Comprehensive Economic Development Strategy For the U.S. Virgin Islands

2012 Update to the 2009 Plan



Office of the Governor Bureau of Economic Research

Comprehensive Economic Development Strategy for the U.S. Virgin Islands:

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Introduction

The most recent Comprehensive Economic Development Strategy ("CEDS") for the United States Virgin Islands ("USVI" and "Territory") was approved by the U.S. Economic Development Administration ("USEDA") in 2009. The 2012 CEDS Update ("CEDS Update"), tracks the progress made in the past three years in achieving the Territory's economic development goals, documents the changes in economic conditions and realigns investment priorities to the changing economic environment. The most significant change in the economic conditions of the Virgin Islands since the 2009 CEDS Plan approval has been the recent abrupt closure of the HOVENSA L.L.C. ("HOVENSA") oil refinery on the island of St. Croix that is only now beginning to have the most dramatic impact on the social, economic and financial fabric of St. Croix and the entire Territory. This corporate decision, not only ended a sixty-year relationship with the closure of one of the largest petroleum refinery in the western hemisphere, but also silenced the economic engine that powered so much of St. Croix's business community, philanthropic giving and employment.

Overall, and as will be noted in this 2012 CEDS Update report, the HOVENSA refinery closure represented more than a \$580.0 million reduction in direct gross economic output, or approximately 13% of our total gross territorial product, and a loss of over \$92.0 million in tax receipts. The closure resulted in the direct termination of approximately 2,500 employees and subcontractors, representing 12% of total employment and 27% of the average gross pay of the private sector on the island of St. Croix. During the inception of the 2009 CEDS Plan, the Virgin Islands unemployment rate was, on an annual basis, well below the U.S. annual average during the same time period as the entire nation was still experiencing an economic downturn resulting from the global recession. The refinery insulated the Virgin Islands from the full brunt of the recent recession but along with closure and the lingering aftermath of the decline in global economic growth is not only creating unemployment at an alarming rate and energy uncertainty is increasing in the Virgin Islands. The current strategic goals for the CEDS should encompass sustainable employment, energy and entrepreneurship policies that will encourage and facilitate new job creation, private investment, business expansion and retention while strengthening the Virgin Islands economy.

With employment prospects dimming in the Territory and as highly trained employees seek opportunities globally, the current unemployment rate in the Virgin Islands has risen to more than double the unemployment rate that existed during the planning stages of the 2009 CEDS. Sustainable employment growth was not a priority economic development goal in the 2009 CEDS nor was job creation, entrepreneurship and workforce development, and training for dislocated workers in the Territory. The overall economic development goals of the Virgin Islands was centered on fostering a more stable, diversified and adaptable economy by creating a vibrant economy built on strong traditional, new and emerging markets. At that time, the economy was growing as HOVENSA was profiting from higher oil process and the average annual Virgin Islands unemployment rate was 5.9% beginning in 2009. Presently, as the Government of the Virgin Islands ("Government or GVI") monitors the economic, fiscal and financial fallout associated with the refinery closure, for each passing day members of the business community, government officials and civil leaders are just beginning to get a more accurate understanding of the CEDS economic development process as new strategies are being formed to implement updated sustainable employment, energy and economic growth related objectives and goals for St. Croix and the entire Territory.

2012 UPDATE TO THE CEDS STRATEGIC PLANNING OBJECTIVES

The CEDS Update is founded on the platform of the 2009 CEDS five-year plan. The deliberative process began in September 2007 with the formation of a CEDS Committee ("Committee"), comprised of representatives from the public and private sectors and nonprofits. The Committee's main objective was to develop a new economic development strategy for the Territory. To accomplish this, six sub-committees were formed. These were:

- Economic Development
- Tourism, Hospitality and Retail
- Marine and Port Development
- Financial and Business Services
- Information technology ; and
- Energy Infrastructure, Environment and Transportation

The sub-committees' task was to develop a vision, with goals, objectives and strategies for each of the areas under their purview, employing various tools for strategic planning such as SWOT ("strength, weaknesses, opportunities, threats") and situational analyses, consulting public sector and private sector strategic plans and initiatives. Through dialogue and consensus building in group meetings, economic symposia, summits, workshops and outreach programs, the CEDS committee was able to assess the strengths, weaknesses, and opportunities in the local economy and formulate a vision, goals, objectives and capital investment projects for the economic development and diversification of the Territory. The CEDS committee also approved a prioritized short list of investment projects based on public need and which exhibit sustainable development (see the 2009 USVI Comprehensive Economic Development Report for detailed descriptions).

The five-year CEDS completed in 2009 included the following areas:

- 1. The CEDS Committee Vision and Mission Statements, Goals, and Meeting Schedule An articulation and description of the Territory's economic aspirations and desired outcomes.
- 2. Current Conditions and Trends An analysis of the economy using current data and research.
- 3. Strengths, Weaknesses, Opportunities, and Threats A framework for analyzing the Territory's resources and environment.
- 4. The CEDS Subcommittees- A description of working groups and their area of focus.
- 5. Evaluation Criteria A yardstick against which accomplishments and impact are measured.
- 6. **Priority Projects** A short list of projects that meet the core of the CEDs goals.
- 7. **Performance Measures and Evaluation** An outline of the plan's implementation and methods for evaluating progress on meeting the CEDS goals and execution of priority projects.

2012 UPDATE TO THE CEDS VISION, GOALS AND PRIORITY PROJECTS

In preparation of the CEDS Update, members of the CEDS Committee participated in work groups charged with reviewing the vision, goals, and priority projects contained within the five-year strategy to determine whether they were still relevant under current economic conditions. The participants were representatives of the Chambers of Commerce, economic development authority, the workforce development board, community foundations, the tourism and hotel association, insurance and banking industries, labor groups, public-sector and quasi government agencies. Given the unique partnership between the Government of the U.S. Virgin Islands and the business sector, non-profit associations similar to the St. Thomas and St. Croix Chambers of Commerce and the Hotel Association

represent the private sector in regards to public policy matters, so input from the private sector exists on the CEDS Committee. Members of the CEDS Committee and their affiliations are listed in the Appendix 1.

Four subcommittees were created by Governor John P. de Jongh, Jr., Chairman of the CEDS Committee, each with the responsibility to overhaul the strategy and priority projects and propose changes, if any. The subcommittees were: Economic Development; Finance and Business Service, Information Technology and Public Affairs; Energy, Infrastructure, Environment and Transportation; and Workforce, Education and Social Welfare. The CEDS vision and overall goals were retained from the 2009 CEDS Plan after a CEDS Committee review determined they were still relevant, but new goals were also added to address emerging needs and critical issues facing the Territory. As an outgrowth of this process, several projects were deleted from the priority list as implementation of projects has been affected due to shortage of resources and the changing economic times.

While the shortage of critical resources along with new economic and fiscal realities has hampered the Territory from implementing many of its priority projects, a tremendous amount of planning, project development and economic development analyses have been completed in the past three years. While transportation and utility based priority projects have either stalled or delayed, while alternative energy and broadband projects visualized in the 2009 CEDS has expanded having access to public private funding opportunities.

CEDS VISION

The CEDS vision articulates a medium-term vision for the Territory's economic development as stated. The Government of the Virgin Islands will capitalize on its unique human, natural, cultural and industrial resources and location to create a robust and globally competitive economic marketplace that attracts, creates and retains business and industry, continues to upgrade and rebrand its tourism offerings, provides high-wage jobs, and opportunities that results in the highest quality of life and sustainable prosperity for its residents.

GOALS FOR THE TERRITORY

The CEDS is built on five principle economic development goals rooted in a strong commitment to economic viability, increased economic opportunities, and a higher standard of living for the residents of the USVI. These goals qualify all the initiatives and actions, and support the overall vision of a robust economy, a competitive business environment, high wage jobs, and opportunities that assure the highest quality of life for residents. Each of these goals is supported by objectives and strategies. The goals are to:

- 1. Create a vibrant economy built on strong traditional, new and emerging markets that drive business creation.
- 2. Develop a skilled workforce and excellent educational and training opportunities.
- 3. Build an efficient, reliable, and integrated utility, transportation and technologically advanced infrastructure.
- 4. Create an accessible, affordable and efficient health care system.
- 5. Maintain an efficient, transparent, and effective public sector.

As a supplement to the CEDS Committee and sub-committee meetings, Governor de Jongh convened a strategic planning session on March 20, 2012 facilitated by the National Governors Association. The culmination of the strategic planning session was the development of a list of priority areas of concern being faced by members of the community as well as accomplishments the Governor's cabinet members have achieved so far in the current administration. Many of the priority areas, including education and energy, and developing a Science, Technology, Engineering and Mathematics ("STEM") programs in the public schools were consistent with the 2009 CEDS goals and

objectives but many went the well beyond the economic and social development concerns in the current CEDS plan to focus more on community development such as health and public safety concerns as the Territory recovers from massive layoffs in both the private and public sectors, and capitalizing on knowledge-based opportunities by strengthening our STEM programs in both educational and training areas. The Governor's strategic priority areas were:

- Economic and Small Business Development
- Health
- Energy
- Public Safety
- Education

There were also planning and strategic sessions held by sub-committee members with the Board of Directors of the St. Croix Chamber of Commerce, a group of business leaders and economic development beneficiaries on St. Thomas, meetings with the Health Reform Task Force, the Children & Family Council and Territory-wide tourism held summits.

Section 1: New Developments and Trends

Since the 2009 Comprehensive Economic Development Strategy was written, the local economy has suffered a confluence of three shocks, the magnitude of which has created major economic and financial distress. The Territory has been negatively impacted with the passage of the 2004 JOBS Act, which arbitrarily altered residency requirements, and the U.S. Internal Revenue Service's change of the statute of limitations enforcement, both actions resulting in the loss of economic development beneficiaries and reduction in applications; by the Great Recession; and, finally, as described in the introduction the closure of HOVENSA oil refinery is the most significant negative impact on the Virgin Islands. The cumulative impact of these events, from mid-2008 and to date, have triggered higher rates of unemployment, contraction in economic output, investment and private consumption, and a concomitant decrease in Government revenues, resulting in burgeoning budget deficits and employee terminations in both the private and public sectors.

The local economy first experienced incipient signs of slowdown in late 2007, but it was not until the end of 2009 that economic growth decelerated considerably as the contagion from the recession spread throughout virtually all sectors of the economy choking economic growth and business and investment. This was mirrored by the reduced application flow to the Territory's economic development program administered by the Virgin Islands Economic Development Authority ("EDA") and the closing of many companies. As a small, open economy, highly integrated within the U.S. and global economies, the Virgin Islands remain highly susceptible to exogenous shocks. So as the global crisis heightened, it eroded economic gains and accentuated the weaknesses in the heavily tourist-based, refined petroleum export-dependent Virgin Islands economy.

The dependence on two industries has made the USVI economy subject to perturbations in world market and vicissitudes of business, to the extent that the shut-down of HOVENSA oil refinery located on St. Croix has been a shock of major proportion, one that potentially can cause unparalleled impact on the people and economy. The refinery's imprints are in all areas of the economy and the loss of refining capacity will have broad impact in all sectors

through the economic multiplier effects. Aside from the direct impact, indirect effects will be felt on industries that were direct supplier of goods and services, on household spending and investment, housing and real estate market, education, and health care services, leading to broader impact on economic output, employment, wages, income, and government tax revenues.

OIL REFINERY CLOSURE

HOVENSA L.L.C., a joint venture between Hess Corporation and the Venezuelan state company Petróleos de Venezuela, shut down the 350,000 gallon per day capacity St. Croix oil refinery in February 2012 and announced its intent to convert the site to an oil storage terminal conditioned on a long term concession being negotiated with the Government. HOVENSA cited operational losses of \$1.3 billion that accumulated over the past three years and projection of continued losses as the basis for the closure of the refinery. The income losses are attributable to several factors that have plagued the oil refining industry in recent years, including the combination of high crude oil prices and weak demand for petroleum products. HOVENSA also identified competition from new and emerging markets and its competitive disadvantage with U.S.-based refineries fueled by low-priced natural gas as a responsible factor for the closure.

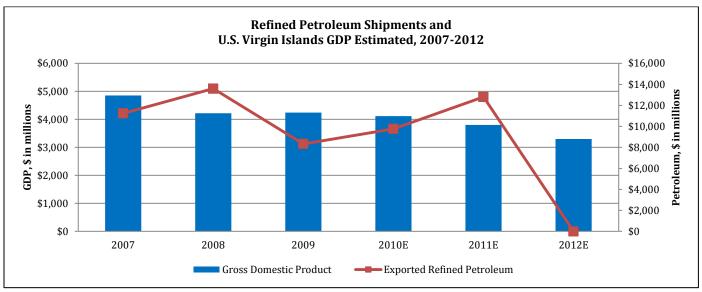
The closure of the oil refinery, which was the largest private-sector employer in the Territory, will have a major adverse impact on the economy. The oil refinery directly provided about 2,200 full-time jobs—1,200 manufacturing jobs and 950 contractors paying an annual average wage of \$76,000 in 2010, twice the \$38,000 average annual wage for all USVI jobs. HOVENSA has made considerable payments to the Government in the form of employee compensation, taxes, vendor payments for goods and services and charitable contributions. The sum of these effects was \$408 million in Fiscal Year 2011. The payments included employee payroll of \$112.3 million, \$175 million for contract workers contractor and \$2 million in non-resident company withholdings, \$35 million in taxes including property taxes totaling \$14 million, transfer payments of \$84 million, and charitable contributions of \$1 million.

The loss of the oil refinery suggests that the impact on Government revenues and employment is significant. While revenues and employment are hard hit, the economic loss extends well beyond these direct impacts. The oil refinery indirectly created additional jobs and economic activity across many other local industries from which it purchased goods and services, including accommodation and food, transportation, construction, utilities and business services. Due to its dominant presence particularly on St. Croix, the closing of the oil refinery will cause an additional 10% of the islands workforce to become jobless, doubling the unemployment rate for St. Croix to an unprecedented 18.7% and elevating the Territory's unemployment rate to 12.5%. Additionally, the closure will cause government tax revenues to decline by as much as \$100 million annually from the loss of property, corporate and income taxes. Further, refined petroleum industry generates about 95% of the Territory's total export revenue and is responsible for 20% of the Territory's \$4 billion economy; hence, a concomitant drop in output and export earnings is anticipated with the closure of the refinery.

