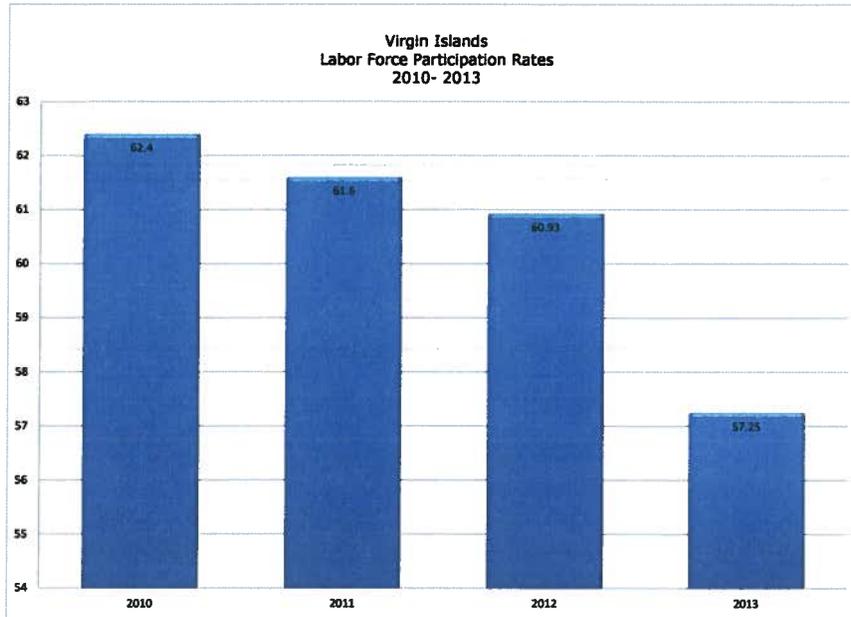
Figure 5



The annual growth rate chart shows an over the year percent change in the labor force over a five year span. If lines are above zero, the market is growing, if lines go below zero, the market is shrinking over the period.

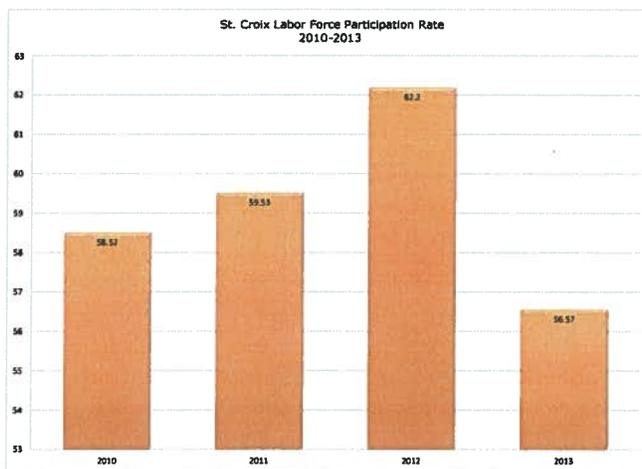
As the economy’s aggregate demand slowed, the effects were noticeable on the labor force participation rates for the Virgin Islands. The labor force participation rate is the number of people in the labor force divided by the total population in the Virgin Islands (Census base 2010) ages 16 and over. In 2009, the estimated percent of the population 16 years and older tied to the labor force was 62.4 percent. The chart in figure 6 reflects incremental decline, related to persons in the population leaving the labor market based on factors of low job demand, attrition in the workforce, slow labor production, and individuals’ no longer seeking employment based on availability of job openings and opportunity. At the end of 2013, the rate dropped to 57.25 percent.

