



U. S. Virgin Islands

VISION 2040

Our Community. Our Economy. Our Future.

A VISION OF PROSPERITY FOR ALL





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PREFACE

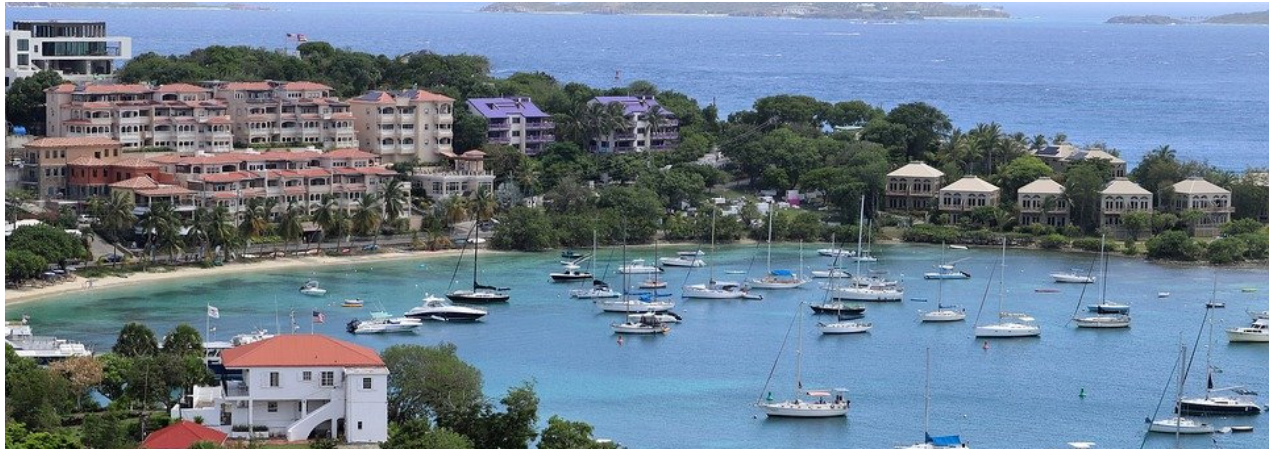


Source: U.S. Virgin Islands Department of Tourism

This user-friendly document includes an overview of key conditions, challenges, and opportunities facing the U.S. Virgin Islands and lays out a twenty-year economic strategy for the Territory.¹

Vision 2040 was established to engage multiple stakeholders, with a strong emphasis on understanding diverse perspectives of residents and businesses. The goal was to capture the prevailing “voices” of the U.S. Virgin Islands and set the tone and pace for future economic change. It does not attempt to address all issues or problems facing the U.S. Virgin Islands and it is not meant to be a technical blueprint that guarantees success in the future. Vision 2040 provides instead the overarching goals and a framework for achieving economic growth and prosperity. Within this framework, multiple stakeholders will find areas where their interests, efforts, operating plans, and “voices” can be aligned to help make the vision reality.

The Governor tasked the USVIEDA with overseeing the project. The USVIEDA is the primary economic development agency for the Territory. It is not, however, a plan written by or produced exclusively for the benefit of the USVIEDA. Some parts do relate to the USVIEDA, but most elements that directly or indirectly influence the economy are outside the purview of the USVIEDA or any single entity. All stakeholders have a direct impact on the future



Source: U.S. Virgin Islands Department of Tourism

economic well-being of the Territory, be they utility providers, small business owners, civic and professional associations, public officials and elected leaders, young professionals, nonprofit groups, community organizers, and many, many others. Vision 2040 is the common framework to bring these interests together.

The USVIEDA worked with Camoin 310, a nationally recognized economic development consultant group, to conduct objective research and analyses, engage participants, facilitate discussions, and provide independent assessment of stakeholders’ interests and recommendations for consideration by public and private entities.

The report is intended as a reference document and plan of action for all those who care about the future

of the U.S. Virgin Islands, from policy makers, to students, residents, business owners, investors, and others. Vision 2040 is laid out in a straight-forward manner and is easy to read for use by audiences from all walks of life. In this way, Vision 2040 was designed from the start to be different: it is based on what the people hold to be true and its conclusions derive from their thoughts, aspirations, and desires.

Vision 2040 needs to persist across Administrations. The success of Vision 2040 is only possible if those very readers—the stakeholders committed to shaping the future of the U.S. Virgin Islands—embrace its findings and ensure its recommendations and initiatives are followed.

¹ U.S. Virgin Islands and USVI are used interchangeably throughout the plan. Charts, tables, and graphs that reference Virgin Islands all relate to the U.S. Virgin Islands and do not

include the British Virgin Islands. Territory is capitalized in places where it is the main subject of the sentence, and appears as “territory” when referred to in general, i.e. American territory or

territory employee. For background on the U.S. Virgin Islands see page 39 of Volume 3.

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EXECUTIVE SUMMARY



Photo Source: U.S. Virgin Islands Department of Tourism



Photo Source: U.S. Virgin Islands Department of Tourism

VISION 2040

Vision 2040 is the most ambitious long-term economic strategy and action plan ever attempted in the U.S. Virgin Islands. It is built on the positive efforts and contributions of several thousand people who care deeply about the Territory. In the last months of 2020 they came together, during a worldwide pandemic, for a planning process unlike any other to help determine the priorities and strategies that would shape a new reality for themselves and future generations.

VISION 2040

Our Community. Our Economy. Our Future.

A Vision of Prosperity for All

Public Engagement

Public Outreach & Engagement

- Created Vision 2040 Website
- Public Kick-off Presentation
- Territory-wide Public Forum
- St. John Community Survey
- St. Thomas Community Survey
- St. Croix Community Survey
- Diaspora (Live Abroad) Survey
- Diaspora Town Hall Events (2)
- Virgin Islands Association Meeting
- Survey of USVI Businesses
- St. John Virtual Open House
- St. Thomas Virtual Open House
- St. Croix Virtual Open House
- St. John Town Hall
- St. Thomas Town Hall
- St. Croix Town Hall



Stakeholders

- Four (4) Task Force Meetings
- Three (3) Focus Group Sessions
- Five (5) Industry Working Group Meetings
- 60 Stakeholder Interviews

Community Outreach



Vision 2040 Website
5,700 Sessions
4,300 Users
560 Email Subscribers

Social Media
31,113 People Reach
735 Page Followers

MEDIA CAMPAIGN

- TWO VIDEO COMMERCIALS
- 180 PROMOTIONAL RADIO SPOTS
- 6 RADIO INTERVIEWS
- RADIO & TELEVISION BROADCAST OF PUBLIC MEETINGS
- ELECTRONIC BOARD ADVERTISING
- PRINT NEWSPAPER ADVERTISEMENTS
- INFLUENCER PROMOTION OF VISION 2040
- SOCIAL MEDIA PAGE AND ENGAGEMENT
- DEDICATED VISION 2040 WEBSITE
- VISION 2040 SUBSCRIBER LIST E-MAIL BLASTS
- FIVE (5) PUBLISHED NEWS ARTICLES

Based on sound principles and anchored by hard facts, Vision 2040's most powerful messages are the truths revealed by the people who helped develop the plan. Throughout 100 days of interactive, participatory exercises and dialogue, their voices helped guide research, shape aspirational goals, and influence recommendations and new initiatives designed to bring about economic prosperity.

Participants spoke directly about their hopes and dreams, and of those things that they love about living in the U.S. Virgin Islands: the deep sense of community, the natural beauty, friends, family, and more. At the same time, they did not sugarcoat the problems of living in the Territory, such as lack of

opportunity and family-sustaining jobs, high cost of living, food insecurity, poverty, inadequate health care, and crime.

Participants expressed hope that Vision 2040 would position the U.S. Virgin Islands as a vibrant, desirable place to live and visit, and as a prosperous business location that is competitive based on its abilities to develop, retain, and attract talented workers who are creative and imaginative.

The participants expressed hope that Vision 2040 would position the U.S. Virgin Islands as a vibrant, desirable place to live and visit, and as a prosperous business location that is competitive based on its abilities to develop, retain, and attract talented workers with creativity and imagination.

Survey Responses: 3,116

Residents: 1,922

Diaspora ("Expats"): 706

Businesses: 488

Hope for the Future

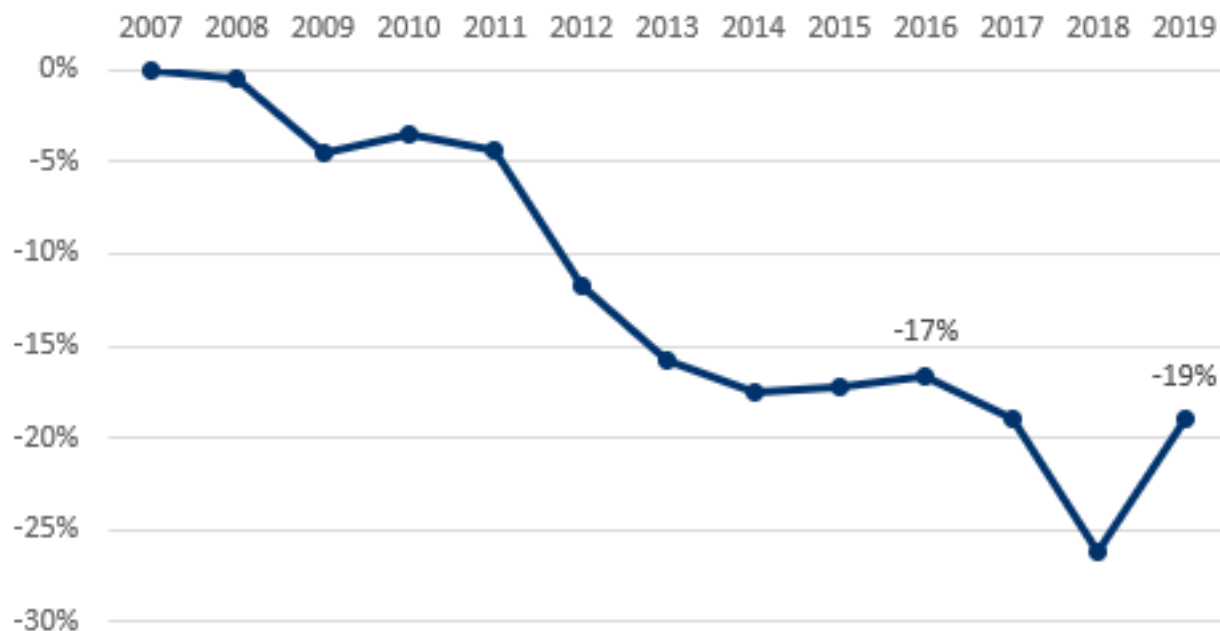
Most residents of the U.S. Virgin Islands are optimistic about the future, which says a lot about a community that has suffered one devastating setback after another. This comes from a survey completed by more than 1,900 residents as part of the Vision 2040 project.

Between 2007 and 2019, the U.S. Virgin Islands lost 8,700 jobs: a net job loss of 19%.

Within the past decade the economy of the U.S. Virgin Islands has experienced a series of setbacks. Still reeling from the closure of the Hovensa oil refinery in 2012 that put thousands of residents out of work and the financial crisis that followed, back-to-back Hurricanes Irma and Maria in 2017 delivered even bigger blows to the fragile economy. The hurricanes caused widespread destruction and hardship for individuals, communities, and businesses. It took years to see visual evidence that the community was on the mend, and then the U.S. Virgin Islands was impacted by a global pandemic that halted tourism—its primary industry.

The success of Vision 2040 rests on making difficult decisions to reverse more than a decade of economic decline and gain a foothold to move in a new direction. This began well before Vision 2040 with honest assessments of the challenges facing the Territory that were accompanied by conclusions from numerous reports written by experts who were called upon to help deal with the aftermath of the hurricanes.

U.S. VIRGIN ISLANDS PERCENTAGE JOB CHANGE SINCE 2007



Invariably, study after study came to the same conclusion: the best safeguards against economic catastrophe involve fundamentally restructuring and diversifying the USVI economy so that it is less dependent on any single industry base, is able to produce good paying jobs that lift residents out of poverty, and can provide new sources of revenue so the Territory can better manage future challenges. More than ever, strengthening capacity at all levels, beginning with how government functions, is critical.

In short, it is past time to change direction. The Territory must become more competitive by reducing costs of doing business. It must develop

and leverage its educational resources and separate from its Caribbean neighbors by providing livable wages that will attract and retain talent.

The unique value proposition for the U.S. Virgin Islands is to be recognized as a dynamic, innovative location. For this to happen it must foster a supportive business climate and better leverage its vast known and hidden resources to ensure that more of its residents are employed and contribute to the well-being of the larger community.

The Territory's economic development professionals, public and private sector leaders, must be viewed as trusted catalysts for change and honest brokers for private investment. A unified coalition must be forged from and embraced by multiple public and private stakeholders, all of whom are doing their parts to nurture economic growth.