The Territorial Gross Domestic Product ("TGDP or GDP") estimates underscores the effect the oil refining industry has had on the territory's economic growth. From 2002 to 2007, real GDP grew at an average annual rate of 2.9 percent. Real GDP decreased in 2003 but increased in each year from 2004 to 2007. Changes in exports, imports, and investment (including inventory investment) associated with the oil refining industry accounted for much of the year-to-year variation in real GDP growth. For example, the decrease in real GDP in 2003 reflected a decrease in construction activity due to the completion in 2002 of several large private and public sector projects, including a \$0.5 billion Coker unit for the oil refinery in St. Croix. The increase in real GDP in 2005 also reflected an increase in

construction activity associated with the oil refinery: specifically, the construction of a desulfurization unit that began in September of that year. The increase in real GDP in 2007 largely reflected trade activities associated with the oil refining industry. As the recession global took hold, the economy of the U.S. Virgin Islands contracted in 2008 and in 2009. Real GDP decreased 5.6 percent in 2009 after decreasing 1.3 percent in 2008. The decrease in real GDP in both years reflected changes in imports, inventory investment, and exports associated with the oil refining industry.¹

The following graph illustrates the contribution of oil industry to export and GDP and potentially the consequential loss to the economy.



Source: USVI Bureau of Economic Research

The implications for the Virgin Islands economy are clear. The economic benefits, output and employment that the oil industry generated are much less certain. Hence, there must be a retooling of resources and restructuring of priorities to mitigate against severe economic loss.

The Government, based on legislative action, also implemented the Virgin Islands Economic Stability Act of 2011, which included an 8% across-the-board reduction in the salaries of all government workers paid over \$26,000 per year; implemented a program to incentivize the retirement of government employees with thirty or more years of service; instituted a limited hiring program and voluntary leave without pay. In early 2012, the Government commenced executive branch employee dismissals. The passage and approval of the economic stability legislation had a tremendous economic development impact, as the annual government payroll declined by approximately \$26.3 million with the implementation of the 8% salary reduction measure and resulted in the early retirement of 324 employees. In addition, the reduction in overall government revenues required the elimination of 571 positions in FY 2012 and substantially more unless economic conditions improve for the Virgin Islands.

ECONOMIC DEVELOPMENT RELATED PRIORITIES

Against this backdrop of economic destabilization, job losses, and a continual decline in government revenues, a refined set of economic development priorities have emerged. To address these challenges and opportunities, the Government and its private sector and non-governmental partners are undertaking efforts to expand and diversify the

¹ U.S. Bureau of Economic Analysis, *GDP for American Samoa, the Commonwealth of the Northern Mariana Islands, Guam and the US Virgin Islands*, September 2011.

economy and create business opportunities employment for residents. The Government, cognizant of the need to diversity its economic base to safeguard against a changing economy and to replace jobs lost in the manufacturing, retail and designated business sectors has established several priority areas and projects for implementation. In addition, the revitalization of the historic towns of Charlotte Amalie, including Savanne, Christiansted and Frederiksted and including all enterprise and commercial development zones are key elements of overall economic development in the Territory.

Revitalization of the downtown districts was a priority area in the Governor's strategic planning session and an economic priority to business owners and residents located in these communities as strategies supported by tax incentives, grants and technical assistance are implemented. EDA along with Virgin Islands Finance Authority, the Virgin Islands Department of Planning and Natural Resources Division of Comprehensive and Coastal Planning, the Virgin Islands Department of Agriculture Urban and Community Forestry Program and numerous civic groups are developing programs to revitalize downtown development districts. The ultimate goal for downtown district development is to support revitalization of commercial and residential properties to encourage and facilitate efforts that will enhance the quality of, future economic growth and sustainable community development in urban areas.

MITIGATION OF "SUDDEN AND SEVERE" ECONOMIC IMPACTS OF NATURAL DISASTERS AND PLANT CLOSURES

The economic, financial and fiscal shock resulting from the refinery closure is not as devastating as a natural disaster but the impact can be almost as great in magnitude. Not only is it important for the territory being prone to hurricanes, tsunamis, high winds, and water damage that paralyzes industry and trade, and disrupts the livelihood of thousands of residents, to implement a sound disaster mitigation plan. At this critical point in time in the Territory, with the abrupt closing of HOVENSA and the sudden and severe loss of 2,100 direct and numerous indirect jobs are causing n a potentially massive downturn in economic growth and as much as \$100 million loss in government tax revenues, a sound mitigation plan needs to implemented for economic disasters as well. Mitigation efforts for both natural and other disasters should include expanding current economic development projects and programs to facilitate the creation of new employment, private investment and business expansion and retention, which strengthens the local economy.

DIVERSIFICATION OF TOURISM, MANUFACTURING AND INDUSTRIAL SECTORS

Employment in the manufacturing and industrial sector is relatively small with higher paying incomes; the Virgin Islands economy remains heavily dependent on tourism and government employment. Given the closure of the HOVENSA oil refinery eliminated the majority of the well paying jobs in the Territory's manufacturing sector and austerity measures undertaken by the GVI fewer government positions are available. With the elimination of manufacturing and government positions the economic development goals of diversifying the manufacturing and industrial sectors in the Virgin Islands are a priority.

To diversity the manufacturing sector, in May 2012 the U.S. Department of Labor awarded the Virgin Islands a National Emergency Grant to assist the more than 1,200 workers affected by layoffs that resulted from the closure of the oil refinery on St. Croix. The grant is being implemented by the U.S. Virgin Islands Department of Labor to provide work force training prepare the dislocated HOVENSA employees remaining in the Territory for employment in demand-driven occupations with portable and transferrable credentials. The work force training provided for the unemployed HOVENSA workers should be applied to dislocated workers in the manufacturing, industrial and other industries to develop invaluable work skills to promote and foster job creation, private investment and business expansion and retention to achieve a diversified manufacturing and industrial work force.

Within the tourism context, target sectors most suited to the Territory's expansion and diversification include a rebranding of tourism offerings, in conjunction with the hotels and vacation rentals and attractions and building niche markets – such as sports, dive, weddings, continuing education, cultural heritage, the marine industry, health care, renewable and alternative energy developers and entrepreneurs, technology and business services. These sectors have been identified and advanced to stimulate new investment and foster a more diversified and sustainable economic base. Key to these initiatives is the public-private partnerships that can be obtained through incentives available through the Virgin Islands Economic Development Authority and the University of the Virgin Islands Research and Technology Park ("UVI" and "RT Park").

SUPPORT FOR SMALL BUSINESS ENTREPRENEURS

Another strategic priority area by the Governor's cabinet was supporting small business entrepreneurs. This support is a key pivotal step in achieving a diversified economic base of the Virgin Islands. With the expansion of small business entrepreneurs by strengthening the participation of small businesses in the local economy to a level of innovation with technical assistance and access of financial resources not previously experienced, both economic and business diversification can be obtained. The essential elements of this effort will be access to capital either through federal or GVI resources, but undoubtedly with local commercial banking support. An aggressive Disadvantage Business Enterprise program on federal highway projects, the preferred bidder's status on public contracts, a strong contractor bonding program to access to bid on capital projects, a certified supplier program for locally-owned businesses and support of the Small Business Development Agency to achieve innovative and research support, and establishment of a equity and/or venture capital financing vehicles would encourage dislocated workers and potential entrepreneurs to pursue opportunities in small businesses.

Small Business Development Center and Business Incubator Program is currently targeting local firms that provide high quality jobs and economic diversification. Firms include high-margin light manufacturers, call centers and designated service businesses, such as asset and investment managers. The economic mandate for the UVI and EDA is to establish capital and preserve job opportunities for residents of the Virgin Islands while promoting capital formation for economic and business development in the Virgin Islands.

The University of Virgin Islands ("University"), in consultation with successful innovation entrepreneurs and leading technical experts in the field of entrepreneurship, has developed an informative model for enhancing the success of entrepreneurial initiatives that can serve as the appropriate bridge between the government and the private sector. With the closure of HOVENSA and other economic challenges facing the US Virgin Islands, this academic endeavor has now taken on greater importance for the entire Territory. The University intends to build upon this foundation of technological expertise and develop a Territory-wide Entrepreneurship Development Center. The successful businesses that participate in the project would eventually contribute to the economic development and stability of the Territory in a significant and meaningful manner. The initiative will be undertaken with the involvement of the Small Business Development Center at the University.

INVESTING IN NEW AND ALTERNATIVE ENERGY RESEARCH, PRODUCTION AND UTILIZATION

As the Territory confronts a future without the oil refinery and facing higher energy costs, more emphasis is placed on research and investment in developing and implementing renewable and alternative energy sources. The Government completed its strategic plan with Southern States Energy Board and in 2010 was selected by the Department of Energy and Department of the Interior for the Energy Development in Islands Nations ("EDIN")

initiative. The Government has set a goal of reducing its reliance on fossil fuel to sixty percent by 2025. Options and strategies under review for implementation include incorporating solar, wind and liquidified natural gas into the energy portfolio and constructing an electric grid interconnection with Puerto Rico.

INCREASING ACCESS TO EDUCATION, WORKFORCE TRAINING AND INNOVATIVE TECHNOLOGIES

Education is a key driver of economic development and sustainable economic growth. From improving early childhood education to providing STEM training across multiple grade levels including the University level, the Virgin Islands is making great strides in increasing the access while improving the quality of formal education in the Territory. Not only is formal education essential to worker productivity but the expansion of workforce training for terminated workers also improve labor productivity which is the basic foundation for sustainable economic growth. In addition, existing innovative technologies in telecommunications are linking both formal education and job specific workforce training globally so students as well as workers can constantly obtain additional knowledge and valuable work related skills.

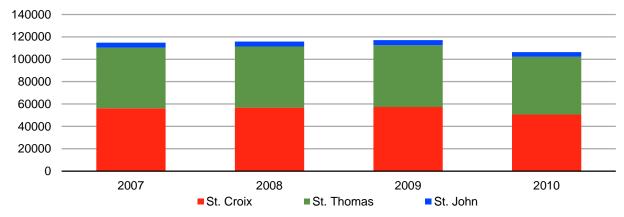
The University's Research & Technology Park is serving the dual mission of expanding the Territory's economic platform in e-commerce and knowledge-based businesses and facilitating UVI's involvement to build a workforce in these disciplines. The RT Park can provide economic incentives to qualified businesses. In addition, the RT Park includes a multi-tenant innovation center for office labs, conference areas and information technology-dependant businesses and currently has 16 tenants and is actively recruiting additional eligible firms.

Recent reports by the Brookings and McKinsey Institutes confirm national economies that adopt innovative technologies including telecommunications tend to recover from global disasters like recessions, factory closures or natural disasters. The 2009 CEDS objective for business service and information technology called for the o development of a diversified and sustainable information technology and business services. Presently, the final stage of Virgin Islands Next Generation ("viNGN") broadband middle mile technology project funded by the U.S. Department of Commerce and the Government of the Virgin Islands is being completed and is achieving this goal by creating 50 public computer centers at libraries and community centers along with the anticipation that 700 new computer workstations with training in computer literacy skills, high-definition teleconferencing capabilities, and technology services for small local businesses.

To capitalize on the STEM efforts and to ensure long-term economic platform diversification, an Executive Order was signed by the Governor in 2011, establishing Science and Technology Council ("Council") with public and private sector representation. The Council's primary charge is the given guidance to the development of a science and technology environment that strengthens the educational foundation and identifies opportunity for economic diversification and growth. The Council is an integral component of the University of the Virgin Islands in the work of the Virgin Islands Experimental Program to Stimulate Competitive Research ("VI-EPSCOR"), which is funded by the National Science Foundation.

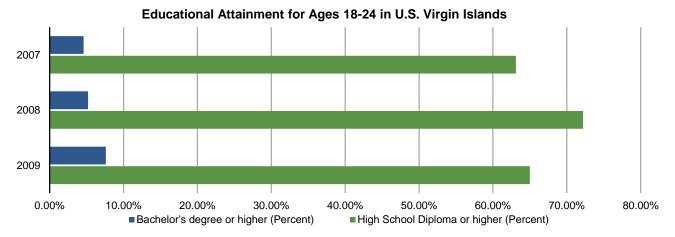
CHANGES TO THE SOCIOECONOMIC PROFILE SINCE THE 2000 CENSUS

This summary highlights changes in the socioeconomic profile of the USVI since the 2000 census. In 2010, the residential population of the U.S. Virgin Islands declined to 106,405 persons. This follows a decade of slow, but steady annual population growth of 0.6 percent, considerably slower than the U.S. annual average of 1.15 percent. A complete update of this section can be found in Appendix 2.

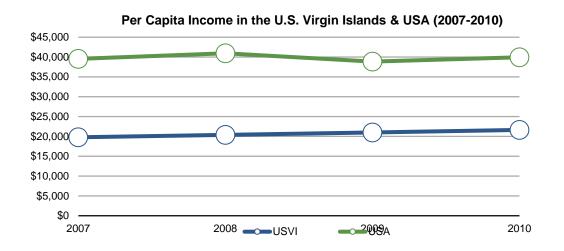


Population in U.S. Virgin Islands from 2007 - 2010

Educational attainment in the U.S. Virgin Islands is far below U.S. national averages, with nearly 50 percent of the adult population having less than a high school diploma. The U.S. Virgin Islands have a shortage of highly educated adults, with only 12 percent of the adult population having a bachelor's degree or higher, whereas the U.S. national average is 27 percent.