Figure 6



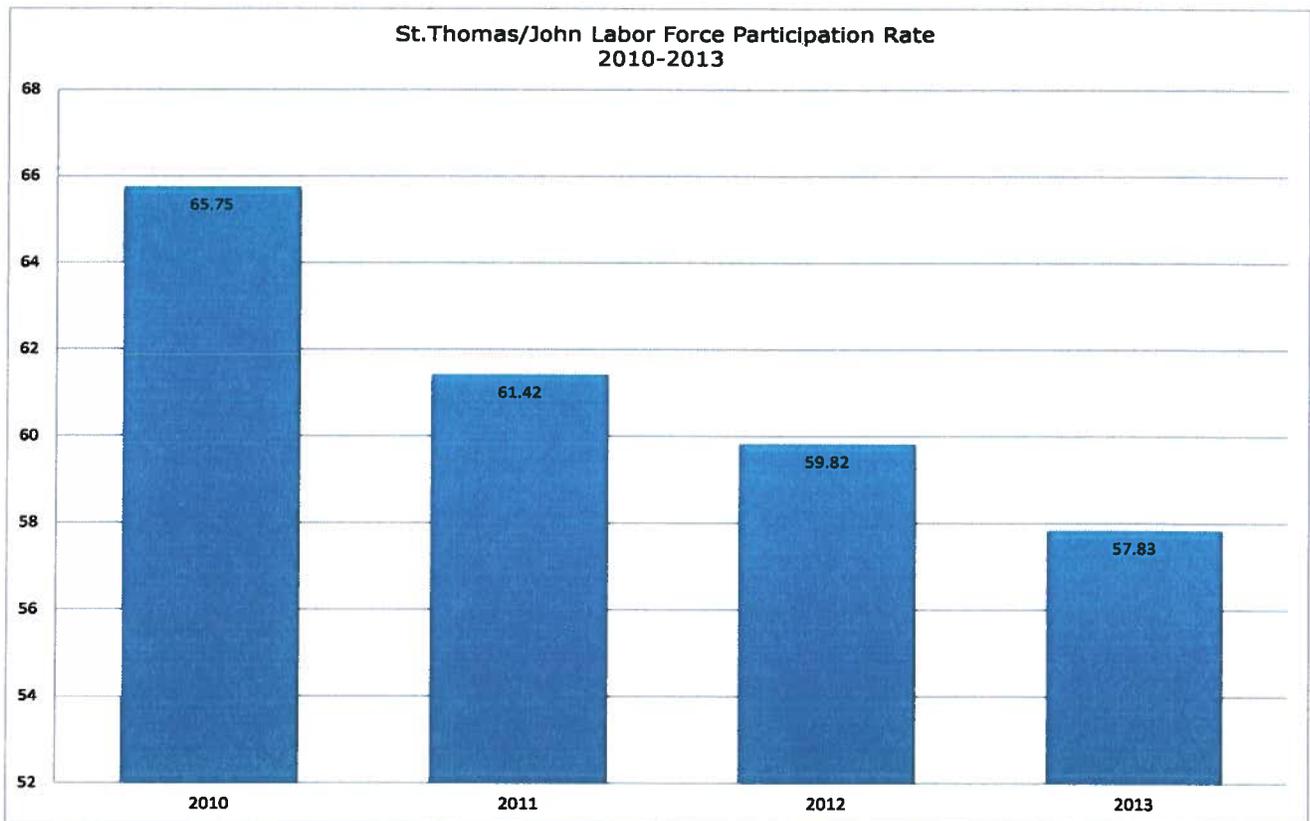
The decline in the population participating in the labor force was not exclusive to one island district, but was impacted in both areas over the 2009 to 2013 cycles. Data trends even show a slight increase in the St. Croix district in 2012 before the lagging effect of the refinery closure impacted the rate in 2013 (see figure 7) ending at 56.57 percent.

Figure7



In contrast, and although the St. Thomas/St. John nominal count of the labor force is slightly higher compared to St. Croix, participation as a factor of population in the area saw incremental declines over the five year span with a 7.92 point change from 2009 through 2013 data.

Figure 8



Note; although it is apparent that the Virgin Islands labor force has experienced contraction relative to the economic downturn, the data analyzed for this report was based on decennial counts for 2010 which were collected and may not represent current population and migratory factors relative to population trends. Since there is no updated census and there is no Census sponsored American Community Survey in the Virgin Islands the 2010 is the only official reference point.

The economic indicators continue to show signs of labor force decline over the past five cycles, with the biggest impact occurring in 2013 thus far. Currently, this decline has seemed to reach the bottom with early data showing a relative flat line trend compared to past quarters points. This trend in labor force and employment numbers are expected to stay at this pace in the near term barring any additional key events or unanticipated global events.

Current Employment

The Current Employment Statistics (CES) survey collects data each month on employment, from a sample of nonagricultural establishments. Employment data refer to persons on establishment payrolls who received pay for any part of the pay period that includes the 12th day of the month.

Total non-farm employment was down -4 percent on an over the year basis, related to the change in the goods producing sector. The specific industry was manufacturing which declined by -47.13 percent related to employment in the St. Croix district. The service producing sector also experienced a -2.43 decline or approximately -905 compared to 2012 data. The public sector also experienced a large decrease of -453 as result of continued austerity and the impact of declining economic activity in goods and services producing sectors. Other sectors can be seen in figure 9.

Figure 9

	2013 Employment	2012 Employment	Over the Year Change	Percent Change
Total nonfarm	38,704	40,317	-1,613	-4.00%
Total private	27,681	28,841	-1,160	-4.02%
Goods-producing	2,319	3,026	-707	-23.36%
Service-providing	36,385	37,290	-905	-2.43%
Private service-providing	25,362	25,815	-453	-1.75%
Natural Resources and Mining and Construction	1,647	1,756	-109	-6.21%
Manufacturing	672	1,271	-599	-47.13%
Trade, transportation, and utilities	8,249	8,307	-58	-0.70%
Wholesale Trade	811	683	128	18.74%
Retail trade	5,944	6,136	-192	-3.13%
Transportation and warehousing	1,494	1,487	7	0.47%
Information	769	807	-38	-4.71%
Financial activities	2,240	2,279	-39	-1.71%
Professional and business services	3,346	3,370	-24	-0.71%
Education and health services	2,390	2,423	-33	-1.36%
Leisure and hospitality	7,247	7,237	10	0.14%
Other services	1,122	1,391	-269	-19.34%
Government	11,023	11,476	-453	-3.95%

Occupational Employment Wages

Occupational Data is derived from the Occupational Employment Statistics survey and provides data on wages by occupations within the Virgin Islands. The employment by occupation provides a different measure of the Virgin Islands Workforce than employment by industry. Occupational employment looks at each worker within the business and distinguishes their specific job title (based on the job title rather than the industry).