Vision 2040 was initiated to move beyond traditional modes of thinking and operating that tended to protect turf and erect barriers—real and imagined—so that new voices could be heard, transparency assured, and bold and creative ways of thinking introduced into the public domain.

What Does Economic Growth Look Like?

To begin to change the trajectory of its economy, the U.S. Virgin Islands needs to add 1,100 jobs over the next decade (see chart on following page). In other words, the USVI would need to add 115 net new jobs annually over the next ten years. This translates to an investment (measured by Gross Domestic Product) of \$11.4 million per year for the next ten years (\$114.4 million in total).

That is a conservative scenario that will only marginally impact unemployment rates for the better and is unlikely to have a dramatic impact on poverty rates.

Instead of sporadic marginal changes, Vision 2040 seeks a transformative scenario whereby the Territory reaches rates of full employment and positive job growth. To reach 4.0% unemployment,



Photo Credit: U.S. Virgin Islands Department of Tourism

which is in a range at which the Territory could achieve full employment, the USVI needs to add 1,093 net new jobs annually over the next ten years. This translates to an investment (measured by Gross Domestic Product) of \$113.8 million per year for the next ten years (\$1.1 billion in total) and annual economic growth of between 2-3%.

This is illustrated in the graph on the following page. With the transformative scenario (green line), unemployment levels (currently at least 10%) and the level of residents living below the poverty line

(approximately 22%) can theoretically be expected to drop considerably, assuming there are proper educational and social supports provided.

Unfortunately, the Caribbean has few recent examples where dramatic economic growth occurred. An exception, Turks and Caicos Islands managed to achieve 4.4% average GDP growth over five years prior to the pandemic largely due to construction and related investments in the travel and leisure sectors.

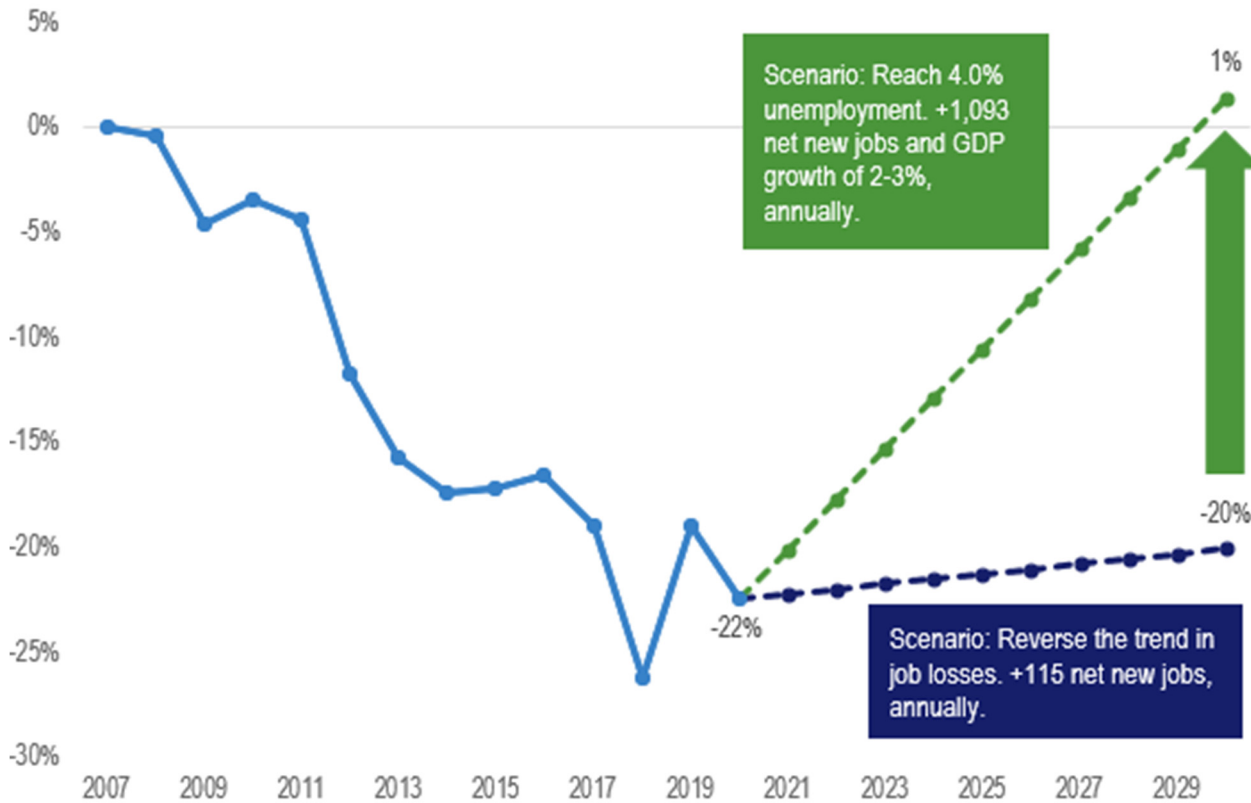
The pre-Covid economy is history, and the challenge is not to return to a former economic state but build a more dynamic, diverse, and sustainable economy that is both fluid and resilient.

The new direction must be for the U.S. Virgin Islands to put in place an aggressive 20-year economic

strategy to not only quickly reverse direction, but to dramatically accelerate job growth and increase gross domestic product in the early years following adoption of a new strategy. The inflection point when growth reverses years of prolonged declines is still likely years out, and it will not occur with the

industries and jobs of the past but will be built on industries of the future. These job gains are unlikely to be won by “home runs” (large companies employing hundreds like Hovensa did), but rather by many “singles” and “doubles” produced by innovative small businesses and fast-growing technology-based firms.

Virgin Islands Percentage Job Change, 2007-2030



Note that this analysis assumes 4.0% unemployment, which is below the territory's unemployment rate of 5.9% in 2007, prior to the Great Recession. This is in a range at which the territory could achieve full employment. This analysis also assumes that population will increase by 5% by 2030 (from 2019 data, the most recently available population data at the time of publication).

Sustaining growth for the U.S. Virgin Islands will occur with smart, measured, and steady investments in a set of targeted industry sectors.

The Vision 2040 process confirmed that reaching the inflection point and sustaining growth for the U.S. Virgin Islands will occur with smart, measured, and steady investments in a new set of targeted industry sectors. It begins with all-out effort to improve the business climate and living conditions while preparing workers for the jobs of tomorrow. As this is achieved, businesses will take root, people will find gainful employment, and those who left the U.S. Virgin Islands will “come home.”

Aspirational and Macroeconomic Goals

We cannot predict what the world will look like in 2040. Human and technological advancements, global changes from natural and societal influences, and economic disruptions will continue to occur at an ever-faster pace.

What will not change are the basic tenets of macroeconomics. Any increases in the production of goods and services will only be possible when existing resources are allocated efficiently. For the USVI, achieving efficiencies will require fundamental changes in how residents are educated, rethinking how and why public services are delivered, and reprioritizing economic goals. That is what Vision 2040 set out to accomplish: to inspire residents to participate and demand bold changes that will lead to a better economic future.



Photo Credit: U.S. Virgin Islands Port Authority



Based on the research conducted and strong engagement and outreach, the Vision 2040 Task Force agreed on two overarching goals and eight aspirational goals for the U.S. Virgin Islands. The recommendations and initiatives included in the strategic plan relate to achieving these goals.

MACROECONOMIC GOALS

Vision 2040 set two macroeconomic goals for the Territory.

The first is to reach full employment by 2030. Full employment exists when jobs are plentiful. It does not mean that everyone has a job; rather, no one is jobless unless they do not want to be employed.

The second macroeconomic goal is to achieve economic stability by 2040. This means that growth and prosperity have taken root, there are no excessive fluctuations in GDP, and prices for goods and services are reasonable, manageable, and stable.

ASPIRATIONAL GOALS

Vision 2040 also establishes eight aspirational goals to help the Territory achieve these macroeconomic goals. They relate to the targeted industries detailed in Volume 5 of this report. These goals are presented on the following page.

ASPIRATIONAL GOALS

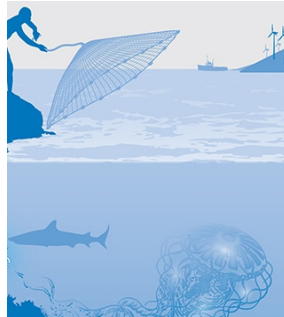
GOAL 1

Increase locally sourced food from 3% to **35%** of local food demand. Agriculture-related industrial production will increase from 2% of GDP to represent **5%** of GDP.



GOAL 2

The U.S. Virgin Islands will become a Blue Economy **research center of excellence** in the world for ocean-based tropical environments.



GOAL 3

Healthcare and health sciences will increase from 7% of GDP to **15%** of the U.S. Virgin Island's overall GDP.



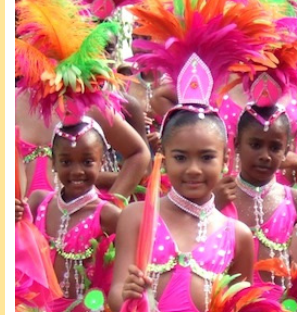
GOAL 4

Entrepreneurs will have access to support and capital to scale their businesses and the **annual net change** in establishments will increase from 14 (2019) to **50 establishments**.



GOAL 5

Population in the U.S. Virgin Islands will increase **10%** from the official 2020 U.S. Census.



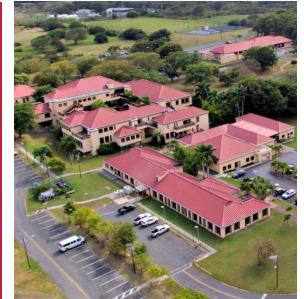
GOAL 6

Renewable sources of energy will represent **75%** of total energy consumption, up from the 1% that they represent currently.



GOAL 7

The U.S. Virgin Islands will have the **highest quality education system** in the Caribbean and the UVI will attract and retain the highest caliber science and technology talent.



GOAL 8

Extended stay visits, authentic experiences, and cultural offerings will increase from 63% of tourism-related revenue to **75%**.



Target Industry Sectors

Targeted industries were selected based on their potential to contribute to economic diversification through growth and job creation in the U.S. Virgin Islands.

 <h3>Agribusiness</h3> <ul style="list-style-type: none"> • Aquaponics, aquaculture, hemp farming • Specialty foods, farm-to-table 	 <h3>Professional/Tech Services</h3> <ul style="list-style-type: none"> • Financial, IT, customer service centers/back office • Remote work, consulting, diaspora co-ventures
 <h3>Coastal/Ocean Resources</h3> <ul style="list-style-type: none"> • Marine/maritime, biology, sustainable harvesting • Medicinal, nutritional, alternative energy 	 <h3>Renewable Energy</h3> <ul style="list-style-type: none"> • Solar, wind, tidal, wave, biomass, waste • New sustainable technologies
 <h3>Health Sciences</h3> <ul style="list-style-type: none"> • Telemedicine, medical simulation • Specialty care and education 	 <h3>Research & Development</h3> <ul style="list-style-type: none"> • Agri-tech, ocean, climate change • Healthcare, academic partnerships
 <h3>Light Manufacturing</h3> <ul style="list-style-type: none"> • Regional foods, co-manufacturing • Resilient building materials 	 <h3>VI-Style Tourism</h3> <ul style="list-style-type: none"> • Heritage, culture, sports, adventure, wellness • Small conferences, casual-elegant lodging, dining

 "Blue Economy" Sector

 Services Technology Energy Agriculture Manufacturing

Taking Action

Vision 2040 provides 115 initiatives and recommendations for moving forward. They are organized by themes: business climate, infrastructure, diversifying the economy, education and workforce, and quality of place and life.

Business climate issues are front and center throughout the report, and with good reason. In a Vision 2040 survey of approximately one-third of all businesses in the Territory (nearly 500 respondents), three out of four businesses (75%) expressed that they would have reservations about recommending the U.S. Virgin Islands to other businesses considering opening in or relocating to the Territory. When asked to rank the business environment on a five-star rating (with 5 being best), eighty-seven percent (87%) would not give the Territory a four- or five-star rating.

Economic growth will not occur until these numbers are reversed. Interviews and focus group sessions with businesses point to government attitudes, programs, and policies as major contributors to a poor business climate. It is not a new phenomenon; in fact, it is a situation that was decades in the making.

Vision 2040 provides recommendations to address the situation, beginning with a call for all government agencies to present the governor with at least three of the most substantive things they can do immediately within their agencies to be more responsive to the needs of businesses. This would yield over 100 corrective actions (in addition to the

115 outlined in this report.) We then call for the establishment of a Business Climate Commission comprised of private and public leaders to evaluate and monitor such actions, evaluate tax and regulatory measures, and to consider other ways to mitigate weaknesses to improve the climate for conducting business.