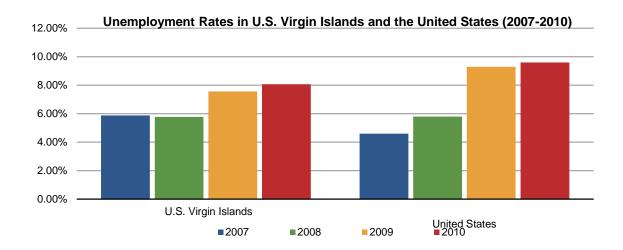
The average income of Territory's residents is considerably lower than that of residents of the mainland United States. In 2009, the per capita personal income of residents was \$20,992, slightly higher than half the U.S. average. Given the impact of the Great Recession, per capita personal income for both the Virgin Islands and the U.S. essentially stalled during the recessionary period and has recently improved. Still, the problem of lower personal income received by the vast majority of local residents is further compounded by the relatively higher costs of living on the U.S. Virgin Islands. This gap has steadily widened as real, or inflation-adjusted, incomes in the Territory have declined slightly over the past 15 years.



In 2011, just over 46,000 people in the U.S. Virgin Islands were employed. This represents a decrease of 2.5% from 2009. Together, St. Thomas and St. John capture just over half of the total U.S. Virgin Islands employment base , despite having a near even split of the resident population. Between January 2000 and December 2011, the employment base of St. Croix expanded from 17,690 to 19,676, producing an annual average growth rate of 1.34%. In the same time period, the employment base of St Thomas/St. John/Water Island grew from 25,450 to 26,081, resulting in an annual average growth rate of 0.52%. From the beginning of 2012 to July, just over 44,000 workers remain employed resulting in the layoff of over 2,000 workers representing 4.5% of the available work force. As the employment is gradually increasing in U.S., employment prospects are deceasing in the Territory, as residents on St. Croix are shouldering the brunt of job losses due to the refinery closure.

Beginning in 2007 and continuing through 2010, the average annual growth rate in nonfarm employment in the Territory has been declining by .76%. While this is not ideal, this rate compares favorably with the U.S. growth of rate of -1.14%. If this trend had continued, future employment prospects were uncertain and had hinged on the net balance of employment growth arising from local economic development efforts to increase private sector employment versus a global recession-impacted slowdown in tourism and construction. Instead, despite local economic development efforts to improve employment in tourism and supporting industries, the refinery closure initially increased unemployment in the manufacturing sector which is now spreading to other industries.

From 1997 until mid-2008, monthly unemployment rates in the Territory were consistently higher than U.S. averages. However, since the summer of 2008, the monthly unemployment rates of the United States have exceeded that of the Territory. Beginning in 2012, the Virgin Islands unemployment rate has been considerably higher than the U.S. employment rate and is currently one of the highest rates of unemployment in the United States.



From 2001 to 2011, the Virgin Islands economy added the most jobs (approximately 700) in the education and health services sector. Expansion in the education and health services sector is followed by a near tie between government, leisure and hospitality, and financial activities — each netting approximately 300 new jobs. Over the 11-year period, construction industry sector suffered the greatest loss of jobs followed by other services, the information and manufacturing sectors.

Following the shutdown of the oil refinery, the facility has proposed the operation of an oil storage terminal². According to the U.S. Virgin Islands Bureau of Economic Research, the refinery was the largest private employer on St. Croix and the entire Territory. It directly employed 1,400 people and 900 others were employed by contractors.³ The closure is projected to near term a negative impact on the Territory's economy as the government adjusts it programs and services to the loss taxes, local businesses adjust to loss activity resulting from the refinery and its workforce and the use of the facility is re-positioned to have alternative economic use. Between 2001 and 2011, the U.S. Virgin Islands' fastest-growing sector was education and health services, followed by transportation and utilities and financial activities. Growth in those sectors could remain strong over the long term if the U.S. Virgin Islands can successfully attract a significant number of potential college students, health care clients and U.S. retiree population or other residents seeking warmer climates while still residing in the United States.

Among the Territory's most highly specialized industries, repair and maintenance and specialty trade contractors each experienced the declines of 31% between 2001 and 2010, while the more general industry sector of management of companies and enterprises experienced a 50% employment decline during that same period.

Between 2000 and 2010, employment growth rates in the U.S. Virgin Islands surpassed those in the United States overall in 12 of the Territory's 30 largest occupations, with net job losses in 12. The two occupations with the greatest growth rates over this period are combined food preparation and serving workers (including fast food) and secretaries and administrative assistants. There is evidence of strong demand for workers in the emerging finance and insurance sector, as suggested by a greater than expected growth in the numbers of secretaries and administrative assistants, accountants and auditors, and first-line supervisors of office and administrative workers. Other relatively fast-growing occupations include general and operations managers and customer service representatives.

² HOVENSA Announces Closure of St. Croix Refinery, Information obtained from <u>www.hovensa.com</u>, January 18, 2012.

³ U.S. Virgin Islands Economic Review, January 2011, U.S. Virgin Islands Bureau of Economic Research, Office of the Governor, (http://usviber.org/Economic Review January 2011.pdf)

Section 2: Progress since the 2009 CEDS

The Government has made progress and continues to support initiatives to grow and diversify the economy and private-sector business, strengthen public finances, improve the infrastructure, build workforce skills, and improve the education and health care systems. As examples, the expansion of the rum distillery industry, the development of the University of the Virgin Islands Research and Technology Park, the build-out of the Virgin Islands Next Generation broadband "middle-mile" initiative, ongoing efforts to expand access to affordable health insurance, strengthen early childhood education development pathways and execute poverty reduction initiatives, and infrastructure enhancement of utility systems, roads, and sea and air ports as essential components of the economic development projects and initiatives that support the growth of the Virgin Islands economy. These efforts include downtown revitalization, workforce development, modernization and expansion of hotels and inter-island air transportation. Noteworthy projects, planning and technical assistance initiatives in progress or completed in the past three years are summarized below.

- To further develop, expand and stabilize the rum industry, the Government signed two 30-year agreements with Diageo plc and Beam, Inc.'s Cruzan VIRIL to expand their branded rum production in the Territory over the next thirty years. The Matching Fund receipts generated from these public-private partnerships have sustained public sector operations and capital investment during the Great Recession and will be essential to the Territory's financial solvency with contributing revenues to the General Fund.
- 2. The Southern States Energy Board or SSEB developed an energy plan, in conjunction with the EDIN program that identified a range of energy options, including energy efficiency programs, renewable energy, fossil fuels; grid interconnection, water production, and transportation have been and are continuing to be studied. Based on the SSEB study, energy policies from eleven states enacting comprehensive utility energy efficiency programs, implementing comparable energy savings from efficiency for the U.S. Virgin Islands would represent an annual potential savings of \$2.6 million and a total savings potential of over \$50 million. These energy efficiency programs can cost as little as half the cost of new generation and reduce overall costs while reducing the need for additional power units.
- 3. The Government, through the Virgin Islands Public Finance Authority, with viNGN as a subrecipient, was awarded \$68 million of federal funding to implement four Broadband Technology Opportunities Programs ("BTOP"): the Comprehensive Community Infrastructure project; the Public Computing Centers project; the State Broadband Initiative project; and the Sustainable Broadband Adoption project. The grant funding will be used to construct and connect a state-of-the-art "middle-mile" infrastructure to enable broadband access to every facet of Virgin Islands' life, including households, schools, public safety, emergency management, healthcare delivery, and private sector activity. These programs will include establishing public computer centers across the Territory to achieve access and opportunities for online training and basic digital literacy to advance training for technology jobs or to start businesses. Additional funding was provided by the Government via a \$32 million bond issue and an in-kind contribution by the Virgin Islands Water and Power Authority.
- 4. The U.S. Virgins Islands Economic Development Authority received a \$489,646 State Trade and Export Promotion ("STEP") grant from the U.S. Small Business Administration to assist small businesses to develop

and expand products for foreign export market. The STEP Grant program, administered by the Virgin Islands Economic Development Authority is a three-year pilot trade and export initiative. Grant funds have, to date, been utilized to identify potential participants and provide the tools to heighten their knowledge of the markets and requirements.

- 5. In addition, the U.S. Virgins Islands Economic Development Authority and the Government of the Virgin Islands received a \$13.1 million grant from the U.S. Department of Treasury under its State Small Business Credit Initiative Program ("SSBCI") to assist in providing opportunities for small business programs including loan guarantees, collateral support programs and loan participations in partnership with local commercial banks. The SSBCI is administered through the EDA; a marketing specialist was employed to work with local commercial banks to open lines of credit. Given the relatively flat line activity of the commercial banks in lending to small businesses and the rather non-existent activity of the U.S. Small Business Administration in the Territory, it is the intent of the Government to spur some increased activity through this program with support of lines of credit and other creditworthy activity.
- 6. The University of the Virgin Islands Research and Technology Park began the construction of the RTPark's \$13 million building on its St. Croix campus. The U.S. Department of Commerce, through its Economic Development Administration, provided \$5.5 million in funding. The 18,000 square foot building is situated on a 10-acre and will offer state-of-the-art technologies, including a data communications center, conference room and support facilities. It will be developed as a "cyber-smart flexible hot space," providing tenants with direct, high-speed network access. The goal of Government through the RTPark and viNGN's "middle-mile" is to develop the Territory's technology community to generate long-term economic growth attracting and serving as a center for e-commerce and technology for transaction-oriented, knowledge-based businesses.

The University is also (i) part of a consortium, speared headed by the U.S. Department of the Interior and includes University of North Carolina-Wilmington, Rutgers University, and University of South Carolina to create and establish the Salt River Bay Marine Research and Education Center on St. Croix, (ii) applying for a third round of National Science Foundation funding to support the competitive research and technical assistance of VI-EPSCOR

- 7. To address the high poverty rates, and provision of a wage scale that recognizes the higher cost of living in the Territory, the Legislature of the Virgin Islands passed Act No. 7027 which required the Virgin Islands Bureau of Economic Research to develop an economic Self-Sufficiency Standard for the USVI ("Standard"). The Standard was developed in 2010 with the issuance and presentations to the CEDS and members of the Legislature. The Standard defined the annual income requirement needed by a family or household to provide for basic needs of housing, food, childcare, healthcare, transportation, clothing, miscellaneous household and personal expenses, and taxes without public or private subsidies. The study made a number of recommendations as a first step to implement a living wage standard which includes mandating the government, businesses which are the recipients of government subsidies, tax incentives and contracts pay the living wage. These recommendations are under consideration by Government officials. Additionally, the Government was successful in being awarded an Early Childhood grant to increase its investment in this critical area.
- 8. As part of an initiative to transform the healthcare system of the Virgin Islands and to reduce the number of uninsured, the Government anticipates receiving approximately \$300 million in federal funds due to the Patient Protection and Affordable Care Act ("ACA") 2010. The ACA funded amount must be matched by 45% in local funds during the period of Health Care Reform. The Government in furtherance of maximizing these

funds to ensure access and affordability is in the process has revising its Medicaid State Plan, re-designing its Medicaid program, automating Medicaid claims reimbursement system, developing a new joint eligibility system between Medicaid, cash assistance and supplemental food and nutrition programs, exploring the feasibility of implementing a Health Insurance Exchange and realigning its health care delivery system to achieve a synergy between the Virgin Islands Department of Health outpatient clinics, two public hospitals, two federally qualified health centers, and the private providers in the Territory. The Government is also approaching this level of funding from the perspective of economic development and creation of small business and job opportunities which will result from leveraging all resources associated with the availability of Medicaid Enhanced 90/10 funding.

- 9. The Government is executing a capital program to address the infrastructure in the historic districts in order to foster more residential and commercial activity. Revisions have been made to Enterprise Zone requirements, funding has been identified to commence design and construction activities on the Market Square and Main Street Enhancement Projects on St. Thomas, the Christiansted Boardwalk (Phase 1), Christiansted By-Pass, and Utility Undergrounding Projects on St. Croix, and the Frank Powell Park and Parking Projects on St. John. The legacy of the historic districts on the three islands, are in essence the very heart and soul of the downtown areas, and the capital funding in conjunction with the policy changes is intended to revitalize the areas while making the surrounding streets safer and more appealing to visitors.
- 10. The Virgin Islands Internal Revenue Bureau ("IRB") received over \$2 million in federal funding and technical assistance to upgrade its system to improve capacity to address tax collection and auditing deficiencies. The funding allowed the integration of the Virgin Islands Tax (VITAX) System with the Virgin Islands Enterprise Resource Planning (ERP) System allowing IRB to utilize the innovative features of ERP's Enterprise Content Manager. Funding also was used to develop a system to secure the processing and transmitting of federal tax information in conjunction with the U.S. Internal Revenue Service.
- 11. Some projects on the 2009 Priority listing report are either still in progress, modified or were not initiated after further analysis. These were:
 - a. Gordon A. Finch Molasses Pier: Plans to modify the terminal to accommodate all small cargo vessel traffic currently utilizing the Gallows Bay dock on St. Croix is pending due to Army Corp of Engineers permitting. The \$15 million proposed cargo building and offices, site development and roll-on/roll-off ramp, bulkhead, and basin components were submitted to the U.S. Department of Transportation as a Transportation Investment Generating Economic Recovery (TIGR) grant funding request with St. Croix Renaissance Park. Due to the TIGR grant threshold of \$20 million, the Virgin Islands Port Authority requested a waiver. In regards to future operations for the pier, the Virgin Islands Port Authority has plans to shift cargo operations from the Gallows Bay Marine facility to accommodate shipping demand from the local rum industry. International transshipping companies are considering developing a transshipment port at the facility, In addition, local business including St. Croix Renaissance Park, Tropical Shipping and Crowley are considering expanding opportunities at the pier.
 - b. Stalley Bay Marine Terminal and Apron: This new facility was being designed to divert commercial traffic from the Crown Bay pier, thereby alleviating Charlotte Amalie traffic congestion due to trucks transporting bulk material and equipment. The Virgin Islands Port Authority funded feasibility studies to determine the environmental impact associated with dredging the terminal. The entire project was initially postponed after reports identified a rare, indigenous coral species; however based on a current evaluation of the scope, its feasibility is still under consideration.