The US Virgin Islands Department of Labor estimates that the mean annual wage for the Virgin Islands in 2013 was \$34,780. The estimated entry level annual wage was \$19,890 and the experienced annual wage was \$41,710. Other occupations employment and wage data for occupational categories can be seen in figure 10.

Figure 10

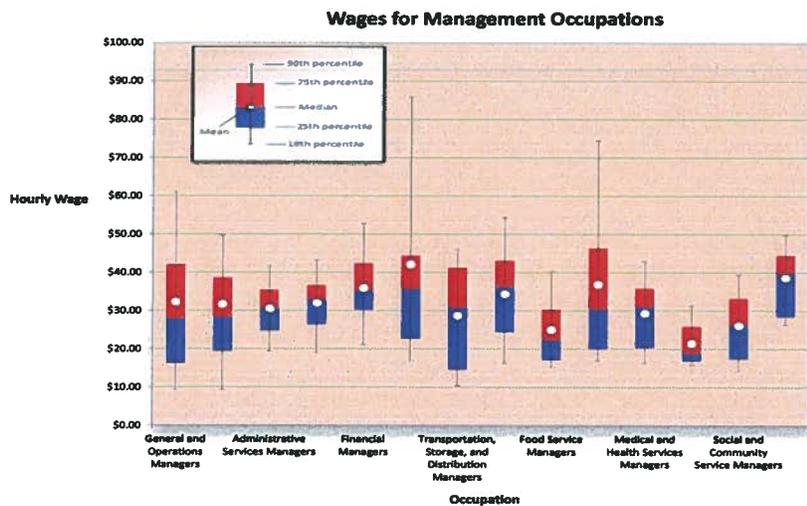
Occupation	Occupation Code	Employment	Entry level	Mean	Experienced
Total All	000000	38,860	\$19,890	\$34,780	\$41,710
Architecture and Engineering	170000	150	N/A	N/A	N/A
Arts, Design, Entertainment, Sports, and Media	270000	210	\$25,760	\$40,400	\$46,920
Building and Grounds Cleaning and Maintenance	370000	2,250	\$18,830	\$23,430	\$26,940
Business and Financial Operations	130000	1,410	\$33,650	\$50,600	\$63,140
Community and Social Services	210000	360	\$30,360	\$40,830	\$47,750
Computer and Mathematical	150000	380	\$30,680	\$50,620	\$64,830
Construction and Extraction	470000	1,390	\$26,230	\$37,820	\$45,280
Education, Training, and Library	250000	2,700	\$26,900	\$39,840	\$48,380
Farming, Fishing, and Forestry	450000	N/A	\$17,610	\$23,410	\$27,850
Food Preparation and Serving Related	350000	3,920	\$17,460	\$22,480	\$24,170
Healthcare Practitioners and Technical	290000	1,000	\$30,070	\$57,290	\$68,620
Healthcare Support	310000	370	\$19,460	\$26,350	\$29,550
Installation, Maintenance, and Repair	490000	1,570	\$24,500	\$35,570	\$43,260
Legal	230000	410	\$54,660	\$86,480	\$110,070
Life, Physical, and Social Science	190000	930	\$16,940	\$29,240	\$37,590
Management	110000	2,650	\$39,800	\$67,890	\$84,830
Office and Administrative Support	430000	8,380	\$21,060	\$30,870	\$37,010
Personal Care and Service	390000	980	\$17,480	\$22,420	\$25,180
Protective Service	330000	2,600	\$19,410	\$31,500	\$38,140
Sales and Related	410000	4,230	\$17,880	\$26,750	\$30,750
Transportation and Material Moving	530000	2,120	\$18,730	\$27,530	\$32,720

The trend over the past five cycles show a decline in entry level wages, down 4.07 percent, to \$19,890 in 2013 from \$20,070 2009 levels. This decline is based on the contraction in employment activity as employment counts decreased and changes in labor market activity.

At the major group (highest level of categorizing occupations) level and the occupations that represent the higher count of employment, the wages for 2013 were in the following areas;

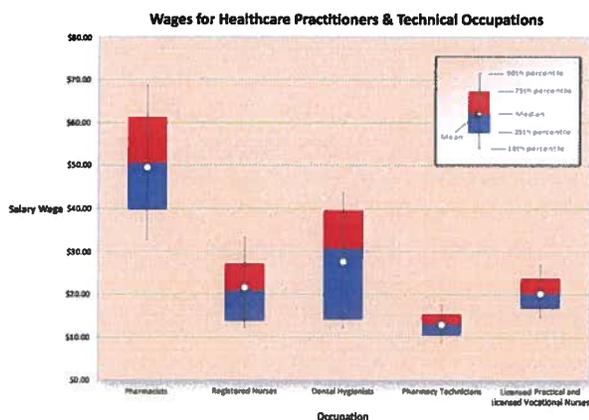
Under management occupations the mean (average) salary was \$67,890, with entry level approximately at \$39,800. Occupations under the managerial classification are financial, food service, medical, and general operations managers (see figure11).