Infrastructure needs were also front and center in the Vision 2040 discussions and survey findings of residents and businesses. Not surprisingly, electricity costs and reliability topped the list. Several recommendations address energy-related issues. We also focus heavily on the lack of sites on which to build new facilities or renovate existing buildings for business activity, and provide steps that can be taken over the next two decades to make room for business growth.

Economic prosperity requires that all systems work harmoniously to realize mutual goals.

Diversifying the economic base and moving away from a service-driven economy where most jobs are in government, tourism, and social services is important. To this end, initiatives are introduced to further the targeted industries and improve the small business and entrepreneurial ecosystem. We note the extraordinary opportunities that exist for the U.S. Virgin Islands to become a center for renewable energy and Blue Economy research and

development for the United States. In 20 years, we predict this sector will be the dominant contributor of jobs and economic activity for the Territory.

Vision 2040 targeted industry sectors requiring workers who have high levels of problem-solving and technical skills. Thus, improvements to education and workforce development are critical to achieving the aspirational goals. And finally, quality of place and life improvements are addressed to ensure that the Territory is safe, attractive, and enjoyable for living, visiting, and conducting business.

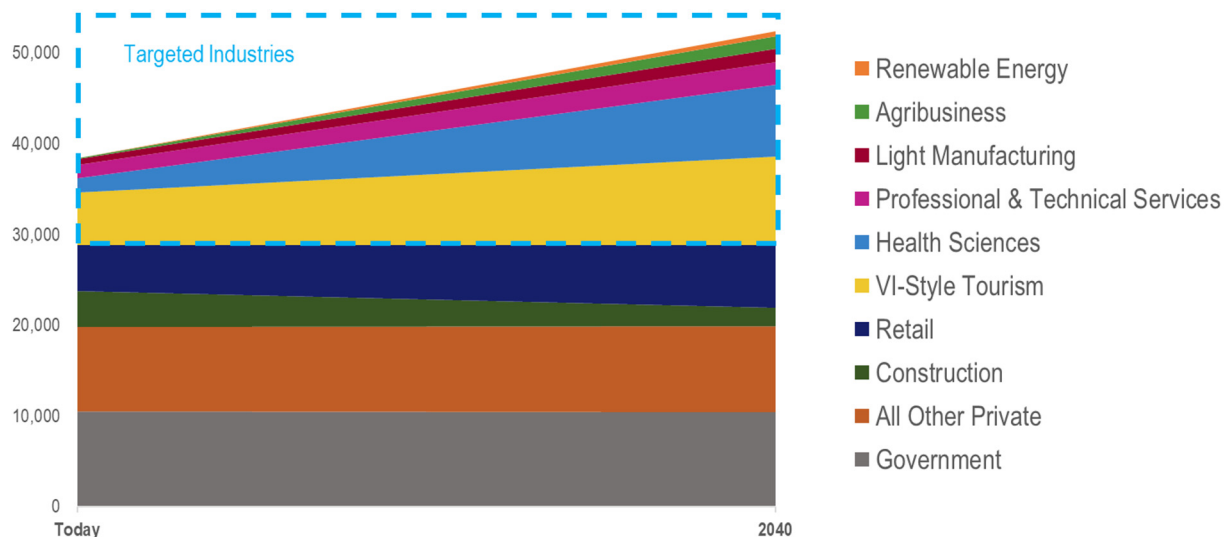
A significant finding and opportunity for the U.S. Virgin Islands rests with those who were born and raised here but had to leave for various reasons: the so-called “diaspora”. Vision 2040 conducted worldwide outreach and over 700 former residents completed surveys and many from around the globe participated in virtual town halls to provide their thoughts and ideas. Not only do these expats represent investment opportunity for the Territory, but they are also part of the solution as the majority indicated a desire and willingness to return—provided certain conditions changed for the better.

The path to reaching the 2040 destination will not be a straight line. Short-term plans and administrations will come and go—as they should to adjust to new realities. If along the way, everyone commits to moving toward the positive outcomes of Vision 2040, then a whole new generation will experience economic prosperity and enjoy a better quality of life.

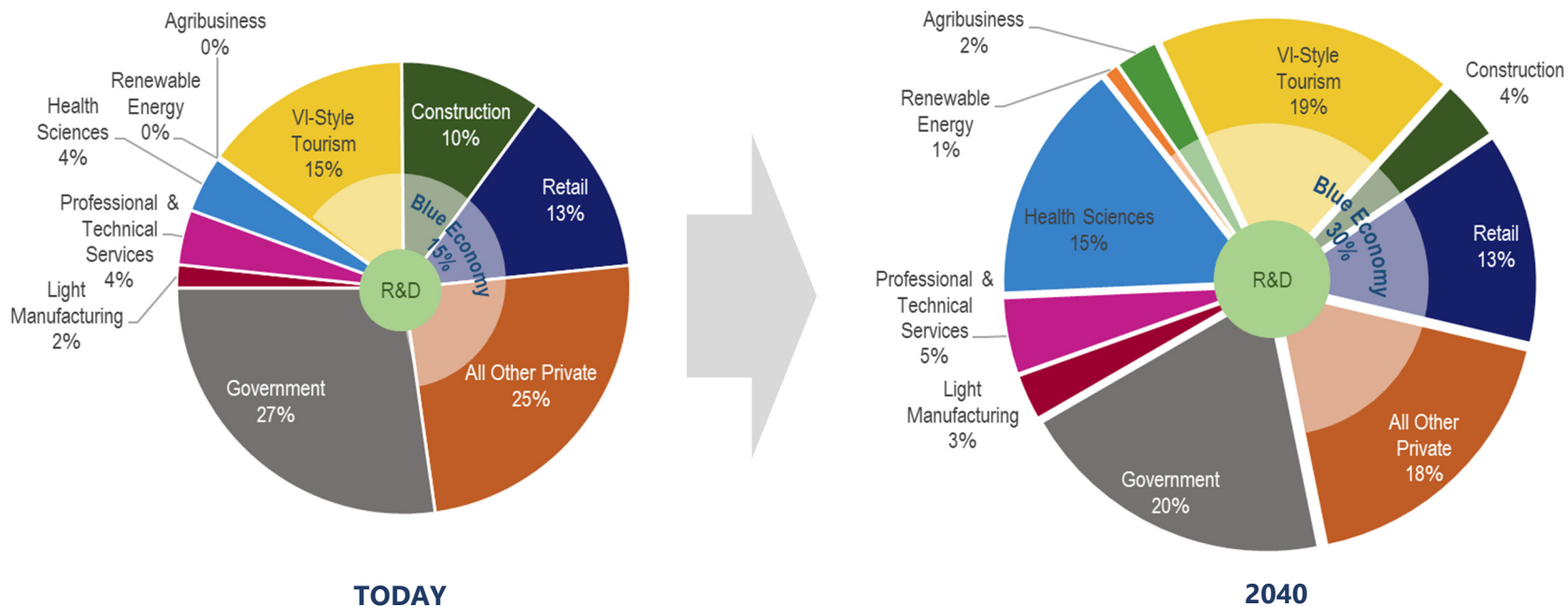
Predicting Impact

In 2040, the U.S. Virgin Islands will have a larger and more diverse economy than it does today. **By focusing efforts on the targeted industries and goals identified in this strategy, total jobs in the territory could grow by 35% from under 40,000 today to over 52,000 in 2040.** In 20 years, the number of jobs would surpass the pre-Great Recession peak, placing the territory on a path toward stable economic growth.

U.S. Virgin Islands Jobs by Sector: Today and 2040



Percent of Jobs by Sector: Today and 2040



SAMPLE FINDINGS: VOICES OF THE RESIDENTS

WHAT DO RESIDENTS THINK THE U.S. VIRGIN ISLANDS NEEDS MOST?



Citizens are looking for leadership that invests in the community via better education, infrastructure, jobs, and healthcare.

WHAT ARE THE TOP CONDITIONS NEEDING IMPROVEMENTS ACCORDING TO RESIDENTS OF EACH ISLAND?

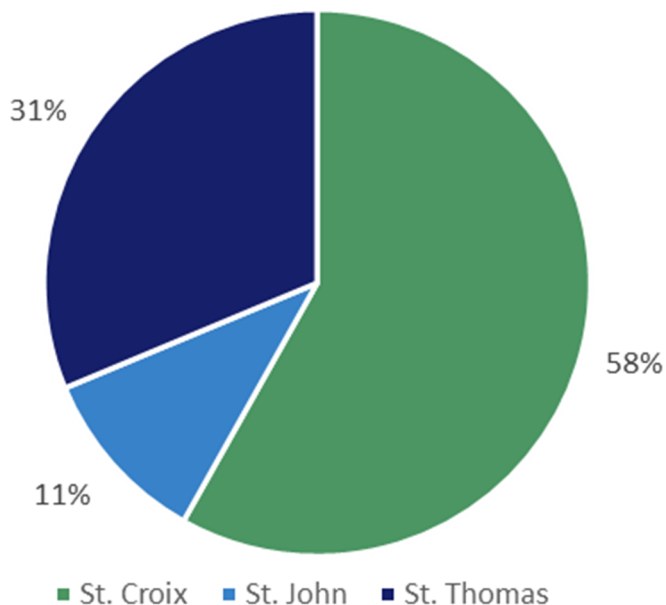
St. Thomas	St. Croix	St. John
1. Infrastructure	1. Cost of Electricity	1. Housing Affordability
2. Social Problems	2. Social Problems	2. Cost of Electricity
3. Housing Affordability	3. Crime Rate	3. Social Problems
4. Crime Rate	4. Transportation	4. Housing Availability
5. Removal of Trash	5. Housing Affordability	5. Government Services and Responsiveness

WHAT ARE THE TOP THINGS THAT RESIDENTS THINK THAT OTHER CARIBBEAN PLACES ARE DOING BETTER? (BASED ON SURVEY)

Modern infrastructure (11.3%)	Abundance of amenities (10.6%)	Focus on equitable opportunities (10.4%)	A positive attitude and hospitality (9.9%)
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SAMPLE FINDINGS: VOICES OF THE RESIDENTS

SURVEY RESPONSES BY ISLAND



- 54% of respondents were born and raised in the USVI.
- 39% have lived on the Islands more than 10 years; 57% their entire lives.
- The USVI is the primary residence of 80% of respondents.

WHAT TYPES OF DEVELOPMENT DO RESIDENTS WANT TO SEE MORE OF IN THE FUTURE?

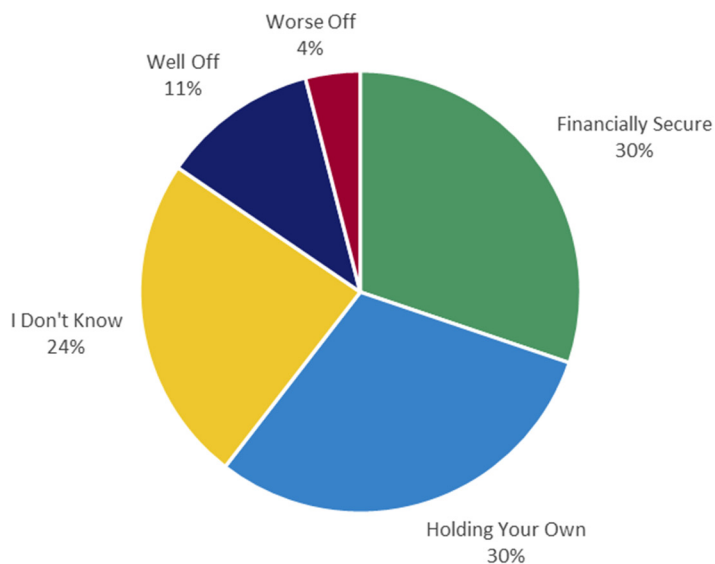
Survey says...

St. Croix | retail/commercial (31%), residential (29%), health & social services (27%) and hotel (26%)

St. Thomas | residential (36%), health & social services (24%), hotel (22%), and retail (22%)

St. John | residential (28%), health & social services (25%), retail (23%), and hotel (16%). A small number surveyed selected "No Development", of which 30% specified that they did not wish to see hotels.

HOW DO RESIDENTS FEEL ABOUT HOW THEIR FUTURE IN THE TERRITORY WILL BE?



81% of Surveyed residents selected an optimistic outlook for their future in the USVI

8 out of 10 people expect to live in the USVI 20 years from now.

SAMPLE FINDINGS: THE USVI DIASPORA

WOULD YOU CONSIDER MOVING BACK?