- c. HERA Aviation Center: This Virgin Islands Port Authority plan was to take advantage of the key location of St. Croix relative to other Caribbean islands, the runway's length and the available land mass to create a regional air cargo hub and maintenance, repair and overhaul "(MRO") facility at the Henry E. Rohlsen Airport on St. Croix. In addition, the Virgin Islands National Guard Air has developed a master plan to expand its footprint and presented plans to the National Guard Bureau in Washington, D.C., the Virgin Islands Port Authority and Federal Aviation Administration. The plans include for Caribbean region responses, parking of the Hurricane Hunters, a construction of a regional training institute estimated to cost between \$10 and \$20 million.
- d. Solar Panel Program: Three major initiatives have been executed in this area. First, the Virgin Islands Port Authority installed a photovololtaic solar panel system at the Cyril E. King airport that will lower annual electric costs by an estimated 15%. Second, the Virgin Islands Water and Power Authority has executed long-term power purchase agreements with Sun Edison, Toshiba International and Lanco Virgin Islands, LLC for the integration of approximately 18 MW of solar energy into the electrical grid. After the Virgin Islands Public Service Commission approves the rates and the project is constructed, solar power generation is anticipated to begin in early 2014. Lastly, WAPA is evaluating a Distributed Generation + Intelligent Grid (DG+IG) demonstration project on St. John, which is expected to result in 25% of St. John's electricity being supplied by local solar generation while delivering significant economic benefits to the Virgin Islands.
- e. Territory-wide Metropolitan Area Network ("MAN") to Accommodate Fiber to the Home/Business: Plans to create a Metropolitan Area Network ("MAN") that would allow local government agencies, schools and private business to easily exchange data and communicate via video will be achieved through the Virgin Islands Public Finance Authority's wholly-owned subsidiary, Virgin Islands Next Generation Network. In August 2010, the Virgin Islands Public Finance Authority ("PFA") was awarded a Comprehensive Community Infrastructure ("CCI") grant as a part of the Broadband Technology Opportunities Program administered by the U.S. Department of Commerce National Telecommunications and Information Administration. In addition to the CCI grant, the PFA was awarded the State Broadband Initiative, Public Computer Centers and Sustainable Broadband Adoption grants. viNGN is a sub-recipient of the grant funds. In addition to the grant funding, the Virgin Islands Water and Power Authority is providing in-kind contribution of assets and PFA undertook a bond issuance to facilitate the local funding match requirement. viNGN's build-out includes a high speed, open access, fiber optic network infrastructure to provide Ethernet transport for service providers and, by extension, to community anchor institutions/anchor tenants within the Territory. The ultimate goal is to serve as a "middle mile" provider, with the business model of viNGN premised on providing wholesale broadband. This operational model is reinforced by viNGN's enabling legislation. The goal of this build out is to provide reliable, affordable broadband services to Internet Service Providers ("ISPs") and other service providers throughout the Virgin Islands. Giving access to relatively inexpensive, reliable bandwidth to ISPs and other retail service providers will enhance the economic development goals consistent with the MAN initiative by providing commercial, governmental and residential consumers inexpensive, reliable broadband access. The fiber optic network infrastructure will be deployed to ISPs, other last mile providers and community anchor institutions/anchor tenants (such as government departments and agencies, non-profit organizations, educational institutions, public safety entities, healthcare delivery providers, and other key community stakeholders), many of which are located in economically distressed areas. VIPA/viNGN expects the broadband project to be complete and fully operational in June 2013.

- f. Wastewater Reclamation Project, St. Croix: Plans to develop a conveyance, storage and distribution system for the Anguilla Landfill wastewater treatment facility on St. Croix to address the lack of water for agricultural irrigation and other non-potable uses were delayed. The Virgin Islands Waste Management Authority ("WMA") has addressed equipment failures at the Figtree pumping station led to daily discharges of 300,000 to more than 1 million gallons of raw sewage into several water bodies that feed into the Caribbean Sea. This wastewater should have flowed to the Anguilla Wastewater Treatment Plant. The WMA stopped the discharges from the two pump stations and immediately installed a second house pump at the Figtree to ensure that there were two functioning pumps at significant capital costs. WMA plans to complete a secondary treatment plant at the facility so the resulting wastewater can be reclaimed for agricultural use. The Authority continues to push the project as it can be provide a year-round source of irrigation to local farmers on St. Croix.
- g. Sustainable Agriculture: Based on VI Act No. 6836"Sustainable Agriculture Act"), involvement in the U.S. Department of Agriculture's Specialty Crop program and receipt of its Agricultural Marketing Service award, the V.I. Department of Agriculture has implemented a beekeeping program to make honey, increased the number of fruit crop plantings and fruit production for local consumption that enhances the farmer's value added which increases farm incomes, initiated a farm-to-school program, and established a nutrition program to provide local produce to WIC participants. Through assistance from the USDA Forest Service, the Virgin Islands Department of Agriculture is acquiring real property to protect and preserve natural and cultural resources on St. Croix. These newly acquired lands are now owned by the GVI; one of the goals of the project is that these acreages will become an integral part of a proposed territory-wide park system.
- h. Irrigation System: Delay in the proposed expansion and upgrade of the irrigation systems for commercial agriculture uses within the Territory including the completion of a 60,000 gallon cistern in Estate Bordeaux on St. Thomas represented a major accomplishment in regards to infrastructural improvement for agricultural production. This success constitutes Phase I of the Estate Bordeaux Farmers' Market Project. While this new development is expected to increase water storage capacity for agriculture production the overall goal of the project, once completed, is to foster and encourage economic development.
- i. Marine Industrial Park: Ongoing development of the privately held Golden Rock Yacht and Ship Repair Center/Marine Industrial Park on St. Croix. The first phase of the project involved building the ship manufacturing, repair facility and supporting infrastructure. Initiating a public private partnership to operate the Marine Industrial Park is the second phase of the project. The third and final phase involves expanding the yacht and ship repair infrastructure to adjacent properties on St. Croix.
- j. **Revolving Loan Fund ("RLF") Plan:** Plans by EDA to fund cyclical industries, performance bonding, and revolving lines of credit along with a facility to fund administrative costs were not implemented due to economic, financial and compliance-related issues. To resolve outstanding compliance issues, EDA hired two experienced commercial banking officials to monitor the current revolving loan funds. At present, the revolving loan fund delinquency rates are below 7% and many financial issues are being resolved. Given the improvements in compliance and financial management of the existing revolving loan funds, EDA formally requested to the U.S. Department of Commerce, Economic Development Authority, an (*i*) interest rate reduction and (*ii*) recapitalization. Given the interest rate reduction and the recapitalization utilizing grant funding were approved.

Section 3: Updated Regional Priority Projects

The Government has made adjustments to the priority projects to reflect the changing economic paradigm and to adapt to fewer public and private sector resources. The Priority Projects identified relate to the top economic development strategies identified earlier:

STRATEGIC PRIORITY: MITIGATION OF "SUDDEN AND SEVERE" ECONOMIC IMPACTS OF NATURAL DISASTERS AND PLANT CLOSURES:

Comprehensive Economic Disaster Mitigation Plan

Given the number of declared federal disasters, the Virgin Islands Government, with assistance from the U.S. Federal Emergency Management Administration, continues making significant improvements in the emergency management, preparedness, mitigation, response, and recovery while lacking progress in post disaster economic assessment measurement and resilience. The goal of this priority is to identify resources the Virgin Islands can develop to potentially mitigate future economic disasters, either natural or manmade, accelerate recovery and build the capacity to reduce vulnerabilities in the Territory.

Developing a Virgin Islands based Input-Output ("I-O") model based on the current Territorial Gross Domestic Product information along with building an economic impact modelling systems measure the economic impact from natural and economic disasters including the economic, financial and fiscal impact associated with the sudden closing of the HOVENSA refinery on St. Croix. The proposed study would include a gap analysis between future clusters and island skills and resources. This will better prepare the Territory to plan capital infrastructure, physical facilities, human resources including training and skill building opportunities as well as needs for capital investments and business financing.

Taking into account both the geographical location and isolation of the Virgin Islands, the population is extremely vulnerable to economic disasters. The scope of work of this proposal identifies methods to improve the economic assessment measurement capacity that will enhance the recovery and resilience by identifying and quantifying drivers of economic growth and sustainability.

In addition, to become more economically resilient the territory needs to engage in targeted economic development. This involves conducting an extensive reality-based assessment of the Virgin Islands economic, social and financial strengths and assets to attract and grow new industries to diversify the economy. Having improvements in economic measurement and a targeted economic development strategy creates a nexus that will ultimately improve disaster mitigation, accelerate both economic recovery and resiliency, and reduce vulnerabilities resulting from natural and other disasters.

Government seeks funding for a Comprehensive Economic Disaster Mitigation Plan to include impacts from the sudden large plant closings, such as what took place with HOVENSA oil refinery on St. Croix. The study would include a gap analysis between future clusters and island skills and resources. This will better prepare the territory to plan infrastructure, physical facilities, human resources including training and skill building opportunities as well as needs for capital investments and business financing. The funding will assist in building capacity to measure the economic impact of natural and other disasters as well as the economic impact of incidents similar to sudden closing of the HOVENSA refinery on St. Croix. The study would include a gap analysis between future clusters and island skills and resources. This will better prepare the territory to plan infrastructure, physical facilities, human resources including training and skill building opportunities as well as needs for capital investments and business financing.

STRATEGIC PRIORITY: DIVERSIFICATION OF INDUSTRIAL SECTORS AND SUPPORT FOR SMALL BUSINESS ENTREPRENEURS

Revolving Loan Fund Plan ("RLF")

The Virgin Islands Economic Development Authority is a semi-autonomous government instrumentality responsible for the promotion and enhancement of economic development in the Territory. Comprised of five major components, including the Government Development Bank, the Economic Development Commission, the Industrial Park Development Corporation, the Small Business Development Agency and the Enterprise Zone program, EDA administers the revolving loan fund (RLF).

The purpose of the EDA is to act as an umbrella authority that assumes, integrates and unifies the functions of each separate agencies under one executive entity in order to achieve maximum efficiency of operations, avoid duplication of services, positions and responsibilities, reduce expenses for personnel, physical plant and operations and develop comprehensive programs for the economic development of the Territory by exercising the powers and duties of all four former entities, in conjunction with one another, and in the context of the overall goal of promoting and enhancing the economic development of the Virgin Islands.

To provide assistance to businesses involved in the cyclical industries, such as tourism and construction, to local contractors, dislocated workers intending to re-establish or expand businesses of their own as a means of retaining skilled workers in the V.I. and to provide an alternate source of financing (in conjunction with other financing institutions) for small businesses offering maximum job opportunities to local residents.

Section 4: Current Funding Priorities

The CEDS committee has identified the following funding priorities for the near future. These are presented below:

I. COMPREHENSIVE ECONOMIC DISASTER MITIGATION PLAN

The Virgin Islands is seeking funding to build capacity to measure the economic impact of natural and other disasters as well as the economic impact of incidents similar to the sudden closing of the HOVENSA refinery on St. Croix. The study would include a gap analysis between future clusters and island skills and resources. This will better prepare the territory to plan infrastructure, physical facilities, human resources including training and skill building opportunities as well as needs for capital investments and business financing.

Located in "Hurricane Alley", the area of warm within the Atlantic Ocean which stretches from the Northwest coast of Africa and to the east coast of Central America and the United States Gulf coast, the Virgin Islands is one of

the most vulnerable societies in the world, with major risks including hurricanes, drought, earthquake, tsunami, and manmade disasters based on a recent emergency management analysis of the Territory. Since 1964, 21 major Federal disaster or emergency declarations have been issued for the Virgin Islands, including 6 declarations since 2000 and 3 federal disaster declarations in 2010, Topical Storms Otto and Tomas and Hurricane Earl.

Given the number of declared federal disasters, the Virgin Islands, with assistance from the U.S. Federal Emergency Management Administration, continue to make significant improvements in the four phases of emergency management during a disaster, which are preparedness, mitigation, response, and recovery but lack progress in post disaster economic assessment measurement and business resilience. The Virgin Islands has made tremendous strides in emergency management but must focus more on identifying methods and measures to potentially mitigate future economic disasters, either natural or manmade, accelerate recovery and build the capacity to identify vulnerabilities.

Despite being overly exposed to extensive storm damage, the Territory does not have a uniform method to quantitatively or qualitatively assess storm or economic damage. Developing an Input-Output or I-O based modeling system using information from the Territorial Gross Domestic Product is critical in determining the economic impact of natural disasters as well as the ongoing economic and financial effects of the closing of the HOVENSA refinery on St. Croix. The Virgin Islands I-O model and economic impact analysis software are an integral part of the proposed comprehensive disaster mitigation plan which is composed of three components that will improve the capacity of the Virgin Islands to measure the local economy, implement a comprehensive targeted competitive industry study and fund the CEDS process. The disaster mitigation plan would include an extensive gap analysis between future clusters and island skills and resources in the Territory. Funds will also be used to improve CEDS related data collection and reporting.

The economic modeling and targeted industry study components will provide vital information needed to plan critical infrastructure, physical facilities, human resources including training and skill building opportunities as well as needs for capital investments and business financing the event of a disaster or economic incident. Taking into account both the geographical location and isolation of the Virgin Islands, the population is extremely vulnerable to economic disasters. Along with the comprehensive industry study, developing economic capacity to model the Virgin Islands economy will improve the economic assessment measurement capabilities and enhance the recovery and resilience by identifying and quantifying drivers of both economic growth and sustainability.

To become more economically resilient, the Territory needs to engage in targeted sustainable economic development policies and programs. This involves conducting an extensive reality-based assessment of the Virgin Islands economic, social and financial strengths and assets to attract and grow new industries to diversify the economy. Having improvements in economic measurement and a targeted economic development strategy plan can be supported by the third component of the disaster mitigation plan, a detailed financial analysis of the HOVENSA corporate facility. All three components of the comprehensive disaster mitigation plan create a potential nexus that will ultimately improve future disaster mitigation, accelerate both economic recovery and resiliency, and reduce socioeconomic vulnerabilities in the Virgin Islands.