Figure 11



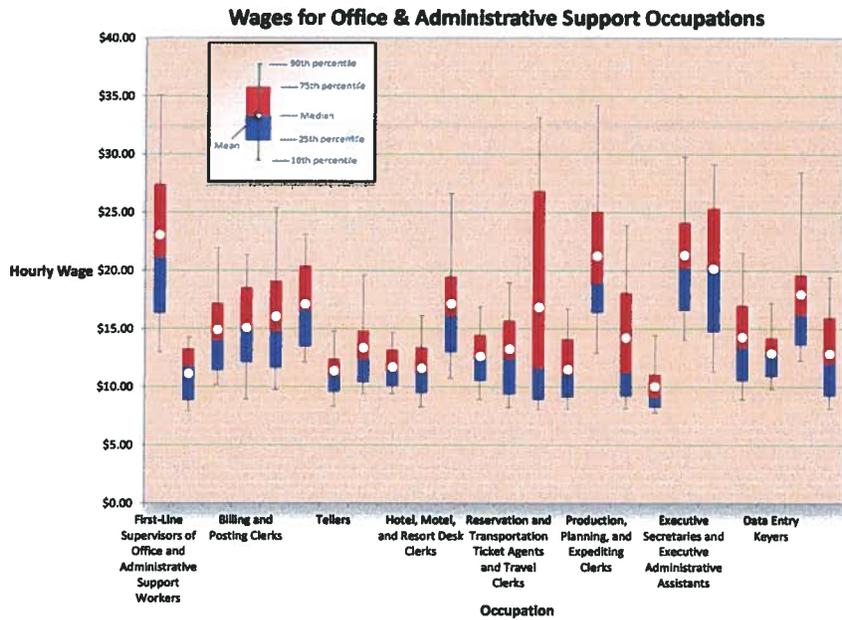
The mean annual wage for Healthcare Practitioners and Technical in Virgin Islands in 2013 was \$57,290. The estimated entry level annual wage was \$30,070 and the experienced annual wage was \$68,620 (see below).

Figure 12



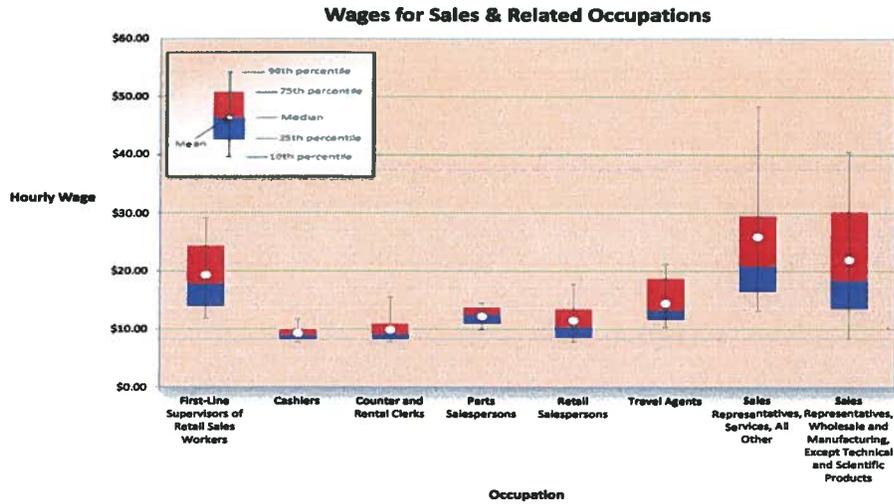
Under office and administrative support occupations, which represents the highest count of employment in the 2013 survey, the mean salary was \$30,870 and the experienced level was \$37,010. Some of the occupations that are in the sector are executive secretaries, data entry clerks, cargo agents, and book keeping clerks. (See figure 13)

Figure 13



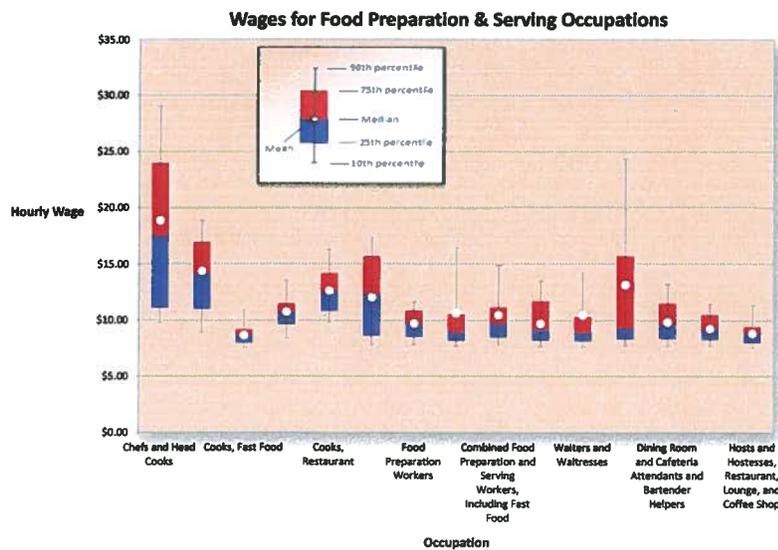
Sales related occupations are also prevalent as part of the large service industry tied to tourism activity within the Virgin Islands, with occupations such as travel agents, cashiers, sales clerk, and sales representative. In the 2013 occupational estimates, the average wage for occupations in this sector were \$22,420, and at the experienced level \$25,180. See Figure 14 .