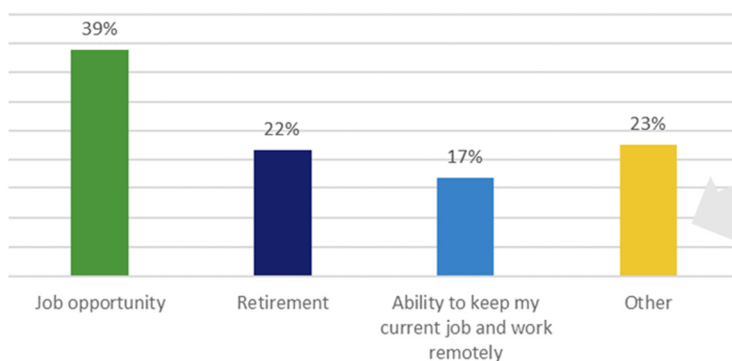


8 out of 10
people would consider moving back
(responded yes or maybe)

Of those people who would consider moving back to the Territory:

1. Their time away does not impact their interest to potentially move back.
2. They vary in age.
3. Most do not own a business.
4. They are educated.
5. A majority are tied to St. Croix.
6. Most are working, 93%
7. Most have family still on the islands.

WHAT WOULD IT TAKE TO MOVE BACK?



Top responses from the "other" category include affordable housing, better healthcare, lower cost of living, additional job opportunities, and less crime.

What PROJECTS will MOST POSITIVELY impact the economy? (Top responses of 11 options)

Energy and communications improvements
(21%)



Healthcare modernization (16%)



Education/training for residents (14%)



Physical infrastructure improvements
(12%)



Small business support (9%)



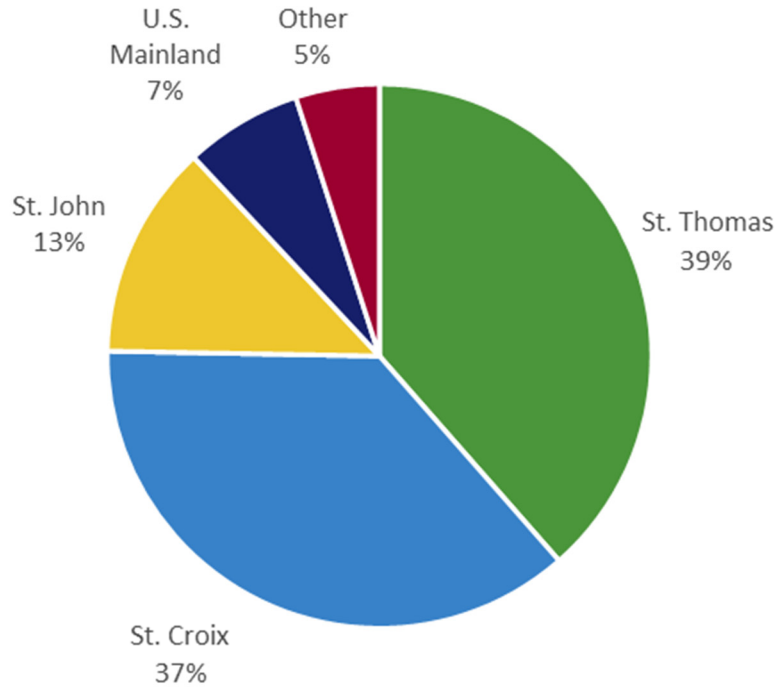
SAMPLE FINDINGS: BUSINESS OWNER VIEWPOINTS

488 Business owners completed a survey as part of the Vision 2040 research process

Most survey respondents were the founder of their company (81%).

While 32% of businesses have been in business more than 20 years, 28% have been in existence only 1-5 years

SURVEY RESPONDENTS BY BUSINESS LOCATION



CHALLENGES WE ASKED BUSINESSES TO RATE

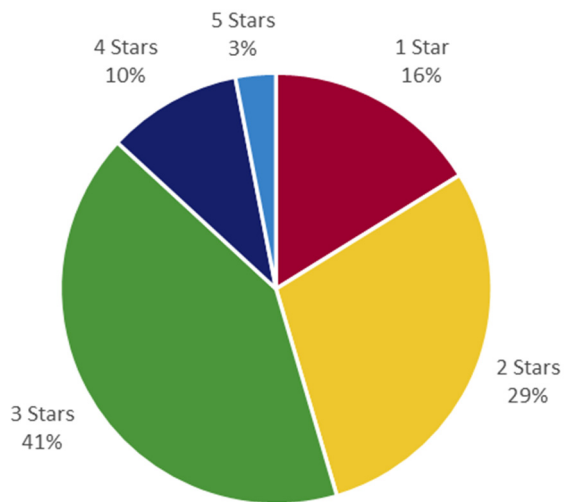
(1=Not a Challenge, 5=A Severe Challenge)

2.6	Acquiring new customers
2.7	Developing new high-margin products or services
3.8	Energy costs
2.2	Entering new export markets
2.5	Entering new US domestic or Caribbean markets
2.3	Having enough parking spaces at your facility
2.3	Keeping up with changes in customer preferences or needs
3.1	Lack of business support programs and services
2.9	Maintaining high margins on your existing products or services
2.0	Managing your brand
3.0	Navigating legislative and/or regulatory barriers
2.7	Obtaining growth financing and capital
3.7	Overall cost of doing business
3.0	Recruiting the best workforce possible
2.3	Responding to new disruptive technologies in your industry
2.5	Retaining high-value customers
2.4	Retaining your best workers
3.5	Taxes
3.6	Unexpected changes in economic conditions or industry demand

Many businesses wrote in additional information that helped us understand growth challenges. Many cite Covid-19 restrictions, governmental regulations (specifically licensing and IRB), and high taxes, (specifically the gross receipt tax) as hindrances to growth. The cost of living, the need for educated/skilled workers, and obtaining capital were also cited.

SAMPLE FINDINGS: BUSINESS OWNER VIEWPOINTS

HOW WOULD YOU RATE YOUR PERCEPTION OF THE BUSINESS CLIMATE IN THE U.S. VIRGIN ISLANDS?

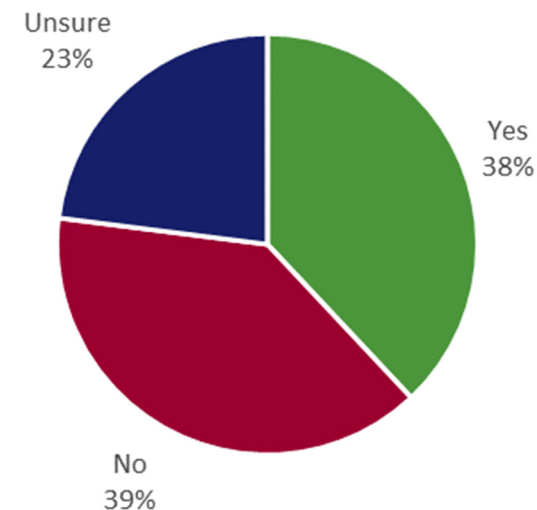


75% of businesses surveyed would have issues recommending the USVI as a place to do business, and 87% do not believe the business climate is sufficient.

Where do growing companies think USVI should focus its efforts?

- Simplify and accelerate zoning, business permitting, regulatory compliance (9%)
- Improve the work ethic of workforce (9%)
- Increase the level of technical skills, accreditation, advanced degrees of local workforce (8%)
- Provide and/or support workforce development initiatives and training programs (8%)

DO YOU EXPECT TO HIRE MORE EMPLOYEES IN THE NEXT YEAR?



WHAT FINANCIAL ISSUES HAVE BEEN DIFFICULT IN THE PAST FIVE YEARS?

(1=Not Difficult, 5=Extremely Difficult)

2.8	Managing cash-flow
2.1	Understanding your true total cost of product/service per unit
2.1	Making pricing decisions
2.8	Financing new equipment and/or facilities
2.5	Attracting external sources of growth capital
2.8	Boosting profit margins on existing products/services
2.9	Dealing with the increasing total cost of labor
3.7	Dealing with the increasing cost of utilities
3.2	Cost of real estate

Only 16 respondents (6%) indicated working with a government agency in the past three years whereas 215 indicated they had not. While this is a small sample, those that were contacted by the government to discuss challenges viewed the business climate more favorably, with 31% providing a positive rank compared to 12% who were not contacted.



An aerial photograph of a coastal town, likely in the U.S. Virgin Islands. The town features a mix of residential and commercial buildings, many with red or blue roofs. A prominent feature is a large marina with several docks extending into the clear, turquoise water. Numerous sailboats and larger yachts are moored at the docks. In the foreground, a large, octagonal building with a red roof is situated in the water. The background shows a lush, green hillside with more buildings and a road winding through the trees.

2

APPROACH TO PROSPERITY

Photo source: U.S. Virgin Islands Department of Tourism



VOLUME 2

APPROACH TO PROSPERITY

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FRAMEWORK FOR GROWTH

Vision 2040

It was the expectation that Vision 2040 would not be just another plan. Instead, it would build on existing recovery efforts and provide a framework for collective actions to dramatically alter the economic course of the U.S. Virgin Islands. To do this required putting in place an economic strategy that would span multiple administrations. The Governor at the time of launch, Albert Bryan, was adamant this could happen if the economic strategy was based on sound principles, anchored with hard facts, and had widespread public support.

With that in mind, Vision 2040 was designed to be an interactive, participatory process to produce a long-term economic strategy and action plan that positions the U.S. Virgin Islands as a vibrant,

Vision 2040 was designed to be an interactive, participatory process to produce a long-term economic strategy and action plan that positions the U.S. Virgin Islands as a vibrant, desirable place to live and visit, and as a prosperous business location that is competitive based on its abilities to develop, retain, and attract talented workers with creativity and imagination.



Wilfred "Bomba" Allick Port and Transshipment Center. *Source: USVI Port Authority*

desirable place to live and visit and as a prosperous business location that is competitive based on its abilities to develop, retain, and attract talented workers with creativity and imagination.

Vision 2040 launched in September 2020 with a 100-day intensive engagement and public input period and a final product delivery date for February 2021. A task force of public and private leaders was formed to provide oversight and guidance throughout the process. Five industry work groups assembled around the subjects of service sector, technology, energy, agriculture, and manufacturing. Vision 2040 also formed focus groups comprised of

real estate and small business owners, and met with the University of the Virgin Islands' Comprehensive Economic Development Plan and Master Tourism Plan teams to engage sitting and incoming legislative officials. Additionally, 60 stakeholder interviews were conducted with civic leaders, community, business, and public representatives.

Guiding Principles

Effective economic developers identify and clarify underlying values that stakeholders embrace as central themes, and then build out an overarching strategy in which stakeholders know their respective roles in making it happen. By way of the processes, stakeholders commit to move in the same direction to address mutual challenges and meet aspirational goals. In short, systemic change requires commitment and adherence to a shared set of values.



Vision 2040 laid out eleven principles to guide development of a 20-year strategy. Several of the principles focused on planning for implementation and actionable changes. It was agreed that Vision 2040 needed to respect and build off successful

ongoing efforts aligning with common objectives of achieving prosperity. Similarly, over time government departments, economic stakeholders, and organizations would need to consider adapting annual operating and strategic plans with Vision 2040's long-term aspirational goals to reinforce efforts and ensure continuity.

Vision 2040 recognized that economic development involves more than job creation. Growth needs to be tied to community development and be fair and inclusive. Thus, the Vision 2040 project was launched with the intent to engage vast segments of the population.

Further, the principles acknowledged the significance of small businesses and the importance of developing a supportive business environment for entrepreneurs to succeed. Some principles addressed the need for responsive frontline public sector workers, who play a critical role in producing a competitive business climate.

With that in mind, the governor established a task force that included commissioners in his cabinet to help guide Vision 2040. Vision 2040 organizers also agreed that fiscal sustainability and efficient use of public resources to create a top location to visit and conduct business were key in developing a long-term economic strategy. The principles also recognized the role of education in producing the skill sets necessary to reduce poverty and succeed in the world of work. Finally, the principles reinforced that Vision 2040 would need to hold public and

private sectors accountable, while improving on the capabilities of the Virgin Islands Economic Development Authority (USVIEDA) and economic stakeholders to deliver tangible results. Appreciably, accountability comes with producing performance measures that can be easily tracked and modified as needed to achieve maximum impact.