Funding Request

Planning grant of to implement, within an economic development context, a system of economic measurement of disaster mitigation and methods related to improving economic disaster resiliency capacity in the Virgin Islands.

II. REVOLVING LOAN FUND PLAN

To provide assistance to businesses involved in the cyclical tourism industry, to local contractors, dislocated workers intending to re-establish or expand businesses of their own as a means of retaining skilled workers in the Virgin Islands and to provide an alternate source of financing, in conjunction with other financing institutions, for small businesses offering maximum job opportunities to local residents.

Virgin Islands Economic Development Authority currently employs two experienced commercial banking officials to monitor the current revolving loan funds. At present, the revolving loan fund delinquency rates are below 7% and many financial issues are being resolved. Given the improvements in compliance and financial management of the existing revolving loan funds, EDA formally requested an interest rate reduction and recapitalization. Given the declining state of the Virgin Islands economy due to the HOVENSA refinery closure, USEDA granted the interest rate reduction and the recapitalization utilizing grant funding.

Funding Request

Request \$5 million in funds that may be loaned to either recapitalize the current existing or create a new Revolving Loan Fund facility to provide an alternate source of financing for local credit worthy businesses.

Section 5: Evaluation of the CEDS Process

Process Evaluation

The performance measures and evaluation are used to assess the progress of the CEDS program in meeting its goals and objectives. The table below lists the items on which the program is judged and the manner in which it is evaluated.

Number of sub state-jurisdiction members actively participating (of the total eligible to participate) in the USVI CEDS program

The CEDS Committee consists of 23 members representing the districts of St. Croix and St. Thomas and John. The most recent committee was established in2007 in the new administration of Governor John P. de Jongh, Jr. The members actively identify the critical needs and resources and participate in efforts relative to area planning and sustainable development.

Increase number of committee members

The number of CEDS Committee members has increased in the past three years to include individuals who represent the principal economic interests; however, there is a need to increase private-sector representation from a current 35% to at least 51% and reduce the number of government representatives to no more than 49%.

Increase diversity of committee members

Although there is a cross-section of representatives and adhoc groups who participate in economic planning, other stakeholders who represent areas of community and economic interest should become a permanent addition to the CEDS committee.

Increase committee and staff support with relevant experience

The committee is supported by a staff of planners and technical specialists in the areas of economic development, water and power resources, infrastructure development, tourism, housing, education and workforce, planning and natural resources, and budget and finance.

Increase number and diversity of stakeholder participants in public meetings and workshops

The process to complete the CEDS strategy had unprecedented public and private sector participation and support. The implementation and update process continued the high level of engagement by stakeholders who participated in various meetings and workshops.

Document input from public meetings and workshops

Staff compiled all information garnered in meetings and workshops which were included in the CEDS quarterly and annual reports.

Increase transparency of CEDS process

The CEDS process is a highly visible and participatory process.

Expansion of techniques employed for dispersal of information (radio, TV, print, web)

Among the methods to disperse information on the CEDS such as radio and print media, a website and discussion forum was created to exchange information and obtain public input.

Assess and share impact of input in decision making

In addition to other assessment methods, a major public hearing was held with senators of the USVI Virgin Legislature in March 19, 2011 to assess the impact of CEDS and to receive input in decision making as pertains to economic development.

Creation of CEDS report and yearly evaluations

Reports including quarterly and annual reports have been completed in accordance with USEDA requirements.

Publication and dissemination of report and evaluations

Reports and information are published and disseminated through a variety of forums and media.

CONCLUSION

Needless to say, the corporate decision to close the petroleum refinery on St. Croix is having a devastating impact on 2009 CEDS economic development goals and requires the CEDS committee to further refine the vision and goals for the Territory. Additionally, the continuing uncertainty associated with the refinery closure is diminishing both current and future expectations of Virgin Islanders, especially as residents navigate their way forward. Unfortunately, this decision was made as the Virgin Islands economy was beginning to stabilize and showing signs of sustained local economic development activity. The challenge of the current post HOVENSA economic environment is to not only to manage the economic and community developments goals and priorities incorporated in the 2009 CEDS, but more importantly, to begin to restructure the visions and goals of the CEDS process to heighten the strategic plans and initiatives developed by the CEDS committee members. In essence, with the reduced economic and financial resources resulting from the refinery closure and increasing fossil fuel based energy pricing, the economic growth. The task the CEDS committee is now facing is developing strategic plans and initiatives to manage these interwoven economic and social events within the current complex global economy.

The U.S. faces a jobless recovery as unemployment while the European community is struggling with austerity policies and with uncertainty surrounding the strength of its currency union, and even certain emerging economies (Brazil, Russia, India and China) that have signaled strong growth now is showing evidence of slowing. There is simply no denying that the economic ramifications of events in the larger world are and will continue to be felt in the Virgin Islands and will influence tourism arrivals, manufacturing activity, submission of new economic development applications, and private sector prospects to obtain financing for private sector projects or support for construction activity. The charge for the Government of the Virgin Islands along with the CEDS committee is to execute on the needed economic and community development improvement changes that will support manufacturing and industrial development and diversification, expand public infrastructure, encourage the retention of existing businesses and attract new businesses and support all levels of education including the expansion of job skill and entrepreneur training programs to address ongoing workforce endeavors.

SUPPORTING DOCUMENTATION

APPENDIX 1: USVI COMPREHENSIVE ECONOMIC DEVELOPMENT COMMITTEE

Private Sector Representatives

Name	Position	Organization
Mark W. Eckard, Esquire	President	St. Croix Chamber of Commerce
Sebastiano Paiewonsky Cassinelli	President	St. Thomas and St. John Chamber of Commerce
Lisa Hamilton	President	St. Thomas/St. John Hotel Association
Julie Printy	President	St. Croix Hotel & Tourism Association

Public Sector Representatives

Name	Position	Government
John P. de Jongh <i>,</i> Jr.	Governor/Chairman	Office of the Governor
Nathan Simmonds	Deputy Chief of Staff	Office of the Governor
Wharton Berger	Director	Bureau of Economic Research
Debra Gottlieb	Director	Office of Management & Budget
Beverly Nicholson-Doty	Commissioner	Department of Tourism
Alicia Barnes	Commissioner	Department of Planning & Natural Resources
Donna Gregory-Frett	Acting Commissioner	Department of Education
Albert Bryan, Jr.	Commissioner	Department of Labor
Darryl Smalls	Commissioner	Department of Public Works
Claudette Watson-Anderson	Director	Bureau of Internal Revenue

Quasi-Government Representatives

Name	Position	Government
Joseph B. Boschulte	President & CEO	The West Indian Company Ltd.
Hugo V. Hodge, Jr.	CEO	Virgin Islands Water & Power Authority
Percival Clouden	CEO	Virgin Islands Economic Development Authority
David Hall, PhD	President	University of the Virgin Islands
Carlton Dowe	Executive Director	Virgin Islands Port Authority

Non-Government Representatives

Name	Position	Government
Dee Bacher-Brown	President	Community Foundation of the Virgin Islands
Roger Dewey	President	St. Croix Foundation
Richard Difede	Chairman	Workforce Investment Board
Luis "Tito" Morales	President	Central Labor Council

APPENDIX 2: UPDATED CONDITIONS AND TRENDS

The U.S. Virgin Islands are located east of Puerto Rico between the Caribbean Sea and the North Atlantic Ocean (see Figure 1). Their total land area is 346 square kilometers—roughly twice the area of Washington, DC—with an average population density of 308 people per square kilometer in 2010.



Figure 1. U.S. Virgin Islands

A mild subtropical climate, scenic beauty, and status as a U.S. Territory make the U.S. Virgin Islands an ideal location for vacationers from the United States, South America and Europe, and for business development. The Territory host over 2.5 million visitors per year, most of whom arrive by cruise ship, and tourism is the dominant economic engine, accounting for nearly 60 percent of the total gross territorial product. The three primary islands of the U.S. Virgin Islands are St. Thomas, St. Croix, and St. John. There are also two smaller islands, Water Island and Hassel Island.

Each island has its own distinct landscape, mix and intensity of land uses, cultural identity, and prospects for future development. St. Thomas is home to the capital and the Territory's largest city, Charlotte Amalie, which has a population of 10,354 persons according to the 2010 U.S. Census. St. Thomas is the primary center for resort tourism, government, finance, trade, and commerce, but its rugged landscape limits the land available for agriculture and other types of land-intensive development. Charlotte Amalie is also home to a major deepwater harbor that is along major

shipping routes to the Panama Canal, and it is just east of the Cyril E. King International Airport—one of the busiest airports in the Caribbean.

The island of St. John is just under 5 kilometers to the east of St. Thomas. Cruz Bay is located on the western coast of the island and serves as its primary port and link to St. Thomas. Nearly two-thirds of St. John is owned by the National Park Service and is off-limits to commercial development.

St. Croix is the largest of the three main islands, in both land area and population. It is roughly 64 kilometers to the south of St. Thomas. Its primary towns are Christiansted and Frederiksted. The eastern and northwestern portions of St. Croix are hilly, but, overall the island is flatter and has more land available for additional agricultural, commercial, and residential development than St. Thomas. As of 2007, nearly 95 percent of the Virgin Islands' total farmland was on St. Croix. While tourism is still the dominant industry on the island, St. Croix is also the primary manufacturing center for the U.S. Virgin Islands, with rum distilleries, a major watch-assembly plant, and one of the world's largest petroleum refineries.

POPULATION

In 2010, the residential population of the U.S. Virgin Islands declined to 106,405 persons (Figure 2). This follows a decade of slow but steady annual population growth of 0.6 percent, considerably slower than the U.S. annual average of 1.15 percent.

Among the three islands, St. Croix and St. Thomas are nearly equally populous, with 50,601 and 51,634 persons, respectively. St. John is considerably smaller, with only 4,170 persons in 2010 —less than 4 percent of the total population of the U.S. Virgin Islands. The relative population shares of the three districts have remained fairly stable over time, with St. John's having a slightly higher annual growth rate of 1.65 percent, explained, in part, by its small size.

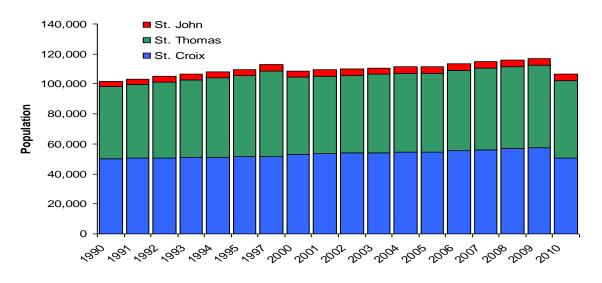


Figure 3 shows the population of the U.S. Virgin Islands since 1965. The population more than doubled between 1965 and 1980 as the growing tourism industry drew workers from many of the neighboring islands in the Caribbean. Population growth has since flattened and then declined slightly, despite steady growth for the United States as a whole.

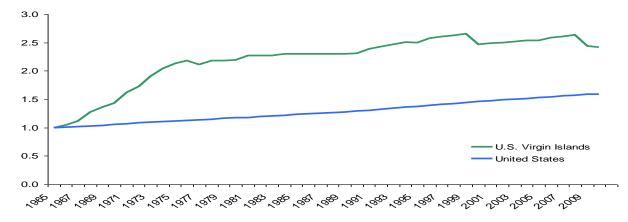
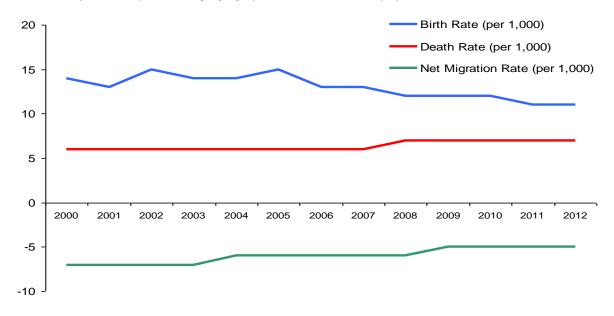


Figure 3. Population of U.S. Virgin Islands from 1965-2010

Source: U.S. Census Bureau, International Database and U.S. Virgin Islands Bureau of Economic Research – Annual Economic Indicators

Population can only change through natural population increase (births minus deaths) or migration. Births and deaths, in turn, are largely dependent upon the age profile of the resident population: places dominated by older populations have higher mortality rates, while places with more young families have higher birth rates. Recent population changes in the U.S. Virgin Islands are primarily driven by natural increase, with net migration rates close to zero throughout the 1990s.

Death rates have increased slightly, while birth rates have declined in the Islands (Figure 4). The stagnant growth since 2000 is due primarily to a slight increase in out-migration, offsetting any natural increase due to more births than deaths. If migration remains flat, future population and labor force growth in the U.S. Virgin Islands will be predominantly driven by the changing age profile of the current population and its influence on birth and death rates.





The U.S. Virgin Islands has a bimodal age distribution, with a high concentration of people under age 19 and an even greater concentration of adults between 40 and 70 (Figure 5). The Islands have a greater population share of adults between 40 and 70 than the U.S. population as a whole, and considerably fewer people between the ages of 20 and 39 when compared with the United States. Islands residents also tend to live longer than the typical American.

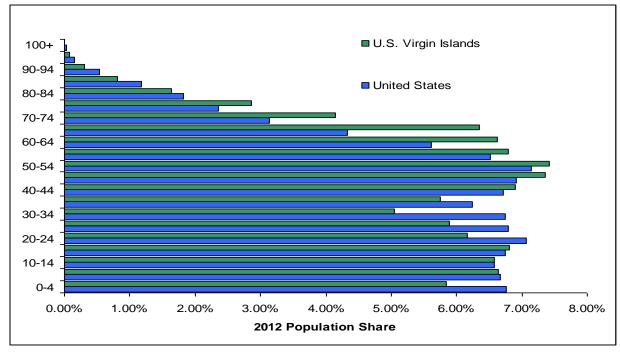


Figure 5. Population Share by Age Cohort, 2012 Source: U.S. Census Bureau, International Database

This means that a large cohort may soon be exiting the labor force and presumably placing greater demands on the island's health care and social support systems (Figure 6). At the same time another; an even larger cohort will just be entering the workforce. The lack of an experienced workforce may lead to older workers remaining in the labor force later in life. Birth rates may also rise in the coming years as the sizable adolescent population progresses into their childbearing years.