Figure 14



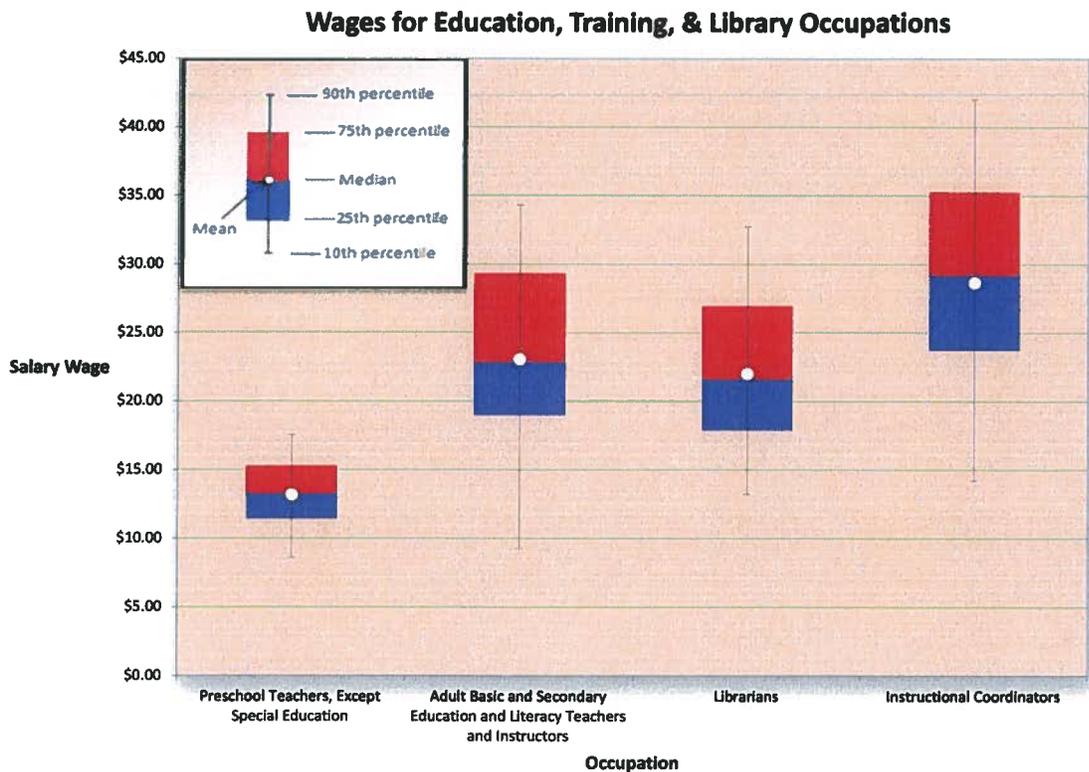
Another dominant occupational sector is the food preparation and serving related sector. Occupations under this area represent the vast amount of employee performing function relative to the Virgin Islands leisure and hospitality industry. Estimates for this sector are \$22,480 on average, and entry level of \$17,460. Although these wages are at the lower end of the scale, many of these occupations also rely on gratuitous income in addition to hourly wage rates.

Figure 15



Under education, training, and library occupations entry level wages were \$26, 900 and average wages were \$39,840.

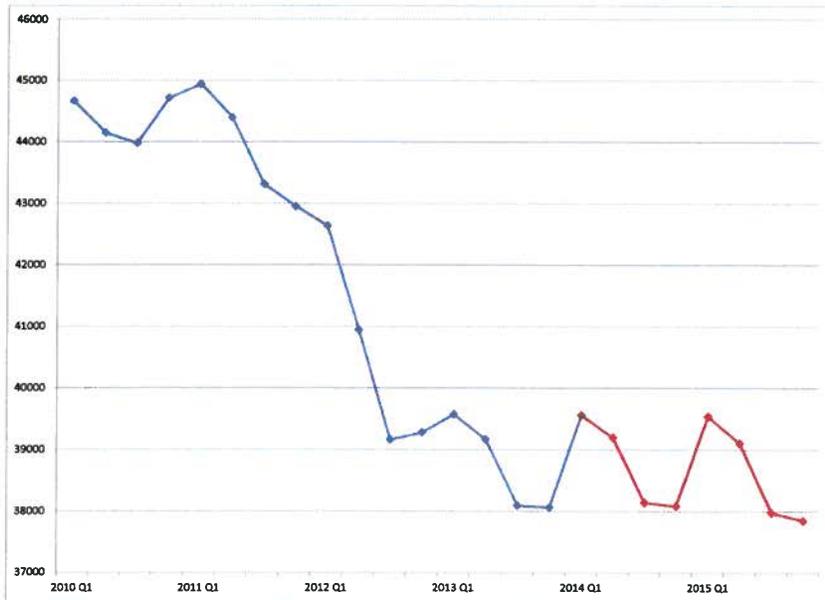
Figure 16



Industry Projections

Industry employment projections in the short term (2013-2015) are expected to decline by -0.276 percent to 37,852 in the fourth quarter of 2015, based on the 2013, 38,062 base year employment counts (as per *Quarterly Census of Employment Wages Program*). Despite seasonality in the economy, that will result in job openings during the tourist season, the trajectory of total employment has been declining due to the contraction in the economy as sectors have either furloughed, or reduced hiring over the past five years (see figure 17). Although overall employment is expected to decline, some sectors will see slight increases as a result of shifting patterns in the 2013 data.