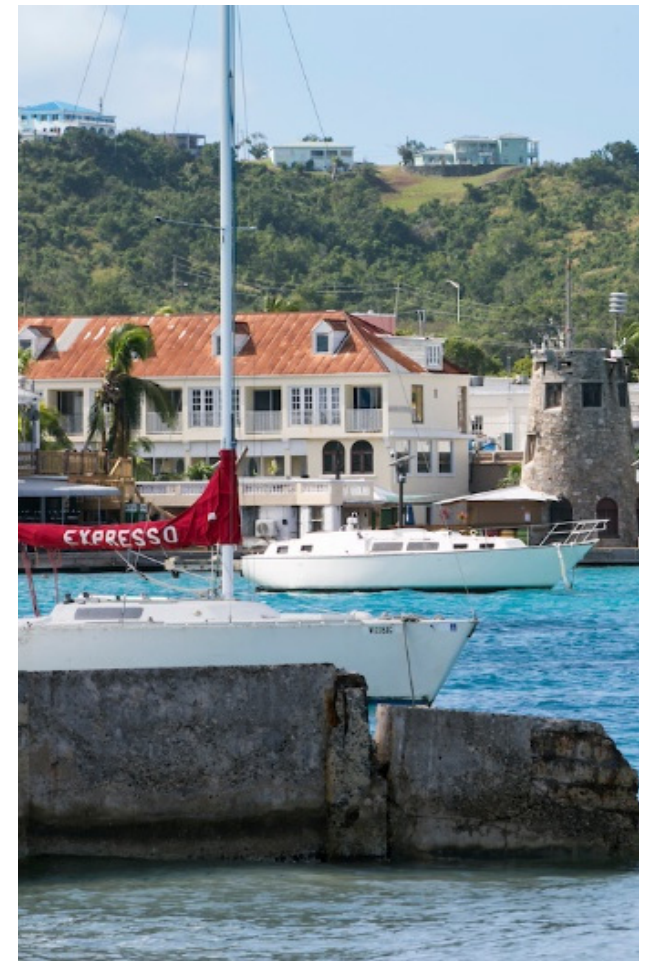


Photo source: U.S. Virgin Islands Department of Tourism

PRINCIPLES TO GUIDE DEVELOPMENT OF VISION 2040

1. Complement the U.S. Virgin Islands' redevelopment initiatives following Hurricanes Irma and Maria to help target resources to improve **infrastructure and community development priorities**;
2. Align with and contribute toward goals of increasing levels of per capita **income, private capital investment, population, and job growth**;
3. Promote an equitable **quality of life and place** for residents, with vibrant communities having affordable, diverse options for housing and accessible amenities;
4. Help create an environment where **entrepreneurs** of diverse backgrounds and incomes can start, grow, and sustain businesses;
5. Improve the **business climate**, characterized on the front line by streamlined processes and business-friendly efforts;
6. Contribute to the **fiscal sustainability** of the Territory by encompassing targeted industries that diversify the economy and produce tax revenue generated from economic growth with decreased need for public spending, particularly on social services;
7. Support efforts of **public education and workforce development** professionals to help prepare and retain graduates as permanent residents in local jobs, while encouraging expats to return to the Islands;
8. Build on the promise of healthy and enriched living, and promote USVI as a **top location** to visit and conduct business;
9. Fill gaps in local **economic development programming and target resources** to support the growth and development of the entire U.S. Virgin Islands territory, and leverage local collaboration and island resources to support services and initiatives;
10. Produce **right-sized performance metrics** along with management control and accountability measures to achieve maximum impact; and
11. Take full advantage of the **capabilities and programs of USVIEDA** and its allies and make recommendations for enhancements as appropriate.

Recovery with Resiliency

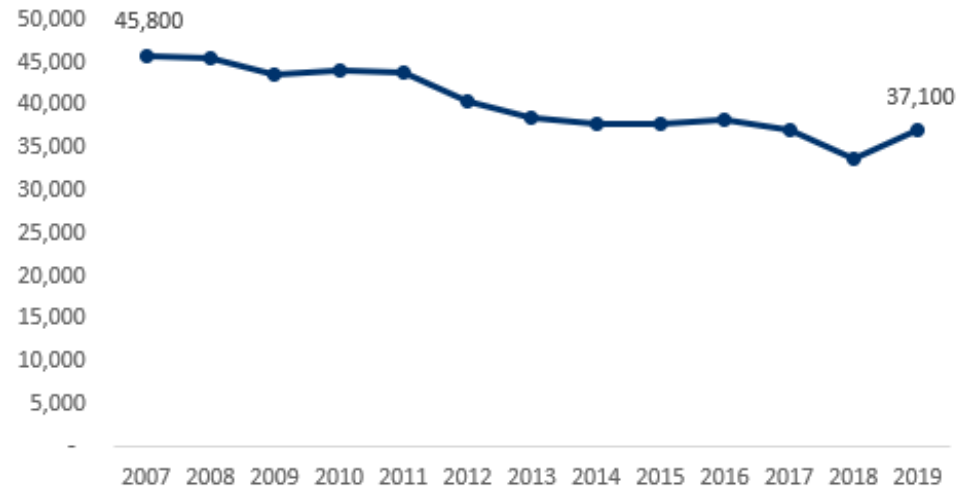
Most residents of the U.S. Virgin Islands are optimistic about the future. This comes from a 2020 survey completed by more than 1,900 residents as part of the Vision 2040 project (see Volume 4). That says a lot about a community that has suffered one setback after another.

Between 2007 and 2019, the U.S. Virgin Islands lost 8,700 jobs, a net job loss of 19%. (Refer to Volume 3 for full economic analyses.)

Clearly, the past decade has not been kind to the economy of the U.S. Virgin Islands. Closure of the Hovensa oil refinery put thousands of residents out of work and financial crisis followed. Hurricanes Irma and Maria then delivered big blows to the power grid and infrastructure assets, causing widespread destruction and hardships for individuals, communities, and businesses. It was estimated that 90 percent of buildings were damaged or destroyed.

Between 2007 and 2019, the U.S. Virgin Islands lost 8,700 jobs, a net job loss of 19%.

VIRGIN ISLANDS TOTAL EMPLOYMENT



VIRGIN ISLANDS PERCENTAGE JOB CHANGE SINCE 2007



The graph to the right, which was included in a report prepared for the UVI Hazard and Resilience Mitigation Team by ESI (Econsult Solutions), shows the dramatic impact of past events.

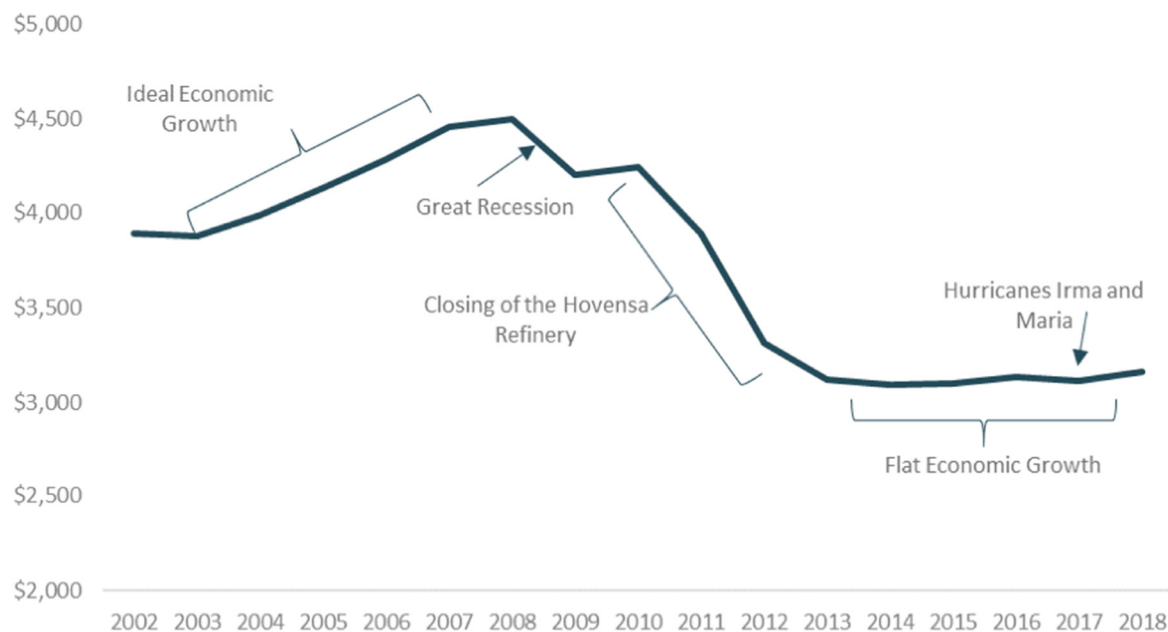
After the natural disasters, government, businesses, social service agencies, and residents came together to rebuild and disaster recovery support from the United States government slowly arrived. Plans for reopening parts of the refinery site kindled hope for many. Then the global Covid-19 pandemic took hold, stifling tourism—the leading industry for the U.S. Virgin Islands—and exacerbating high levels of unemployment.

The scope of Vision 2040 did not include evaluating the impact of these events nor did it provide for recommendations on how to manage recovery activities. Rather, the purpose of Vision 2040 was to provide the long-term vision for a more resilient economy, centered on diversifying the economic base and addressing some of the Territory’s systemic weaknesses.

And yet, gaining a foothold and reversing a decade of economic decline is imperative to the success of Vision 2040. This began well before Vision 2040 with honest assessments of the challenges facing the Territory. With the findings of credible reports in hand, the focus must now be on efficiently and

With the findings of credible reports in hand, the focus must now be on efficiently and successfully implementing the recommendations proposed in those reports.

REAL GROSS TERRITORIAL PRODUCT, IN MILLIONS



Source: Bureau of Economic Analysis (2019)

successfully implementing the recommendations proposed in those reports.

Fortunately, multiple public and private sector efforts are underway that have the potential to better prepare the U.S. Virgin Islands for a more resilient and sustainable future.

Some of the more visible efforts include:

- Rebuilding infrastructure and providing needed support following Hurricanes Irma and Maria;

- Responding to immediate health, safety, and financial impacts of the ongoing worldwide pandemic through collaborative initiatives and global engagement; and
- Beginning to address immediate and dire fiscal conditions exacerbated by these disasters and economic troubles, such as unstable tax revenue and crushing obligations of the Government Employment Retirement System.

HURRICANE RECOVERY

Assessments of the impact and related recovery needs, as well as the progress repairing damages caused by the hurricanes, have been well documented. The long-term impacts of recovery activities on the economy and quality of place remain to be seen.

A report issued by the Homeland Security Operational Analysis Center (“HSOAC”) in 2020 states that estimates to fully recover from the damage caused by hurricanes Irma and Maria exceed \$11 billion: a figure that presents an enormous challenge to a Territory with a roughly \$4 billion annual economy. Fortunately, federal government intervention and support over the past five years and for the immediate future will lessen financial burdens that would otherwise fall entirely on local government, residents, institutions, and businesses.

The HSOAC report, along with reports produced for the USVI Hurricane Recovery and Resilience Task Force, provides comprehensive overviews of these damages and pragmatic ways to approach physical, social, environmental, and health-related challenges facing the Territory today.

The recommendations and proposed initiatives detailed in these reports lay out the best approach for moving forward: they must be wholeheartedly embraced and remain front and center in policy formulation and program development.

COVID-19 PANDEMIC

The global community has yet to effectively manage the Covid-19 pandemic and deal with its ramifications.

In a 2020 report released by the United Nations Economic Commission for Latin America and the Caribbean (“ECLAC”), *Assessing the Effects of COVID-19 to Plan the Recovery*, the authors write, “Prior to the pandemic, the [Caribbean/Latin America] region had reported nearly seven years of low growth, averaging less than 0.5 percent. The impacts of Covid-19 include a reduction in international trade, falling commodity prices, lower demand for tourism services and a drop in remittances, sent home from workers abroad.” It concludes: “The Covid-19 pandemic will herald the worst economic contraction in the history of Latin America and the Caribbean.”

The United Nations Economic Commission for Latin America and the Caribbean (“ECLAC”) chief Alicia Bárcena said, “The effects of Covid-19 will cause the biggest recession that the region has suffered since 1914 and 1930. A sharp increase in unemployment is forecast, with negative effects on poverty and inequality.”

As of this writing, it is unclear when the cruise ship industry will be able to return to the Territory, with some reports indicating that it might not happen until 2022.

During the summer of 2020, a St. Croix-based firm, Island Analytics and Marketing LLC, conducted a survey of the impact of Covid-19 on businesses. It found that 33% of St. Croix businesses expected gross revenue losses between 50-100%. This number was 45% for St. Thomas businesses and 52% for St. John businesses.

Whatever the real numbers turned out to be, 2020 was the greatest disaster most businesses have ever experienced.

FISCAL TAILSPIN

The economy of the U.S. Virgin Islands took a severe hit following the closure of the Hovensa Refinery in 2012. Damage caused by two powerful hurricanes—Irma and Maria—that hit the U.S. Virgin Islands in September 2017 created additional economic and social challenges. Public revenues, according to estimates based on fiscal data from the U.S. Virgin Islands, were halved after the two hurricanes.

The U.S. Virgin Islands economy has relied heavily on tourism and related business activity, which made it more vulnerable to the effects of hurricanes than jurisdictions with more diverse economies. The severity of damage from Irma and Maria and the subsequent disruption of the tourism industry suggest that a full economic recovery could take years.

SEEING OPPORTUNITY

Severe economic contraction has a way of exposing system weaknesses, but it also focuses energies on expansion opportunities.