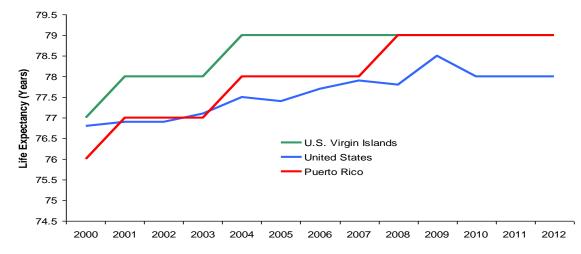


Figure 6. Life Expectancy in the United States, U.S. Virgin Islands, and Puerto Rico Source: U.S. Census Bureau, International Database and U.S. National Center for Health Statistics, National Vital Statistics Reports (NVSR)

Infant mortality is higher in the U.S. Virgin Islands than in the mainland United States, although it is declining at a considerably faster rate (Figure 7).

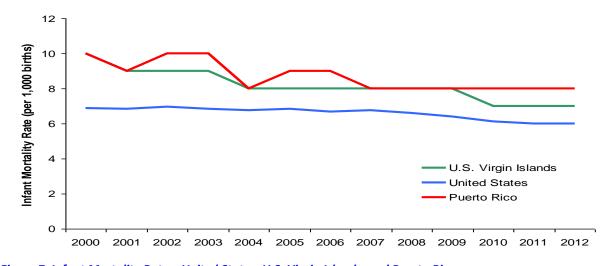


Figure 7. Infant Mortality Rates: United States, U.S. Virgin Islands, and Puerto Rico Sources: Data for United States from U.S. Census Bureau, International Database and Centers for Disease Control & Prevention; Data for U.S. Virgin Islands and Puerto Rico from U.S. Census Bureau, International Database

RACE AND ETHNICITY

As of the 2000 U.S. Census, 76 percent of U.S. Virgin Islands residents identified themselves as Black or African American only, with 13 percent identifying themselves as white only (Figure 8).

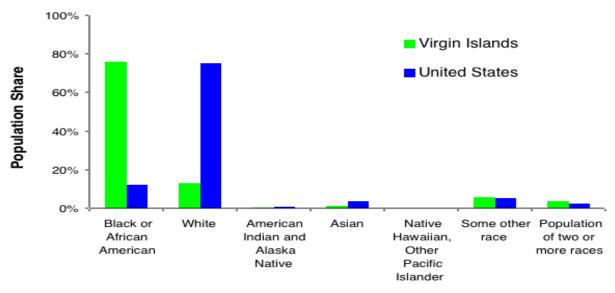


Figure 8. Racial Profile, 2000

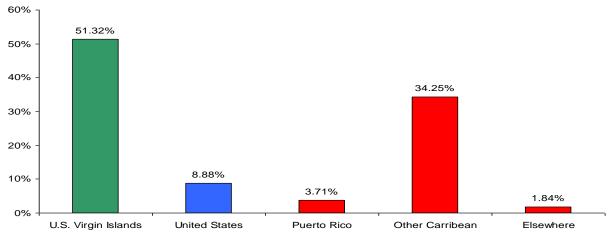
Source: U.S. Census Bureau, 2000 Census of Population and Housing

Data from the 2010 U.S. Census for race and ethnicity are not yet available for the U.S. Virgin Islands. However, according to the 2005 United States Virgin Islands Community Survey, 81.42% of U.S. Virgin Islands residents identified themselves as black or African American only and 8.97% as white only. This is the near opposite of the larger United States, where 75 percent identified themselves as white in 2000 (decreasing to 72.4% in 2010) and 12 percent as black or African American glightly to 12.6% in 2010).

Given its location and relative isolation, the U.S. Virgin Islands has noticeably fewer Asians, Native Americans, and Pacific Islanders, but a slightly higher share of persons identifying as "other" and persons of mixed racial

backgrounds. Roughly 14 percent of the resident population was Hispanic (of any race) in 2000, increasing to 25.17% in 2005 according to the 2005 United States Virgin Islands Community Survey.

Migrants make up a high percentage of the U.S. Virgin Islands' population. Slightly over half (51.32%) of current residents were born in the U.S. Virgin Islands in 2005 (Figure 9). This is a notably lower proportion than the U.S. average share of residents residing in their state of birth (67 percent in 2010). Roughly 35 percent of Islands residents were born elsewhere in the Caribbean and 3.71 percent of the population originated from neighboring Puerto Rico. Another 8.88 percent come from the continental United States. Many of the non-natives were drawn to the Islands' blooming tourist industry prior to 1980.



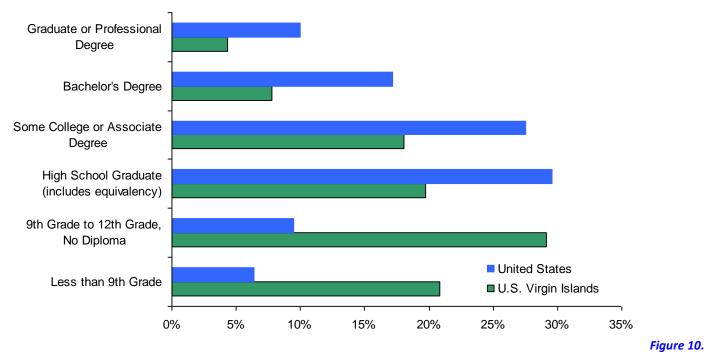


In recent years, in-migration has slowed, with a current net migration rate hovering at -5 per 1,000 in population (see Figure 4). If this trend continues, one can expect the proportion of non-native residents to continually diminish, as older migrant's age and their native-born children and grandchildren become an ever larger share of the population.

EDUCATIONAL ATTAINMENT

Education remains a considerable challenge for the U.S. Virgin Islands. The U.S. Virgin Islands Economic Development Authority sees great potential for the development of a knowledge-based economy coinciding with major investments in information technology infrastructure, a university-based research and technology park, and the expansion of passenger transportation services. However, to be competitive in the knowledge-based economy requires a highly skilled labor force and a solid educational infrastructure to train future generations of knowledge workers.

Educational attainment in the U.S. Virgin Islands is far below U.S. national averages, with nearly 50 percent of the adult population having less than a high school diploma (Figure 10). The U.S. Virgin Islands have a shortage of highly educated adults, with only 12 percent of the adult population having a bachelor's degree or higher, whereas the U.S. national average is 27 percent.



Educational Attainment of the Population, Aged 25+, 2005 Sources: U.S. Census Bureau, 2005 American Community Survey and 2005 United States Virgin Islands Community Survey

INCOME AND POVERTY

Increased personal earnings and income both contribute to and are an outcome of successful economic development. Higher incomes mean greater individual wealth and prosperity, which in turn mean higher discretionary spending, which fuels local demand for goods and services. Discretionary income also represents capital that may be invested in local business enterprises. The average income of Islands residents is considerably lower than that of residents of the mainland United States (Figure 11). In 2009, the per capita personal income of Islands residents was \$20,992, slightly higher than half the U.S. average.

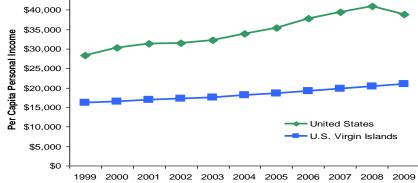
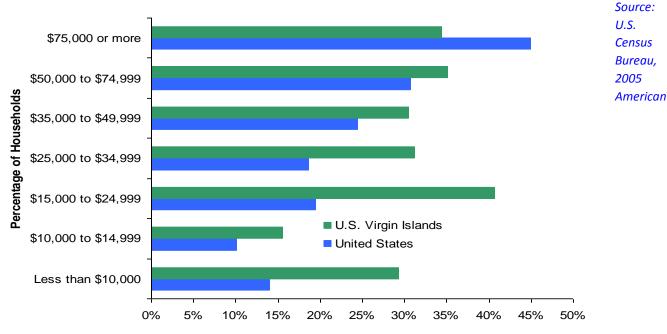


Figure 11: Per Capita Personal Income

Source: U.S. Virgin Islands Annual Economic Indicators, U.S. Virgin Islands Bureau of Economic Research and U.S. Dept. of Commerce, Bureau of Economic Analysis

The problem of low income is further compounded by the relatively higher costs of living on the U.S. Virgin Islands. This gap has steadily widened as real (inflation-adjusted) incomes in the Islands have declined slightly over the past 15 years.

The average income of Islands residents is pulled downward by an extremely large segment of the population earning very little money. The income distribution of the U.S. Virgin Islands is highly skewed (Figure 12). In 2000, more than 25 percent of all households lived on less than \$10,000 per year, compared to less than 10 percent for the United States as a whole. In 2005, this portion of the population in the U.S. Virgin Islands decreased to 13.53%. *Figure 12. Household Income Distribution, 2005*



Community Survey and 2005 United States Virgin Islands Community Survey

The data on poverty paint an even more dramatic portrait of the economic realities of the U.S. Virgin Islands. Slightly over one quarter of the residents of the U.S. Virgin Islands (26.8%) were living below the poverty level in 2005 (Figure 13). This figure is lower than the roughly 32 percent of residents that were living below the poverty level in 1999 and is close to the figure from the 1990 U.S. Census (27%). Figure 13 also compares the percentage of age groups living below the poverty line with their counterparts in the United States. Far more Islands residents are living in poverty, regardless of age.

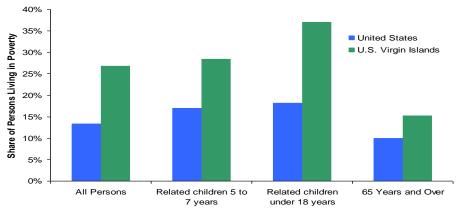
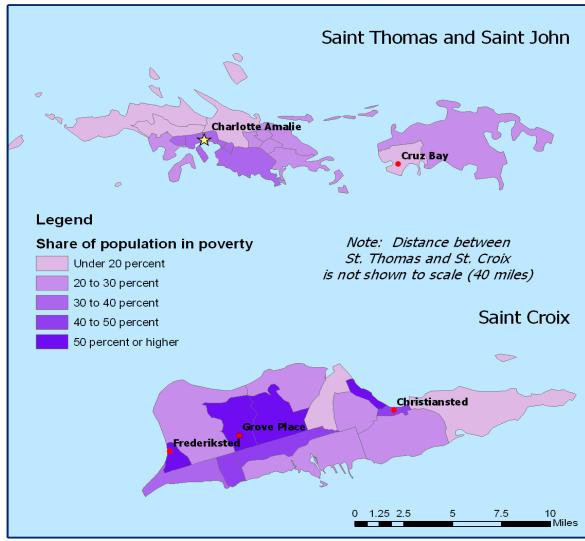




Figure 14 shows the geographical distribution of persons living in poverty in 1999. At that time, the greatest concentrations of poverty were in the interior of St. Croix Island and in the coastal areas near Frederiksted and Christiansted. There was a somewhat lesser concentration of poverty on St. Thomas in the vicinity of the capital of Charlotte Amalie. The more mountainous areas of eastern St. Croix and northern St. Thomas have the lowest share of



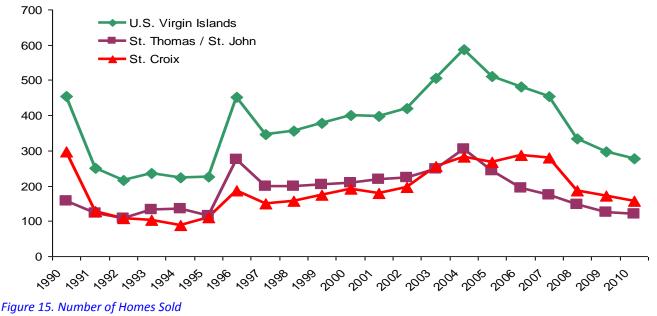
persons living in poverty. According to the United States Virgin Islands Community Survey, 19% of the residents of St. Thomas, 33% of the residents of St. Croix, and 45% of the residents on St. John lived below the poverty level in 2005.

Figure 14. Share of Persons Living below the Poverty Level in 1999 (geographical distribution) Source: U.S. Census Bureau, 2000 Census of Population

HOUSING

In a recent State of the Territory address, Governor de Jongh cited increasing home ownership and improving access to affordable housing as key goals of his administration. Home ownership rates on the islands are far below those of the mainland United States. As reported in the 2000 housing census, 46 percent of occupied housing units are owner occupied, compared with 64 percent for the United States.

During the 1990s, there was brisk growth in housing development. The 2000 U.S. Census reports a 27 percent increase in housing units over the 1990 census—a much higher growth rate than the 14 percent growth in housing units for the United States during the same time period. The increased supply of housing is further evidenced by the consistent increase in home sales on the U.S. Virgin Islands, with a near even split of sales between St. Thomas/St. John and St. Croix (Figure 15). However, there has been a pronounced decline in home sales on St. Thomas since 2004, while sales on St. Croix remained steady until 2006 before beginning a declining trend as well.



Source: U.S. Virgin Islands, Bureau of Economic Research, U.S. Virgin Islands Annual Tourism Indicators

Although the supply of housing has increased, homeownership rates have remained flat—increasing a mere percentage point between 1990 and 2000. Presumably, much of the increased supply of new homes and condominiums has gone to nonresidents and vacationers. Over the past decade, housing costs have accelerated at a far greater pace than resident incomes, putting home ownership beyond the reach of all but a few relatively wealthy Islanders (Figure 16). This is particularly true for St. Thomas/St. John, where the average home sale price was almost \$800,000 in 2007, more than double the average (real) sale price of just six years prior.