Figure17



Sectors in the economy that will see marginal growth is construction, healthcare, professional services, and arts/entertainment. In contrast, sectors marked with declining employment are other services (area related to refinery short term work), telecommunications, and maintenance sectors as a result of fiscal austerity and economic decline. Other bellwether sectors that represent high employment that are also impacted by the flat growth in economic activity are leisure and hospitality, manufacturing, educational services, and clothing accessories sectors.

Despite some areas experiencing declining rates, the nominal value in each sector or actual count is generally slight based on each respective sector in the Virgin Islands having low counts in the classification of establishments place in the North American Industrial Classification System (NAICS) taxonomy. However, in aggregate, employment has dipped throughout the job market.

The table below gives current projected short term industry projections ending 2015. Industries are rollup to super sector category and do not represent entire population of industry employment in the Virgin Islands.

Figure18

Industry	2013 Estimated Employment	2015 Projected Employment	Total 2013-2015 Employment Change	Annual Avg. Percent Change
Accommodation and Food Services	6,074	6,008	-66	-0.54%
Administrative and Support and Waste Management and Remediation Services	1,870	1,897	27	0.72%
Arts, Entertainment, and Recreation	854	910	56	3.23%
Construction	1,496	1,570	74	2.44%
Educational Services	742	669	-73	-5.05%
Finance and Insurance	1,123	1,140	17	0.75%
Health Care and Social Assistance	1,611	1,704	93	2.85%
Management of Companies and Enterprises	276	189	-87	-17.25%
Manufacturing	381	380	-1	-0.13%
Other Services (except Public Administration)	1,045	634	-411	-22.11%
Professional, Scientific, and Technical Services	1,164	1,206	42	1.79%
Public Administration	8,083	6,500	-1,583	-10.33%
Real Estate and Rental and Leasing	1,077	1,078	1	0.05%
Retail Trade	5,618	5,621	3	0.03%
Total Government	8,818	7,250	-1,568	-9.33%
Transportation and Warehousing	1,353	1,381	28	1.03%
Wholesale Trade	816	864	48	2.90%

The long run employment projection factor, out 10 years (2012-2022), employment continues to be impacted by overall base year trend that is lower, with minimal growth during the term. Based on the regression analysis for the period, historical employment data and economic variables currently reflect downward trends. Although the models infer minimal growth, over all, each respective industry demonstrates a separate change factor in employment. The largest count of decline for the 2022 projections is under public administration, by -888, down -8.44 percent, other declining sectors are management of companies, construction, other services, and retail trade sectors. These dips are offset by employment change in professional services, education, administrative, and finance / insurance sectors. See figure 19

Figure 19

Industry	2012 Estimated	2022 Projected	Total 2012 2022	Annual Avg. Percent	Total Percent Change
Accommodation and Food Services	6,435	6,453	18	0.03%	0.28%
Administrative and Support and Waste Management and Remediation Services	1,887	2,354	467	2.24%	24.75%
Arts, Entertainment, and Recreation	831	946	115	1.30%	13.84%
Construction	867	709	-158	-1.99%	-18.22%
Educational Services	860	1,019	159	1.71%	18.49%
Finance and Insurance	1,147	1,279	132	1.10%	11.51%
Health Care and Social Assistance	1,587	1,743	156	0.94%	9.83%
Management of Companies and Enterprises	374	252	-122	-3.87%	-32.62%
Manufacturing	164	170	6	0.36%	3.66%
Other Services (except Public Administration)	1,421	1,262	-159	-1.18%	-11.19%
Professional, Scientific, and Technical Services	1,126	1,281	155	1.30%	13.77%
Real Estate and Rental and Leasing	1,124	1,281	157	1.32%	13.97%
Retail Trade	5,829	5,655	-174	-0.30%	-2.99%
Total Government	11,283	10,466	-817	-0.75%	-7.24%
Transportation and Warehousing	1,379	1,436	57	0.41%	4.13%

Based on the past business cycles reflecting a weakened economy and overall decline in spending and gross territorial activity, industry employment remains slopping downward as the effects of key events and weak spending persist.

Industry Employment Projections estimate changes within an industry over time. Industry projections are based on historical, statistical and subjective analysis of industry trends and are developed by combining employment time series data with current economic indicators. Past trends are examined and knowledge of current trends in the economy are applied to develop projections for the future. Industries are classified by the North American Industry Classification System (NAICS). Base year data, the date for the beginning year of the projection period, are a snap-shot of employment at a point in time. Employment projections are produced using various economic models that are provided to all state Labor Market Information programs to insure consistent methodology and outcomes across the nation. Using these methods, analysts review industry employment and make adjustments based on local area and State economic trends that may occur during the projection period.