The USVI Hurricane Recovery and Resilience Task Force noted that the recovery process “provides an opportunity for the USVI to re-envision the territory’s future. Once the immediate response is over, disasters can open up space for investment, deliberation, and debate, allowing for alternative visions and change. The USVI similarly has an opportunity to leverage recovery funding to create a more modern, resilient, and equitable territory for its residents.”

There is widespread recognition that in addition to ongoing recovery efforts, the U.S. Virgin Islands must deal with underlying systemic weaknesses to reduce its exposure to future risks.

Some of the best talent from around the globe has been mobilized and there is now a deeper understanding of the need to strengthen capacity at all levels. The hurricanes and global pandemic are beginning to reveal real opportunities for the U.S. Virgin Islands to move beyond crisis mode actions and to substantively deal with its underfunded assets and long-standing institutional, economic, and societal problems. In short, to do things in different ways.

Invariably, studies on each of these disasters to date come to the same conclusion: the best safeguard against economic catastrophe is to fundamentally restructure and diversify the U.S. Virgin Islands

economy so that it is less dependent on any economic sector and produces good paying jobs that lift residents out of poverty and provide new sources of revenue so that the Territory can better manage future challenges.



Comments regarding the Government Employees Retirement System (GERS): “The system is in an accelerating death spiral. And for every day that goes by without taking definitive action to reverse the failing of the Government Retirement System, the decisions that ultimately need to be made become more painful and more costly. We all know this. We should also know that if the pension system fails it will affect far more than just the annuities of the retirees, the entire Virgin Islands economy will suffer the loss of over \$200 million annually.”

*Governor Albert Bryan
State of the Territory Address, January 25, 2021*

DRIVING FORWARD

Diversifying the Economic Base

Just as a business can be disrupted by a more agile competitor with a better product, so too can a place fail to anticipate and adapt to the changes the future brings, both of natural and human making. In such situations a place may find itself unwisely investing in programs and services unlikely to produce desirable, impactful outcomes.

Additionally, individual entities, programs, and services within a system can perform efficiently and effectively, while the overall system is falling short of addressing tough ongoing or emerging issues, or failing to meet the big picture impact desired by leaders and the public.

That is the position that the U.S. Virgin Islands unfortunately finds itself in. A key objective of Vision 2040 is to change that dynamic by diversifying the economic base, producing more job opportunities for residents and yielding investments that support greater prosperity for all. This is efficient stewardship of public resources.

Reconfiguring the economic base involves providing a supportive environment for business start-ups and ideal conditions for high growth businesses. The Territory must become more competitive by making it easier to start a business, reducing costs of doing business and increasing trade and direct foreign and domestic investment. It must develop and leverage its educational resources and separate from its



Cruise Ship leaving St. Thomas. *Photo Credit: Peter Hansen*

Caribbean neighbors by providing livable wages that will attract and retain talent.

The unique value proposition for the U.S. Virgin Islands can be for it to become a dynamic, innovative location. For this to happen it must better leverage its vast known and hidden resources to ensure that more of its residents become employed and contribute to the well-being of the larger community.

The Territory's economic development professionals and public and private sector leaders must be viewed as trusted catalysts for change and honest brokers for private investment. A unified coalition must be forged from and embraced by multiple public and private stakeholders all of whom are doing their parts to nurture economic growth.

Vision 2040 was initiated to move beyond traditional modes of thinking and operating that tended to protect turf and erect barriers—real and imagined—so that new voices could be heard, transparency assured, and bold and creative ways of thinking introduced into the future planning process.

Vision 2040 marks the Territory as a vibrant business location, one that exudes enthusiasm, develops, retains, and attracts people with creativity and imagination.

Beyond the Inflection Point

Between 2007 and 2019, the U.S. Virgin Islands lost 8,700 jobs: a loss of 19%.

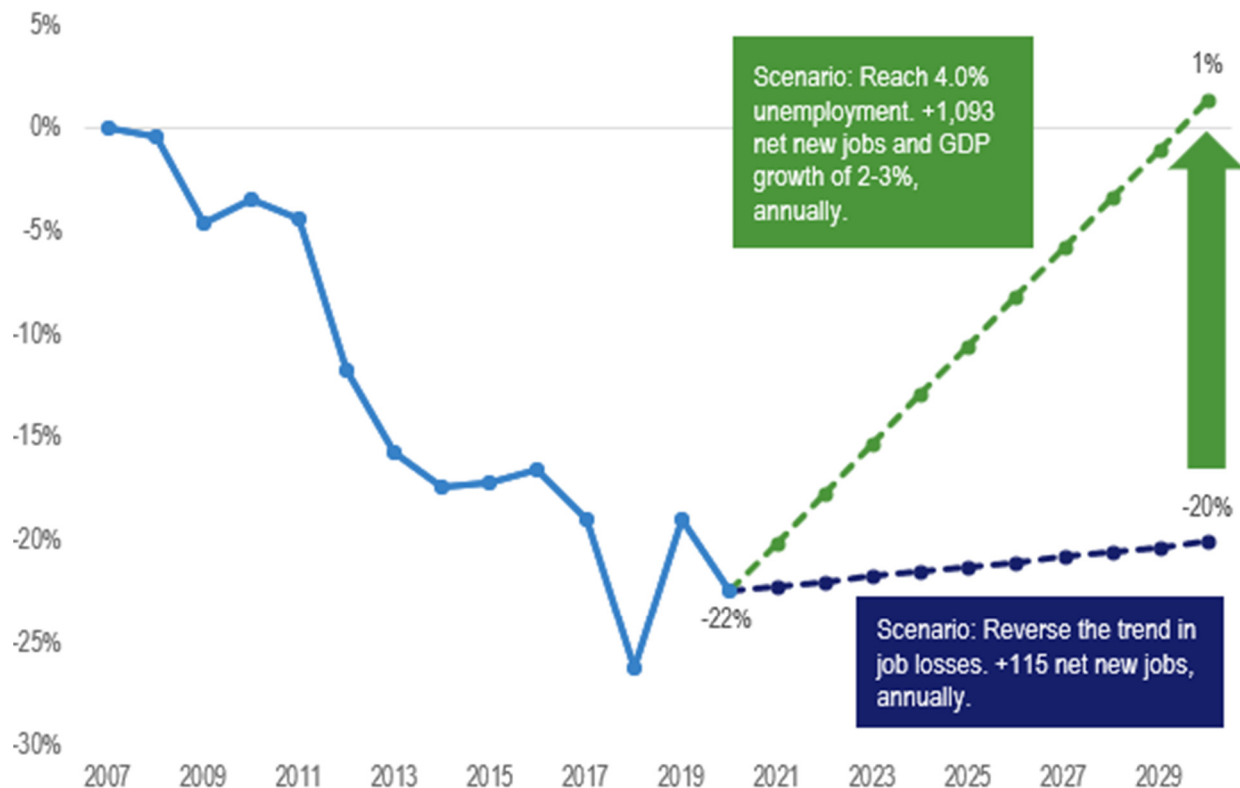
To begin to reverse this trend and change the trajectory, the USVI needs to add 1,100 jobs over the next decade. In other words, the USVI would need to add 110 net new jobs annually over the next ten years. This translates to an investment (measured by Gross Domestic Product) of \$11.4 million per year for the next ten years (\$114.4 million in total).

That is a conservative scenario that will only marginally improve unemployment rates and is unlikely to have dramatic impact on poverty rates.

Vision 2040 seeks a transformative scenario whereby the Territory reaches rates of full employment and positive job growth. To reach 4.0% unemployment, which is in a range at which the territory could achieve full employment, the USVI needs to add 1,093 net new jobs annually over the next ten years. This translates to an investment (measured by Gross Domestic Product) of \$113.8 million per year for the next ten years (\$1.1 billion in total) and annual economic growth of between 2-3%.

This is illustrated in the adjacent graph. With the transformative scenario (green line), unemployment levels (currently at least 10%) and the level of residents living below the poverty line (approximately 22%) can theoretically be expected to drop considerably, assuming there are proper educational and social supports provided.

Virgin Islands Percentage Job Change, 2007-2030



Note that this analysis assumes 4.0% unemployment, which is below the territory's unemployment rate of 5.9% in 2007, prior to the Great Recession. This is in a range at which the territory could achieve full employment. This analysis also assumes that population will increase by 5% by 2030 (from 2019 data, the most recently available population data at the time of publication).

Unfortunately, the Caribbean has few recent examples where dramatic economic growth occurred. An exception, Turks and Caicos Islands managed to achieve 4.4% average GDP growth over five years prior to the pandemic largely due to construction and related investments in the travel and leisure sectors.

The pre-Covid economy is history, and the challenge is not to return to a former economic state but build a more dynamic, diverse, and sustainable economy that is both fluid and resilient.

The new goal must be for the U.S. Virgin Islands to put in place an aggressive 20-year economic

strategy to not only quickly reverse direction, but to dramatically accelerate job growth and increase gross domestic product in the early years following adoption of a new strategy. The inflection point is still likely years out, and it will not occur with the industries and jobs of the past, but will be built on industries of the future. These job gains are unlikely to be won by “home runs” (large companies employing hundreds like Hovensa did), but rather by many “singles” and “doubles” (innovative small businesses and fast-growing, technology-based firms).

The Vision 2040 process confirmed that reaching the inflection point and sustaining growth for the U.S. Virgin Islands will occur with smart, measured, and steady investments in a new set of targeted industry sectors.

Sustaining growth for the U.S. Virgin Islands will occur with smart, measured, and steady investments in a set of targeted industry sectors.

Articulating a Vision for Change

The U.S. Virgin Islands is fairly positioned to compete with its neighboring Caribbean locations and throughout the Americas for business and investment growth opportunities.

It operates under the laws of the United States and, as a Territory of the wealthiest nation on the planet, it has benefited greatly. The Territory has very



Photo Source: U.S. Virgin Islands Department of Tourism

competitive tax benefits sanctioned by the U.S. government, including incentives which include 90% exemption on corporate income tax, 90% reduction of personal income tax, 100% exemption on gross receipt taxes, property, and excise taxes.

Compared to other locations in the Caribbean, the USVI provides a solid education for its residents, good infrastructure, easy access to the Americas, and potential for exceptional communications and broadband.

Its residents enjoy a lifestyle that can serve to attract talent from around the globe, but only if the cost of living is reduced and improvements are made to increase certain amenities and overall public safety.

These are just some reasons why the U.S. Virgin Islands has many of the fundamentals necessary for achieving economic prosperity in the future.

The path to reaching the 2040 destination will not be a straight line. Short-term plans and administrations will come and go—as they should to adjust to new realities. If along the way, everyone is committed to moving toward the same positive outcomes of Vision 2040, then a whole new generation will experience economic prosperity and enjoy a better quality of life.

Aspirational and Macroeconomic Goals

We cannot predict what the world will look like in 2040. Human and technological advancements, global changes from natural and societal influences, and economic disruptions will continue to occur at an ever-faster pace.

What will not change are the basic tenets of macroeconomics. Any increases in the production of goods and services will only be possible when existing resources are allocated efficiently.

For the U.S. Virgin Islands, achieving efficiencies will require fundamental changes in how residents are educated, rethinking how and why public services are delivered, and reprioritizing economic goals. That is what Vision 2040 set about to accomplish: engaging the residents of the U.S. Virgin Islands to commit to a better future by making it happen.

Based on the research conducted and strong engagement and outreach, the Vision 2040 Task Force agreed on two overarching goals and eight aspirational goals for the U.S. Virgin Islands. The recommendations and initiatives included in the strategic plan relate to achieving these goals.



MACROECONOMIC GOALS

Vision 2040 set two macroeconomic goals for the U.S. Virgin Islands.

The first is to reach full employment by 2030. Full employment exists when jobs are plentiful. It does not mean that everyone has a job; rather, no one is jobless unless they do not want to be employed.

The second macroeconomic goal is to achieve economic stability by 2040. This means that growth and prosperity have taken root, there are no excessive fluctuations in GDP, and prices for goods and services are reasonable, manageable, and stable.

ASPIRATIONAL GOALS

Vision 2040 also establishes eight aspirational goals to help the U.S. Virgin Islands achieve these macroeconomic goals. They relate to the targeted industries detailed in Volume 5 of this report. These goals are presented on the following pages.

Economic prosperity requires that all systems work harmoniously to realize mutual goals.

ASPIRATIONAL GOAL 1

Increase locally sourced food from 3% to **35%** of local food demand. Agriculture-related industrial production will increase from 2% of GDP to represent **5%** of GDP.



ASPIRATIONAL GOAL 2

The U.S. Virgin Islands will become a Blue Economy **research center of excellence** in the world for ocean-based tropical environments.

ASPIRATIONAL

GOAL 3

Healthcare and health sciences will increase from 7% of GDP to **15%** of the U.S. Virgin Island's overall GDP.