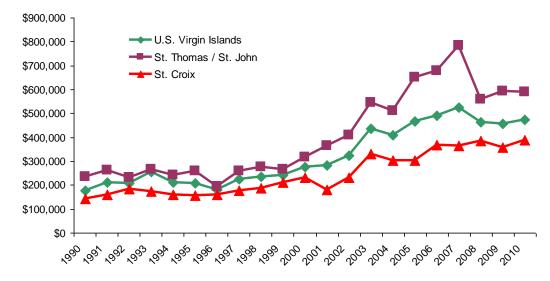
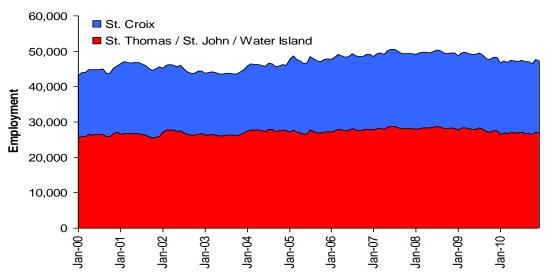


Figure 16. Average Home Sale Price Source: U.S. Virgin Islands, Bureau of Economic Research

LABOR FORCE AND EMPLOYMENT

In December 2010, just over 47,000 people in the U.S. Virgin Islands were employed (Figure 17). This represents a decrease of 2.4% from December 2009. Together, St. Thomas and St. John capture just over half of the total U.S. Virgin Islands employment base (57 percent in 2010), despite having a near even split of the resident population (hence St. Croix's higher unemployment rate). Between January 2000 and December 2010, the employment base of St. Croix expanded from 17,690 to 20,294, producing an annual average growth rate of 1.34%. In the same time period, the employment base of St Thomas/St. John/Water Island grew from 25,450 to 26,902, resulting in an annual average growth rate of 52%.





Employment growth in the U.S. Virgin Islands has historically lagged the United States as a whole, although the territory's economy has shown favorable signs of expansion in recent years unemployment is increasing due to the refinery closure. Figure 18 compares long-term change in nonfarm employment in the U.S. Virgin Islands with that in the United States. Despite greater volatility, jobs growth in the Islands kept pace with or exceeded U.S. employment growth during the latter 1980s and early 1990s. From the mid-1990s, employment in the Islands declined considerably and remained flat, while the U.S. economy boomed on a wave of expansion in the technology sector. Following the recessionary years of the first years of the new millennium, nonfarm employment in the Islands grew steadily until 2007. Beginning in 2007 and continuing through 2010, the average annual growth rate in nonfarm employment in the Islands has been -.76%. While this is not ideal, this rate had compared favorably with the U.S. growth of rate of -1.14% during the same time period. If the recent trend had continued, future prospects may hinged on the net balance of employment growth arising from rising oil profits versus a recession-driven slowdown in tourism and construction. Instead, rising unemployment resulting from the refinery closure is eliminating the employment in tourism and trade industries.

Employment, 2000 –2010 Source: U.S. Virgin Islands Bureau of Labor Statistics

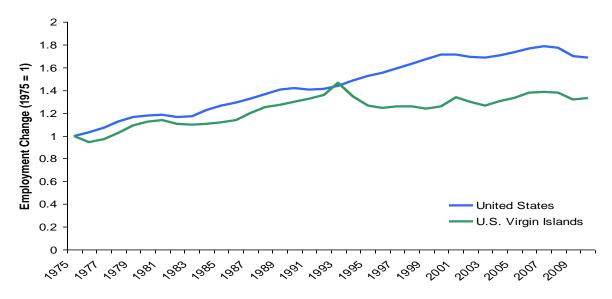


Figure 18. Change in Nonfarm Employment, U.S. Virgin Islands vs. United States Source: U.S. Bureau of Labor Statistics, Current Employment Statistics Survey (CES)

The unemployment rate is a commonly used measure of economic health, described as the percentage of people in the labor force who are presently not employed but are actively seeking employment. In the short term, unemployment rates may fluctuate greatly according to seasonal employment trends and business cycles. A persistently high unemployment rate is symptomatic of a chronic lack of demand for labor or related endemic economic maladies. The high level of unemployment associated with the HOVENSA closing has the potential to impact the long term economic health of the Territory.

From 1997 until mid-2008, monthly unemployment rates in the Islands were consistently higher than U.S. averages. However, since the summer of 2008, the monthly unemployment rates of the United States have exceeded that of the Islands. The Islands also have a far lower unemployment rate than the 16.1 percent annual unemployment rate of neighboring Puerto Rico in 2010. The current unemployment rate is increasing and current monthly rate for St. Croix is comparable to the 2010 annual unemployment rate for Puerto Rico.

While the refinery closure may indicate chronic unemployment, historically labor markets for the U.S. Virgin Islands often show considerable cyclical and moderate seasonal volatility (Figure 19). Almost every year, unemployment increases and decreases depending on the seasonal tourism patterns. On average, over the past ten years, there has been a 1.04 percent difference between monthly highs and lows for unemployment rates within a single year. These seasonal fluctuations tend to be more dramatic during recessionary periods, as evidenced by the peak difference of 2.2 and 2.0 percentage points between high and low intra-year unemployment rates in the recessionary years of 2001 and 2002, respectively. Broader business-cycle fluctuations produce even more dramatic swings in U.S. Virgin Islands unemployment. Over the past ten years, the unemployment rate of the Virgin Islands peaked during the winter of 2002, coinciding with the slowdown in the domestic U.S. economy. Since that time, the unemployment rate in the U.S. Virgin Islands exceeded that of the United States until June of 2008 and then has dipped below it for the past few years. Currently the U.S. Virgin island unemployment rate is significantly higher than U.S. mainland as seasonal, manufacturing and service sector workers remain unemployed.

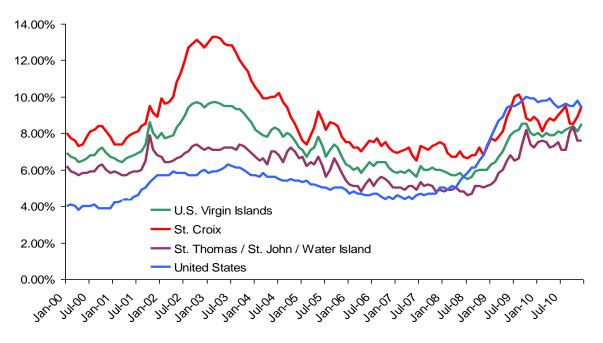


Figure 19. Monthly Unemployment Rates, January 2000 - December 2010 Source: U.S. Virgin Islands Bureau of Labor Statistics and U.S. Bureau of Labor Statistics

The past recession and current moderation in the U.S. economy is having a significant impact on the demand for labor in the Islands. Tourism is very sensitive to macroeconomic conditions; consumers spend less on island vacations when economic conditions at home are grim. The relative isolation of the Islands may also make it more vulnerable to economic shocks. The migration of unemployed workers helps equalize regional unemployment rates, as the jobless seek better job opportunities in wealthier locations. This flow of workers between regions within the U.S. helps explain the consistently low unemployment rates of the continental United States up until 2008. However, in the U.S. Virgin Islands out-migration is more costly and far less feasible given the limited resources of the Island's poor families.

INDUSTRIAL GAINS AND LOSSES

The U.S. Virgin Islands' economic volatility is due largely to its historic dependency on a few key industries, especially tourism. Figure 20 compares the distribution of employment in the U.S. Virgin Islands and the United States by major industry sectors. Government jobs, whether federal, territorial or local, comprise a far greater share of the Islands' employment base than is true of the United States as a whole, although this share has declined in recent years. Leisure and hospitality, which are tourism-based industries, also account for a high relative share of the Islands' economy--just over 1.7 times the U.S. national share.

Other economic sectors include retail, mining, logging&construction, and manufacturing, which includes advanced composite manufacturing (oil refineries). Much, if not all, of the employment in these industries is also related to tourism. For example, the sale of retail goods to foreigners and construction of new resorts, vacation homes and condos is attributable to tourism. Using a conservative definition of tourism that restricts it to hotels and lodging places, gift shops, eating and drinking places, and air transportation, the U.S. Virgin Islands Bureau of Economic Research estimated the number of people engaged in tourism-related employment to be approximately 8,038 in 2009, or just under 20 percent of total nonfarm employment. That estimate would be much higher if tourism-dependent or supporting activity in construction, government, personal services, water transport, and other sectors were included.

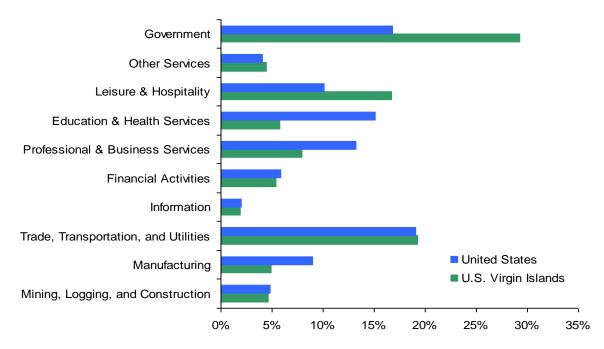


Figure 20. 2011 Employment Share by Industry Sector, U.S. Virgin Islands and United States Source: U.S. Bureau of Labor Statistics, Economy at a Glance and Databases, Tables & Calculators by Subject

From 2001 to 2011, the Virgin Islands economy added the most jobs (approximately 700) in the education and health services sector (Figure 21). Expansion in the education and health services sector is followed by a near tie between government, leisure and hospitality, and financial activities —each netting approximately 300 new jobs. Over the 11-year period, the mining, logging and construction industry sector suffered the greatest loss of jobs followed by other services, the information and manufacturing sectors.

In January 2012, HOVENSA, L.L.C. announced that it would begin to shut down its refinery on St. Croix. Following the shutdown, the complex will operate as an oil storage terminal⁴. In late February the refinery was closed while the terminated employees received wages until April, 20 2012. According to the U.S. Virgin Islands Bureau of Economic Research, the refinery was the largest private employer on St. Croix. It formally directly employed 1,400 people and 900 others are employed by contractors.⁵The direct and indirect terminations are having a significant negative impact on the overall economy of the Islands.

⁴ HOVENSA Announces Closure of St. Croix Refinery, Information obtained from <u>www.hovensa.com</u>, January 18, 2012.

⁵ U.S. Virgin Islands Economic Review, January 2011, U.S. Virgin Islands Bureau of Economic Research (http://usviber.org/Economic Review January 2011.pdf)

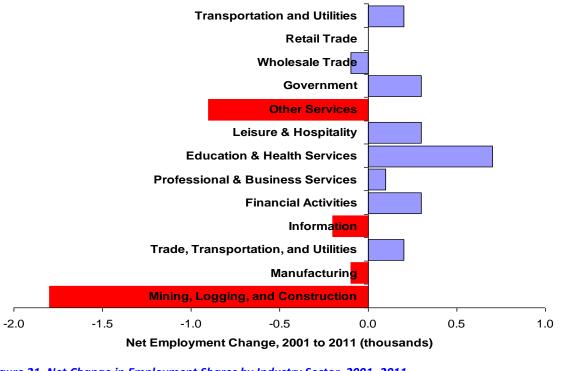


Figure 21. Net Change in Employment Shares by Industry Sector, 2001–2011 Source: U.S. Bureau of Labor Statistics, Current Employment Survey (CES)

Between 2001 and 2011, the U.S. Virgin Islands' fastest-growing sector was education and health services, followed by transportation and utilities and financial activities (Figure 22). Growth in those sectors could remain strong over the long term if the U.S. Virgin Islands can successfully attract a significant retiree population from migrating U.S. baby boomers seeking warmer climates.

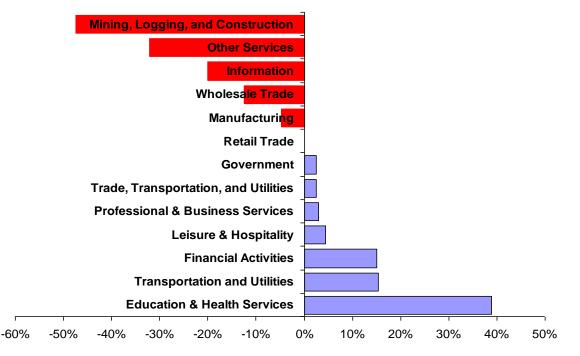


Figure 22. Net Employment Growth Rate by Industry Sector, 2001–2011 Source: U.S. Bureau of Labor Statistics, Current Employment Survey (CES)

Table 1 provides a more detailed industrial profile of the U.S. Virgin Islands economy for the 30 largestemploying industries by three-digit NAICS codes. Some industries, such as petroleum refining, are not included due to suppression of employment information in industries with fewer than two establishments or industries in which a single employer employs over 80 percent of the workers. Again, tourism- and construction-related industries dominate in terms of size; examples include accommodations, food services and drinking places, clothing and clothing accessories stores, construction of buildings, and specialty trade contractors. Several advanced services industries also make the list, such as administrative and support services, repair and maintenance, and professional and technical services.