Estimates of nonagricultural employment and expected job growth and decline for industries are projected for a ten year period and are revised every two years. Data supporting the industry projections are derived from a monthly survey of employers (Current Employment Statistics Program) and a quarterly tax report from employers (QCEW program). These programs are part of a cooperative effort between the State and the U.S. Bureau of Labor Statistics (BLS) to measure employment.

Industry employment projections are obtained through regression analysis using historical employment data, with consideration of economic and demographic factors. Data are produced using the Projections Suite software system, a national standard which is a product of the Projections Workgroup under the direction of the Projections Managing Partnership (PMP) working in cooperation with the Employment and Training Administration of the U.S. Department of Labor and developed by the Utah Department of Workforce Services, Workforce Information Division, Systems Research & Analysis. The data reflect the number of jobs in an industry, not the number of people, since no attempt is made to correct for multiple job-holding. Jobs include both full-time and part-time.

Occupational Projections

Current industry employment and staffing patterns (occupational employment data gathered from the Occupational Employment Statistics program) indicate the occupational demand in the Virgin Islands for the short term (2013-2015) are down by -2.64 percent resembling the decrease in industry employment during the same timeline. Over the past three business cycles, as the Virgin Islands have experienced recessionary factors in the economy, the job demand has also been impacted. Occupations in the office and administrative support, protective service, management, and construction are declining, with marginal growth in healthcare. The table below covers the occupational projection for the super sector occupations in the Virgin Islands.

Figure 20

Occupation	2013 Estimated Employment	2015 Projected Employment	Total 2013-2015 Employment Change	Annual Avg. Percent Change
Architecture and Engineering	150	140	-10	-3.39%
Arts, Design, Entertainment, Sports, and Media	138	120	-18	-6.75%
Building and Grounds Cleaning and Maintenance	1,991	1,932	-59	-1.49%
Business and Financial Operations	1,420	1,326	-94	-3.37%
Community and Social Services	358	318	-40	-5.75%
Computer and Mathematical	319	291	-28	-4.49%
Construction and Extraction	1,280	1,234	-46	-1.81%
Education, Training, and Library	719	637	-82	-5.87%
Farming, Fishing, and Forestry	48	46	-2	-2.11%
Food Preparation and Serving Related	3,595	3,587	-8	-0.11%
Healthcare Practitioners and Technical	737	738	1	0.07%
Healthcare Support	353	356	3	0.42%
Installation, Maintenance, and Repair	1,408	1,245	-163	-5.97%
Legal	492	443	-49	-5.11%
Life, Physical, and Social Science	1,159	962	-197	-8.89%
Management	2,358	2,239	-119	-2.56%
Office and Administrative Support	7,983	7,486	-497	-3.16%
Personal Care and Service	989	951	-38	-1.94%
Production	577	550	-27	-2.37%
Protective Service	2,897	2,601	-296	-5.25%
Sales and Related	3,989	3,946	-43	-0.54%
Transportation and Material Moving	1,967	1,958	-9	-0.23%

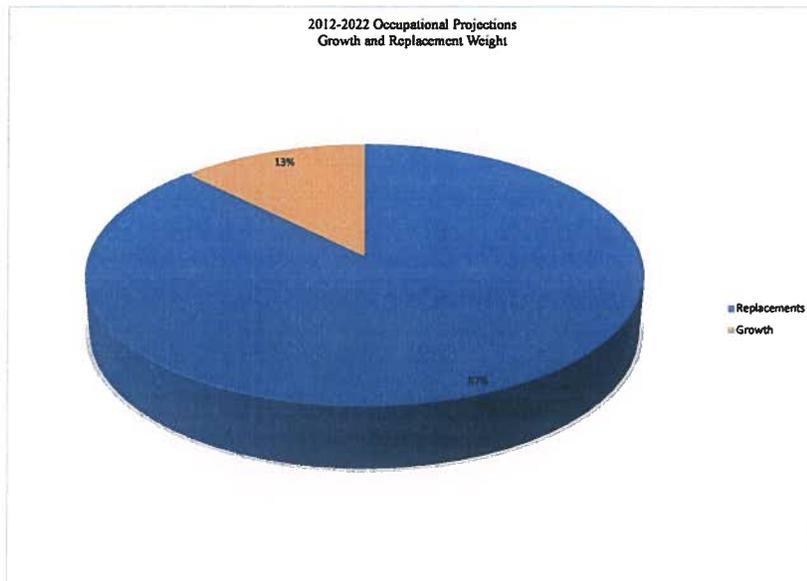
Looking past the short run out to 2022, occupational employment in the Territory is expected to marginally grow by 0.02 percent, or remain relatively flat. This minor change is based on the current regression models coupled with current market variables of employment, capital spending, and unemployment claims. Occupations that show some growth are personal care, transportation, sales, and education, offset by declines in administrative, construction, and maintenance.