ASPIRATIONAL

GOAL 4

Entrepreneurs will have access to support and capital to scale their businesses and the **annual net change** in establishments will increase from 14 (2019) to **50 establishments**.

ASPIRATIONAL GOAL 5

Population in the U.S. Virgin Islands will increase **10%** from the official 2020 U.S. Census.



ASPIRATIONAL GOAL 6

Renewable sources of energy will represent **75%** of total energy consumption, up from the 1% that they represent currently.

ASPIRATIONAL

GOAL 7

The U.S. Virgin Islands will have the **highest quality education system** in the Caribbean and the University of the Virgin Islands will attract and retain the highest caliber science and technology talent.



ASPIRATIONAL

GOAL 8

Extended stay visits, authentic experiences, and cultural offerings will increase from 63% of tourism-related revenue to **75%**.

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3

NATURE OF THE CHALLENGE





VOLUME 3

NATURE OF THE CHALLENGE

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UNDERSTANDING ISLAND ECONOMIES

Market Dynamics

The Caribbean is a diverse set of countries and territories with economies based in service, tourism, finance, and commodity exports. Each island in the region has a distinct market and consequent approach to business, but what connects the islands are their small economies, openness to international trade, and vulnerability to natural disasters and economic shocks.¹

Caribbean island economies face a unique risk of marginalization from the global economy as a result of their small size, distance from large markets, and vulnerability to economic and natural shocks. Additionally, these islands are highly susceptible to global-induced phenomena, such as sea level rise. Several common challenges that highlight the vulnerabilities of island economies include:²

1. **A narrow range of resources, which forces specialization;**
2. **Dependence on international trade;**

3. **High population density and overuse of resources;**
4. **Small watersheds and fresh water supplies;**
5. **Costly public administration and infrastructure, including transportation and communication;**
6. **Limited domestic markets and high export freight costs;**
7. **Heavy dependence on coastal and marine resources for livelihood and food security;**
8. **Heavy dependence on tourism which can be impacted by climate change and natural disasters;**
9. **Limited land; and**
10. **Poorly developed infrastructure.**

THE U.S. VIRGIN ISLANDS

Territorial Status

The U.S. Virgin Islands, formerly the Danish West Indies, were sold to the United States by Denmark in 1917. Today, the islands are considered an insular area and an organized, unincorporated United States Territory.

Citizens are able to vote in local elections for local senators, governor, and delegate to Congress, but do not vote in presidential elections. The U.S. president is the chief of state of the USVI, and the head of government is the governor. The USVI delegate to Congress has the ability to vote in committee but not in floor votes.

The Territory has a mirror-tax system. As a result, federal income taxes paid by residents of the Territory remain in the Territory. There are no county, city, or state taxes.

As a territory, the USVI is eligible for federal assistance from the U.S. government, such as disaster relief efforts through the Federal Emergency Management Agency (FEMA) in the case of natural disasters.

¹ *Caribbean Small States: Challenges of High Debt and Low Growth*. International Monetary Fund, 20 Feb. 2013. <https://www.imf.org/external/np/pp/eng/2013/022013b.pdf>

² Boto, Isolina and Biasca, Ronalee. *Small Island Economies: From Vulnerabilities to Opportunities*. Brussels Rural Development Briefings.

Caribbean islands are more vulnerable to economic shocks and natural hazards than most other countries and regions. This results in volatility in GDP growth rates. Islands also rely heavily on trade to drive growth. Island concentration in a few export commodities creates economic vulnerability to changes in demand and commodity prices. Additionally, the cost of importing and exporting goods is further increased because of time required for storing goods due to infrequency of shipping and air transport.

A lack of economic diversity has proven to be a challenge across the Caribbean island economies. As illustrated by the Covid-19 pandemic, the interruption of tourism and related global economic downturn has put pressure on the island economies. According to the International Monetary Fund, tourism accounts for 50 to 90 percent of GDP and employment for most Caribbean countries and territories. The IMF is forecasted a 10.3% contraction for tourism-dependent economies in 2020.³

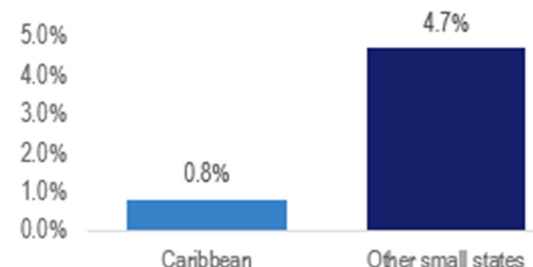
Outside of periodic economic disruptions and natural disasters, the small size of the Caribbean island countries and territories is a challenge in achieving strong growth. Diseconomies of scale in the provision of public goods and services leads to higher average costs for the public sector. Government officials are often responsible for a

wider set of tasks and have lower support services than those in larger economies. Additionally, high fixed costs create a disadvantage for the private sector, where higher trade costs are accentuated by weak infrastructure and market connectivity related to shipping and air.⁴

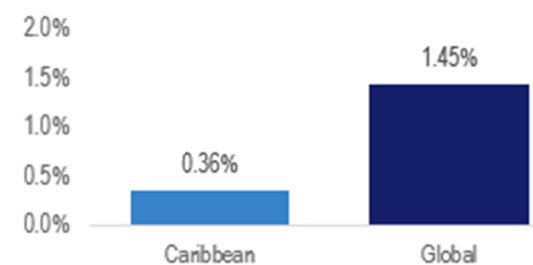
As a result of these challenges, the Caribbean island economies lag the rest of the world in terms of growth, trade, and debt. Average annual GDP growth of Caribbean islands is 0.8%, compared to 4.7% of other non-Caribbean small states. Global export growth has outpaced export growth in the Caribbean, 1.45% to 0.36% from 2011 to 2015. Slow GDP growth and minimal export growth are further exacerbated by a debt-to-GDP ratio that is above 60% in two-thirds of Caribbean Islands.⁵

Low levels of growth have a direct impact on residents of the Caribbean islands, as GDP is directly correlated with poverty levels. As GDP per capita decreases, the population below the poverty line tends to increase. The low-growth, high-poverty cycle, coupled with the additional challenges that Caribbean islands face, creates a market dynamic that is unique to these nations and territories.

Annual GDP Growth Average, 2010-2017



Merchandise Exports Growth, 2011-2015



Debt-to-GDP Ratio is above 60%



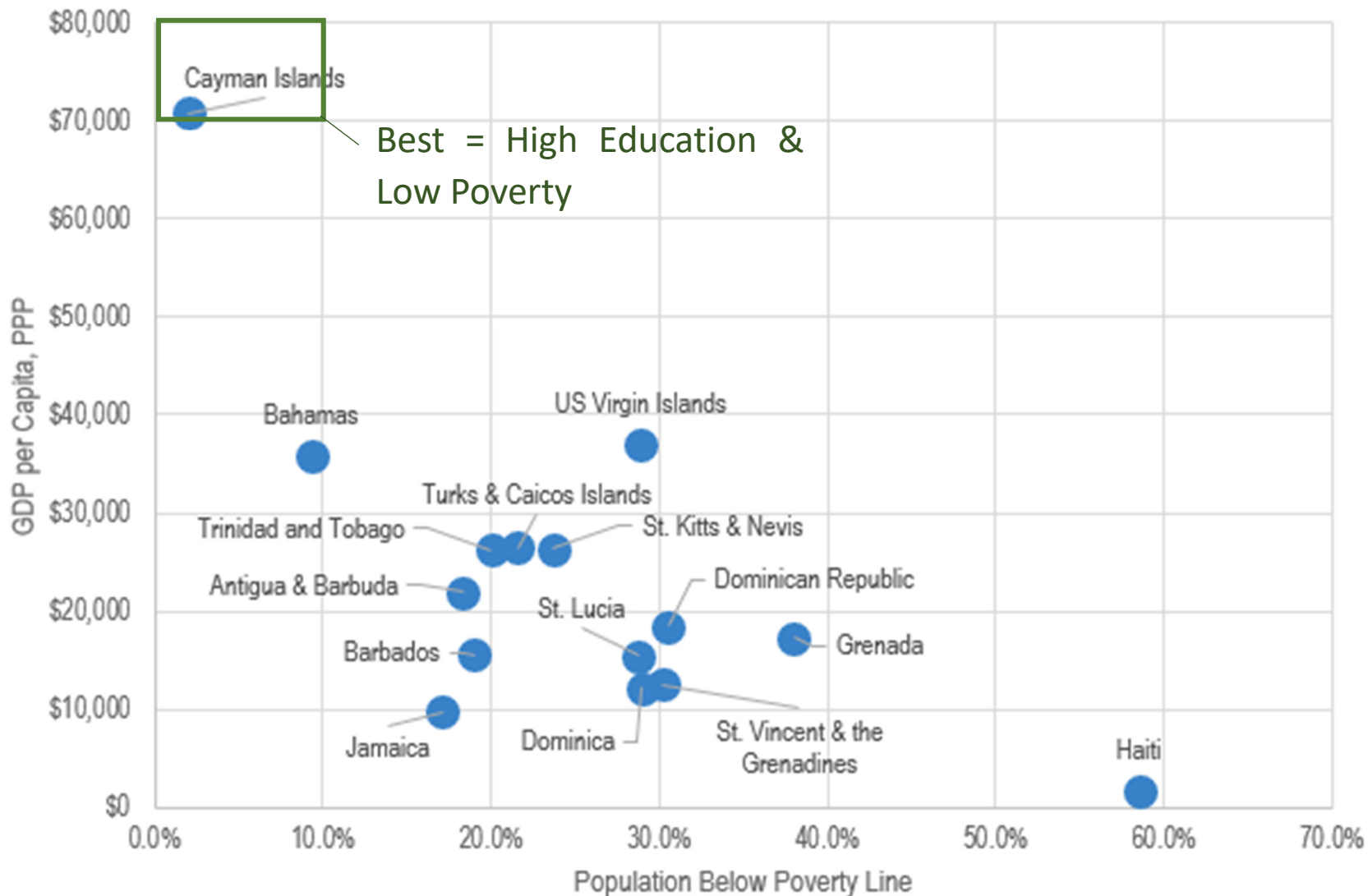
Source: OECD

³ MacDonald, Scorr. *COVID-19, The Caribbean and What Comes Next*. Global Americans, 2 July 2020. <https://theglobalamericans.org/2020/07/Covid-19-the-caribbean-and-what-comes-next/>

⁴ Ruprah, Inderjit. *Does Size Matter? Yes, If You Are Caribbean!* Inter-American Development Bank, Sept. 2013. <https://publications.iadb.org/publications/english/document/Does-Size-Matter-Yes-If-You-are-Caribbean!.pdf>

⁵ *Latin American Economic Outlook 2019: Special Feature: The Caribbean Small States*. OECD. <http://www.oecd.org/dev/americas/LEO-2019-Chapter-6.pdf>

Poverty and GDP, Caribbean Nations



Source: CIA World Factbook and The World Bank

Caribbean Ecosystem

Within the Caribbean, the U.S. Virgin Islands are unique in that they are a territory of the United States but face the same development challenges of other Caribbean nations. Formal relationships exist between the U.S. Virgin Islands and neighboring Caribbean islands, and are critical links that should be leveraged in advancing territorial development and overcoming regional challenges.

As of April 6, 1984, the U.S. Virgin Islands is an Associate Member of the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), which enables its participation in other regional and subregional intergovernmental organizations. In June 1984, the U.S. Virgin Islands was admitted as an Associate Member to ECLAC's Caribbean Development and Cooperation Committee and later became a member of the Caribbean Council for Science and Technology (1991). Though still a member of these organizations, the U.S. Virgin Islands' participation has been less active in recent years.⁶

Links between the U.S. Virgin Islands, the United States, and other Caribbean nations have facilitated collaboration on some of the unique challenges facing island economies. Some of these areas of focus have included:⁷

- 1. Education:** Membership in the Association of Universities and Research Institutions of

the Caribbean has allowed the University of the Virgin Islands (UVI) to collaborate in the development of course materials with the Organization of the Eastern Caribbean States. UVI has also facilitated training for university faculty in the Caribbean and has agreements with several two-year colleges in the Caribbean. The U.S. Virgin Islands also maintains ties with Denmark and has cooperation agreements with universities in Copenhagen and Ghana.

- 2. Environment:** U.S. efforts in intergovernmental arrangements have benefitted the U.S. Virgin Islands. For example, the UN Environment-Caribbean Environment Programme that emerged out of the Cartagena Convention was established to support protection of the coastal and marine environment of the Caribbean.
- 3. Energy:** Facilitated by the relationship with the U.S. government, the U.S. Virgin Islands was selected as a site for an Energy Development in Island Nations project. This was based on the need to reduce the territory's dependence on fossil fuels and reduce its high electricity rate.
- 4. Climate Change:** Climate change adaptation efforts have been supported both through linkages with the United

States and with other Caribbean nations. The U.S. government included a focus on the U.S. Virgin Islands in its national climate assessment and the U.S. Environmental Protection Agency recognized the need to collaborate on climate change programming in the territory. Similarly, the U.S. Department of the Interior provided funding for community outreach and adaptation planning. Regional organizations, such as the Caribbean Community Climate Change Center, have also supported climate change activities in the U.S. Virgin Islands.