	Employment		Employment		Earnings, 2010		Real Wage	
			Growth		Average	Ratio	Growth	
	2010	LQ	2001	-2010	per	VI to	2001 t	o 2010
NAICS - Industry Title	Jobs		USVI	USA	Worker	USA	USVI	USA
721 - Accommodation	3,587	6.98	-11%	-4%	\$29,652	114%	17.2%	3.8%
722 - Food services and drinking places	2,793	1.01	27%	13%	\$16,206	104%	-2.8%	3.4%
561 - Administrative and support services	1,834	0.88	20%	-5%	\$25,103	78%	9.6%	10.5%
448 - Clothing and clothing accessories stores	1,522	3.75	-9%	4%	\$26,486	142%	-9.1%	-13.5%
811 - Repair and maintenance	1,490	4.46	-31%	-9%	\$63,979	176%	25.0%	3.5%
445 - Food and beverage stores	1,249	1.51	28%	-4%	\$19,253	86%	6.5%	-2.6%
541 - Professional and technical services	1,172	0.53	13%	9%	\$51,681	67%	5.1%	6.9%
611 - Educational services	1,061	1.47	44%	31%	\$23,860	56%	-8.6%	8.4%
452 - General merchandise stores	999	1.14	-7%	6%	\$16,976	79%	20.0%	2.5%
236 - Construction of buildings	911	2.52	-7%	-22%	\$34,931	65%	12.3%	6.1%
238 - Specialty trade contractors	893	0.88	-31%	-19%	\$43,568	95%	-6.5%	2.6%
621 - Ambulatory health care services	859	0.49	56%	34%	\$40,075	74%	40.9%	2.4%
522 - Credit intermediation and related								
activities	787	1.05	10%	-2%	\$41,824	69%	14.1%	4.7%
531 - Real Estate	780	1.92	40%	3%	\$38,909	88%	3.4%	4.6%
713 - Amusements, gambling, and recreation	664	1.63	26%	7%	\$24,318	123%	0.0%	-5.3%
517 - Telecommunications	586	2.21	-12%	-30%	\$54,798	76%	6.2%	3.8%
424 - Merchant wholesalers, nondurable								
goods	562	0.99	-12%	-4%	\$37,476	65%	5.3%	6.1%
813 - Membership associations and								
organizations	557	1.44	32%	3%	\$29,230	83%	14.1%	14.8%
444 - Building material and garden supply								
stores	511	1.52	34%	0%	\$28,416	94%	-2.7%	-8.6%
441 - Motor vehicle and parts dealers	473	0.99	-11%	-12%	\$31,123	75%	-5.1%	-8.5%
624 - Social assistance	423	0.58	44%	34%	\$18,701	82%	16.4%	0.7%
453 - Miscellaneous store retailers	365	1.61	-26%	-22%	\$24,065	103%	-0.5%	-5.2%
446 - Health and personal care stores	353	1.22	8%	4%	\$23,555	68%	2.5%	11.9%
551 - Management of companies and								
enterprises	351	0.64	-50%	8%	\$63,420	65%	69.7%	15.7%
532 - Rental and leasing services	344	2.30	ND	-24%	ND	ND	ND	16.7%
483 - Water transportation	319	17.37	0%	18%	\$38,985	53%	4.9%	13.4%
481 - Air transportation	305	2.31	-2%	-27%	\$30,194	50%	-12.2%	-6.0%
488 - Support activities for transportation	298	1.87	59%	2%	\$27,739	57%	16.4%	7.6%
484 - Truck transportation	277	0.75	47%	-10%	\$25,330	60%	0.6%	-0.7%
623 - Nursing and residential care facilities	263	0.29	6%	17%	\$25,841	96%	12.0%	3.4%

LQ stands for Location Quotient

*2001 data was Not Disclosable (ND -- data do not meet BLS or State agency disclosure standards)

Table 1. Detailed Private-Sector Industry Summary, Top 30 Employing Industries

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Note: Due to data suppression in industries dominated by a single employer, some large industries may not be included (e.g., petroleum).

OTHER MEASUREMENTS OF INDUSTRIAL STRENGTHS

Size is not the only salient measure of industrial strength. Industrial specializations are also important. Location quotients provide a measure of the relative concentration of each industry in the U.S. Virgin Islands, measured against the entire U.S. domestic economy. For most states or metropolitan areas, a location quotient of 1.25 is a generally accepted benchmark of significant specialization, but given the U.S. Virgin Islands' relative lack of industrial diversity, a slightly higher standard (greater than or equal to 1.5) is warranted. Not surprisingly, accommodations remain near the top of the list of regionally specialized industries, although it is far overshadowed by water transportation, which has more than 17 times its expected employment share. Its strong showing may partly be explained by the fact that the U.S. Virgin Islands are islands, whereas much of the benchmark region (the United States) is landlocked. Nevertheless, this natural advantage is certainly pertinent to both the tourism economy and also the commercial movement of goods through the Caribbean. Other significant specializations include repair and maintenance, retail clothing, construction of buildings, air transportation, rental and leasing services, telecommunications, support activities for transportation, and real estate.

A vibrant regional economy is often characterized by expanding job opportunities in its largest and most heavily specialized industries. Overall, the U.S. Virgin Islands economy appears healthy, with strong jobs growth in many of its key industries and significant losses in only a few. Support activities for transportation is growing the fastest, with a growth rate of roughly 59 percent between 2001 and 2010, far exceeding the national rate of 2 percent. Other large and/or specialized industries with recent job growth in excess of the U.S. average include truck transportation, building material and garden supply stores and real estate. Among the territory's most highly specialized industries, repair and maintenance and specialty trade contractors each experienced the declines of 31% between 2001 and 2010, while the more general industry sector of management of companies and enterprises experienced a 50% employment decline during that same period.

Smaller industries in which recent job growth exceeds national benchmarks may represent emerging industrial specializations. In the U.S. Virgin Islands, these include ambulatory health care services; food and beverage stores, amusements, gambling, and recreation; and membership associations and organization. Expansion of the nascent health care industry is of particular importance if the U.S. Virgin Islands hope to attract U.S. retirees and provide for the anticipated needs of its own aging workforce.

High wages are another favored indicator of economic health. Higher wages not only translate into a higher standard of living, but may also indicate competitive advantages or higher productivity (especially in the case of manufacturing) that allows workers to command higher pay relative to other areas. Rising wage rates also reflect the local demand for labor and may help identify areas where training and employment services are needed to help meet private-sector demand.

Repair and maintenance is the U.S. Virgin Islands' highest-paying industry. The average worker in the repair and maintenance industry earns nearly \$64,000 per year. While this could bode well for an industry of its size that is experiencing an expansion, it may also signify shortages of mechanics and other necessary repair service professionals. Other high-paying industries are management of companies and enterprises, telecommunications, professional and technical services.

Wages in most industries are far below U.S. levels. However, tourism-related industries are notable exceptions. U.S. Virgin Islanders working in clothing stores; amusement, gambling, and recreation; accommodations;

food services and drinking places; and miscellaneous store retailers all earn more than their stateside counterparts. Outside of tourism-related industries, workers in repair and maintenance also earn substantially more in the U.S. Virgin Islands than they do in the United States. There are also several industries in which recent wage growth has been exceeding U.S. wage growth; these include social assistance, ambulatory health care, repair and maintenance, accommodation, professional and technical services, management of companies and enterprises and general merchandise stores.

OCCUPATIONAL SPECIALTIES

Occupation-based analysis provides another lens through which to understand the composition, growth potential, and weaknesses of the U.S. Virgin Islands economy. Whereas industries are defined by the products and services produced, occupations are defined by what people do and the types of knowledge embodied in the skills of the workforce. On the one hand, the occupational profile of a region often mirrors its industrial profile because some occupations are highly specialized to particular industries. On the other hand, many seemingly different industries may require similar types of knowledge and workforce skills. An analysis of occupations reinforces an understanding of the integrated nature of a regional economy and is useful for identifying underlying workforce assets that might be overlooked in conventional analyses of industrial specializations. Occupations are also a more direct measure of labor demand and are suggestive of the specific types of training and educational programs that are needed to fill emerging needs.

Table 2 presents a summary of the results of our analysis of existing and emerging occupational specialties in the U.S. Virgin Islands for the 30 occupations with the greatest number of workers in 2010. The data come from the Occupational Employment Survey (OES) of the U.S. Bureau of Labor Statistics, which reports numbers of workers and median wage and salary earnings for highly detailed occupational categories.

The occupational profile of the U.S. Virgin Islands is dominated by relatively low-skilled, low-wage positions particularly those directly associated with the tourism, construction, and maintenance industries. The top five occupations are retail salespersons, cashiers, security guards, janitors and cleaners, and secretaries and administrative assistants. Their wages generally lag behind the United States. There are eight occupations in which workers in the U.S. Virgin Islands earn more than their U.S. counterparts: cooks, maids and housekeeping cleaners, first-line supervisors of construction trades and extraction workers, first-line supervisors or retail sales workers, teacher assistants, food preparation workers, retail salespersons, and landscaping and grounds keeping workers. Earnings gains have been more favorable, with all but one (cooks in restaurants) of the top 30 occupations experiencing real wage growth at a faster rate or real wage decline at a slower rate than in the United States since 2000. Wage growth has been particularly strong among maintenance and repair workers, first-line supervisors of construction trades and extraction workers, registered nurses, and bookkeeping, accounting, and auditing clerks.

Many of these jobs exist in large numbers nearly everywhere because they serve the basic consumption needs of the resident population. Location quotients provide a more revealing measure of regional occupational specializations. Among occupations hiring more than 300 workers, the occupation of security guard is among the specializations attracting the most people – security guards are 3.5 times more prevalent on the U.S. Virgin Islands than they are in the United States overall. A prevalence of security guards likely reflects contemporary private-sector concern for the safety of resort visitors and workers in the midst of high crime. Other specialized occupations employing large numbers of people are maids and housekeepers, maintenance and repair workers, bartenders, first-

line supervisors of office and administrative support workers, construction laborers, and first-line supervisors of construction trades and extraction workers.

Recent statistics for the growth of the U.S. Virgin Islands' labor force are generally favorable. Between 2000 and 2010, employment growth rates in the U.S. Virgin Islands surpassed those in the United States overall in 12 of the islands' 30 largest occupations, with net job losses in 12. The two occupations with the greatest growth rates over this period are combined food preparation and serving workers (including fast food) and secretaries and administrative assistants. There is evidence of strong demand for workers in the emerging finance and insurance sector, as suggested by a greater than expected growth in the numbers of secretaries and administrative assistants, accountants and auditors, and first-line supervisors of office and administrative workers. Other relatively fast-growing occupations include general and operations managers and customer service representatives.

	Employment 2010		Employment Growth		Earnings, 2010		Real Wage	
					Average	Ratio	Growth	
Occupations			2000 to	o 2010	per	VI to	2000 to 2010	
CODE TITLE	Jobs	LQ	USVI	USA	Worker	USA	USVI	USA
41-2031 - Retail Salespersons	1,940	1.39	-2%	5%	\$20,930	1.01	0.2%	-0.9%
41-2011 - Cashiers	1,450	1.28	11%	0%	\$17,910	0.97	5.8%	-2.2%
33-9032 - Security Guards	1,190	3.50	10%	-9%	\$19,420	0.81	10.4%	-14.6%
37-2011 - Janitors and Cleaners, Except Maids and	980	1.41	-15%	-1%	\$20,640	0.93	13.6%	-5.4%
Housekeeping Cleaners								
43-6014 – Secretaries& Administrative Assistants, Except	940	1.51	124%	8%	\$28,310	0.92	8.8%	-6.8%
Legal, Medical, and Executive								
49-9071 or 9042 - Maintenance and Repair Workers,	920	2.25	18%	0%	\$32,570	0.94	27.4%	-8.3%
General								
43-1011 - First-Line Supervisors of Office and Administrative	910	1.99	57%	-2%	\$44,520	0.94	13.8%	-3.6%
Support Workers								
43-9061 - Office Clerks, General	890	0.94	-12%	4%	\$24,460	0.92	14.3%	-9.4%
43-5081 - Stock Clerks and Order Fillers	860	1.42	-3%	1%	\$18,770	0.88	1.6%	-22.9%
35-3031 - Waiters and Waitresses	790	1.04	0%	12%	\$18,310	1.00	12.9%	7.7%
11-1021 - General and Operations Managers	760	1.31	90%	-23%	\$79,480	0.84	6.2%	2.6%
37-2012 - Maids and Housekeeping Cleaners	750	2.58	-4%	-9%	\$20,860	1.08	9.1%	6.5%
25-2021 - Elementary School Teachers, Except Special	710	1.42	-12%	5%	\$38,700	0.75	-5.7%	-29.9%
Education								
43-6011 - Executive Secretaries and Executive	600	1.57	0%	-17%	\$35,070	0.81	2.7%	-12.3%
Administrative Assistants								
41-1011 - First-Line Supervisors of Retail Sales Workers	570	1.45	-2%	-8%	\$38,360	1.07	10.6%	9.2%
35-3021 - Combined Food Prep.& Serving Workers, Including	560	0.61	229%	25%	\$16,770	0.93	-0.2%	-2.3%
Fast Food								
37-3011 - Landscaping and Grounds keeping Workers	520	1.85	24%	10%	\$23,530	1.01	13.4%	1.5%
47-2061 - Construction Laborers	510	1.96	-19%	-5%	*	*	*	*
43-3031 - Bookkeeping, Accounting, and Auditing Clerks	440	0.77	-21%	1%	\$32,020	0.94	15.3%	-1.5%
43-4051 - Customer Service Representatives	430	0.60	72%	12%	\$24,970	0.82	-13.7%	-24.8%
25-2031 - Secondary School Teachers, Except Special &	420	1.19	11%	-76%	\$41,190	0.77	-3.4%	-25.6%
Career/Technical Education								
35-2014 - Cooks, Restaurant	420	1.38	14%	40%	\$26,540	1.20	6.1%	13.4%
25-9041 - Teacher Assistants	410	0.97	-13%	8%	\$24,180	1.04	10.8%	9.1%
35-2021 - Food Preparation Workers	410	1.53	-9%	-5%	\$19,480	1.02	7.7%	0.2%
13-2011 - Accountants and Auditors	380	1.05	23%	24%	\$44,800	0.73	1.9%	-23.0%
29-1111 - Registered Nurses	360	0.40	16%	21%	\$54,060	0.84	17.3%	-5.0%
35-3011 - Bartenders	360	2.16	13%	30%	\$18,680	1.00	11.5%	3.3%
39-9011 - Childcare Workers	330	1.60	43%	54%	\$17,230	0.89	5.0%	-13.6%
53-7062 - Laborers and Freight, Stock, and Material Movers,	330	0.49	32%	-5%	\$22,630	0.96	11.3%	-5.3%
Hand								
47-1011 - First-Line Supervisors of Construction Trades &	300	1.90	-17%	-5%	\$63,090	1.08	21.7%	10.1%
Extraction Workers								

Notes: LQ stands for Location Quotient, * = indicates that a wage estimate is not available

Table 2. Summary Table, Top 30 Employing Occupations

Source: U.S. Bureau of Labor Statistics, Occupational Employment Survey (OES)