Figure 21

Industry	2012 Estimated	2022 Projected	Total 2012-2022	Annual Avg. Percent	Total Percent Change
Accommodation and Food Services	6,435	6,453	18	0.03%	0.28%
Administrative and Support and Waste Management and Remediation Services	1,887	2,354	467	2.24%	24.75%
Arts, Entertainment, and Recreation	831	946	115	1.30%	13.84%
Construction	867	709	-158	-1.99%	-18.22%
Educational Services	860	1,019	159	1.71%	18.49%
Finance and Insurance	1,147	1,279	132	1.10%	11.51%
Health Care and Social Assistance	1,587	1,743	156	0.94%	9.83%
Management of Companies and Enterprises	374	252	-122	-3.87%	-32.62%
Manufacturing	164	170	6	0.36%	3.66%
Other Services (except Public Administration)	1,421	1,262	-159	-1.18%	-11.19%
Professional, Scientific, and Technical Services	1,126	1,281	155	1.30%	13.77%
Real Estate and Rental and Leasing	1,124	1,281	157	1.32%	13.97%
Retail Trade	5,829	5,655	-174	-0.30%	-2.99%
Total Government	11,283	10,466	-817	-0.75%	-7.24%
Transportation and Warehousing	1,379	1,438	57	0.41%	4.13%

Although overall employment projections are expected to be flat during the short and long term period, it does not imply cease of employment opportunity in the Virgin Islands. (In measuring employment change two components are the growth and replacement openings related to the measure overtime. Growth openings refer to the number of jobs created by economic expansion, and replacement openings are created by people permanently leaving the labor force through death, retirement, disability, transfer to another occupation, or jurisdiction) just current indicators reflecting minimal economic expansion over the course of the projected time period. In addition to the slumber in activity, seasonality endemic in the overall economy, primarily in the service producing sector of tourist activity, and other local serving establishments create constant wax and wane in employment activity over a given time period.

Figure 22



87 percent of job growth is expected from the replacements, while 13 percent from economic expansion. This shift aligns with demographic factors relative to an aging population in the Virgin Islands, in addition to declining spending, consumption, capital investment, and net import/exports decrease in the greater economy.

Total growth openings in all occupations out to 2022 are around 1,359 (see chart figure 22), with annual openings (12 month cycle) at 136, while replacement openings come in at 9,508 over the long term and annual rates of 951.

Occupations that reflect the largest disparity in growth compared to replacements are transportation, office and administrative support, sales, food preparation, social science, personal care, and protective service. Although still outweighed by replacements, occupations that seem to be indicating growth are education, computer/math, and healthcare.

While establishments that are part of industry employment and responsible for creation of jobs, demonstrate employment and individuals fill the jobs in various occupations, another way to view the dynamics of employment and occupation is through staffing patterns or an inverted matrix. This dissection gives the complete picture or allows a given area to observe patterns in expansion and contraction of occupations within industries. The sectors that have the highest concentrations of occupations are public, leisure/hospitality, education, healthcare, and construction. The concentration of occupations found throughout the sectors are food preparation, protective service, sales, office and administrative support, and transportation and material moving occupations.

Figure 23

Occupations	BaseEmployment	ProjectionEmployment	NumericChange	Percent Change	Growth Openings	Annual Growth Openings	Replacement Openings	Annual Replacement Openings	Total Openings	Annual Total Openings
Total, All Occupations	37627	37701	74	0.2	1359	136	9508	951	10867	1087
Management Occupations	2541	2587	46	1.81	65	6	503	50	568	56
Business and Financial Operations Occupations	1603	1663	60	3.74	91	9	393	39	484	48
Computer and Mathematical Occupations	364	381	17	4.67	25	2	60	6	85	8
Architecture and Engineering Occupations	163	162	-1	-0.61	8	1	35	4	43	5
Life, Physical, and Social Science Occupations	1472	1404	-68	-4.62	15	2	554	55	569	57
Community and Social Service Occupations	442	437	-5	-1.13	12	1	102	10	114	11
Legal Occupations	576	575	-1	-0.17	10	1	92	9	102	10
Education, Training, and Library Occupations	860	945	85	9.88	100	10	208	21	308	31
Arts, Design, Entertainment, Sports, and Media Occupations	169	165	-4	-2.37	3	0	32	3	35	3
Healthcare Practitioners and Technical Occupations	758	830	72	9.5	84	8	158	16	242	24
Healthcare Support Occupations	364	392	28	7.69	31	3	68	7	99	10
Protective Service Occupations	3384	3470	86	2.54	216	22	804	80	1020	102
Food Preparation and Serving Related Occupations	3795	3856	61	1.61	98	10	1364	136	1462	146
Building and Grounds Cleaning and Maintenance Occupations	2134	2277	143	6.7	143	14	431	43	574	57
Personal Care and Service Occupations	1118	1142	24	2.15	45	4	291	29	336	33
Sales and Related Occupations	4153	4193	40	0.96	102	10	1388	139	1490	149
Office and Administrative Support Occupations	8707	8325	-382	-4.39	140	14	1882	188	2022	202
Farming, Fishing, and Forestry Occupations	56	56	0	0	1	0	10	1	11	1
Construction and Extraction Occupations	864	731	-133	-15.39	1	0	135	14	136	14
Installation, Maintenance, and Repair Occupations	1535	1494	-41	-2.67	48	5	348	35	396	40
Production Occupations	597	551	-46	-7.71	4	0	142	14	146	14
Transportation and Material Moving Occupations	1972	2065	93	4.72	117	12	508	51	625	63