Given the unique position of the U.S. Virgin Islands as both a territory of the United States and a member of the Caribbean Community, there are a number of resources and organizations available to facilitate collaboration on challenges faced by the territory. When leveraged fully, this interconnected ecosystem of geopolitical organizations has the potential to benefit the economy of the U.S. Virgin Islands by helping to address some of the constraints to economic growth.

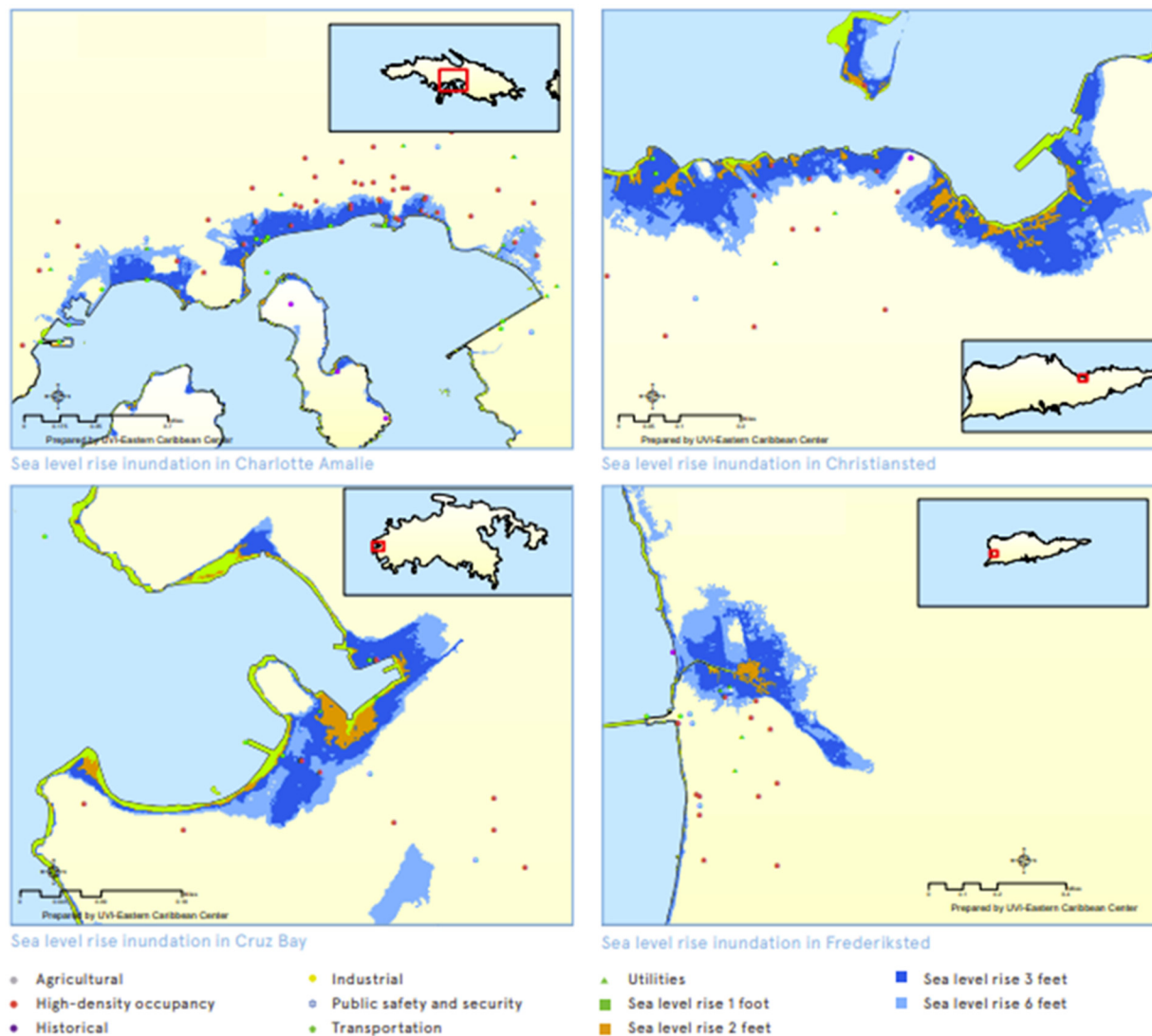
⁶ Gardner, Lloyd. *How Physical Space, Historical Ties, and Geopolitics Influence Development in the USVI*. The St. Thomas Source. 8 Jan. 2021.

⁷ (Gardner, 2021).

Climate Change

Climate change is a concern for the Caribbean islands, and U.S. Virgin Islands is not an exception. Given the unique dynamics of island economies, climate change has the potential to significantly impact the territory's economic wellbeing and quality of life. The waters around the U.S. Virgin Islands have warmed by nearly two degrees since 1901, and sea level has been rising about an inch every 10 years. Most of the territory is well above sea level, but the waterfront blocks of Charlotte Amalie, Christiansted, Frederiksted, and Cruz Bay are within three or four feet of sea level. Sea level rise:

1. **Submerges marshes, mangroves, dry land.**
2. **Erodes beaches.**
3. **Exacerbates coastal flooding.**
4. **Causes coral reef loss due to warming and increased acidity of coastal waters.**
5. **Creates water shortages due to longer dry seasons and shorter, but wetter, wet seasons.**
6. **Increases public health problems, including more mosquito-borne diseases like malaria, yellow fever, and dengue fever as well as increased growth of bacteria that can contaminate water and shellfish.**
7. **Has a negative impact on commerce and tourism and adversely impacts commercial fishing, sport fishing, scuba diving, snorkeling, and beaches.**



Sea level rise scenarios. Source: USVI Hurricane Recovery and Resiliency Task Force.

Over the last decade the U.S. Virgin Islands has undertaken efforts to combat the risks related to climate change that the territory faces. In June 2013 for example, The Nature Conservancy convened a USVI Climate Change Ecosystem-based Adaptation (EBA) workshop for community leaders, researchers, resources managers, and climate change adaptation practitioners. As a result of this workshop, the ten coastal areas in the territory most vulnerable to climate change were identified, so that solutions could begin to be explored.⁸ In 2015, the territory's climate change adaptation program was launched via executive order. This resulted in the establishment of the U.S. Virgin Islands Climate

Change Council and several local initiatives including vulnerability and risk assessments and workshops pertaining to sea level rise and adaptation strategies.

Climate change is a challenge that is not of the U.S. Virgin Islands' making, but it is one that is not going away. Moving forward, climate change adaptation strategies will be critical for the U.S. Virgin Islands' economic security. Such techniques may include, but are not limited to:

1. The application of new technologies to preserve freshwater supplies.

- 2. Building resilience of marine organisms, such as corals, through efforts including coral farming.**
- 3. Implementing and supporting adaptive planning, nature-based development and stabilization, and green and blue infrastructure.**
- 4. Collaborative partnerships, data collection, and decision-making connected to climate-related events and natural disasters.**



Photo Source: U.S. Virgin Islands Department of Tourism

⁸ The Nature Conservancy's Coastal Resilience Program.

REVIEW OF THE USVI ECONOMY

Economic History and Current Condition

Historically a strategic location for the production of sugar and other tropical agricultural products, the U.S. Virgin Islands were well positioned to further European economic and defense interests, such as shipping and the extension of naval forces. Once the United States acquired the U.S. Virgin Islands shortly before World War I, they effectively ceased to have major strategic importance. Moreover, at that time the U.S. Virgin Islands' sugar-based economy had been in decline for decades.⁹

While efforts of mainland and local policymakers eventually created a robust manufacturing sector after World War II, manufacturing in the U.S. Virgin Islands has struggled in the 21st century. In particular, the 2012 closing of the Hovensa refinery operated by Hess Oil resulted in the loss of some 2,000 jobs and left the local economy highly dependent on tourism and related services.¹⁰

The territorial government, facing persistent economic challenges, covered some budget deficits with borrowed funds, which has raised concerns over levels of public debt and unfunded pension

liabilities. Local policymakers have proposed tax increases and austerity measures to bolster public finances, which currently operate with restricted liquidity. The Government Accountability Office (GAO) expressed doubts that those fiscal measures would restore access to capital markets or address shortfalls in the funding of public pensions.

Damage caused by two powerful Category 5 hurricanes—Irma and Maria—that hit the USVI in September 2017 created additional economic and social challenges. Public revenues, according to estimates based on USVI fiscal data, were halved after the two hurricanes. The USVI economy has relied heavily on tourism and related business activity, which made it more vulnerable to the effects of hurricanes than jurisdictions with more diverse economies.¹¹

Construction activity in the USVI has accelerated since 2017 as the islands work to rebuild their infrastructure, and in turn their economies, from the hurricanes. 2020 dealt another blow, however, to the territory's economy in the form of Covid-19. With the associated shutdown of the tourism and local economy due to stay-at-home orders, the USVI experienced severe economic impacts. As of May 2020, the USVI Office of Management and Budget estimated a budget decline of \$150 million for fiscal year 2020. Further projections for fiscal year 2021 estimated a decline in local revenue sources such as Personal Income Tax (-16.2%), Corporate Income

Tax (-18.7%), Real Property Tax (-30.3%), and Gross Receipts Tax (-28.8%).¹²

As with the 2017 hurricanes, tourism-related industries have been particularly affected by the economic shutdown. The leisure and hospitality industry experienced a reduction in labor force of 26.7% between March and April 2020 alone.¹³

Today the impacts of Covid19 continue to be felt in the USVI and worldwide. In the USVI, the recent economic disruptions caused by both the pandemic and the 2017 hurricanes have disproportionately impacted the tourism sector. Together, these disruptions have highlighted the imperative need for economic diversification within the territory. Diversification will support recovery from these recent disruptions and will make the USVI more resilient toward inevitable future disruptions.

This volume and the pages to follow describe in detail the trends that have affected the economy of the U.S. Virgin Islands.

⁹ *Economic and Fiscal Conditions in the U.S. Virgin Islands*. Congressional Research Service. 13 Feb. 2020.

¹⁰ (Congressional Research Service, 2020)

¹¹ (Congressional Research Service, 2020)

¹² *USVI COVID-19 Economic Impact Report*. Island Analytics and Marketing, LLC. 2020.

¹³ (Island Analytics and marketing, LLC., 2020).

Demographic and Socioeconomic Profile

POPULATION AND HOUSEHOLDS

The population of the US Virgin Islands is shrinking. According to the US Virgin Islands Bureau of Economic Research, as of 2019 the population is estimated to be 95,668, 10.1% lower than it was in 2010. This is compared to population growth of 6.1% in the United States over the same time period. Recent declines in school enrollment and local observation suggest actual population may be considerably less than this estimate. While current population estimates vary, the next official count will be available with the release of 2020 Census results. The available data indicates that 48% of households are on St. Thomas, 48% are on St. Croix, and 4% are on St. John.

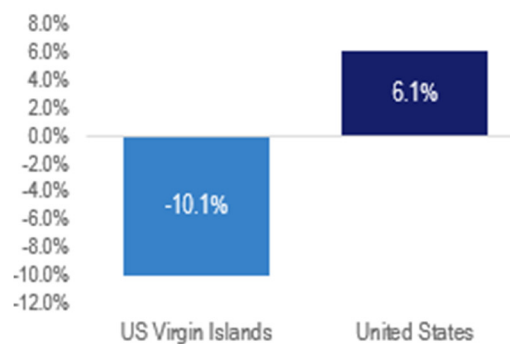
Population by Age

The average age in the U.S. Virgin Islands is 40.0. With a median age of 38.6, St. Croix is the youngest of the islands and closest in age to the United States. The Virgin Islands, however, have an overall lack of young adults age 15-24 compared to the US. This is indicative of young adults leaving the Virgin Islands for education, work, and other opportunities.

Overall, the population of the islands is similarly distributed by age. St. John, however, has a much higher proportion of its population in the age 35 to 44 cohort, and a somewhat higher percentage of its population in the age 55 to 69 age range. As a result,

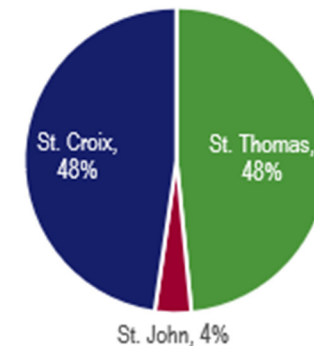
St. John has fewer young adults and children than the other islands, specifically lagging the other islands in the proportion of its population under age 30.

Population Change, 2010-2019



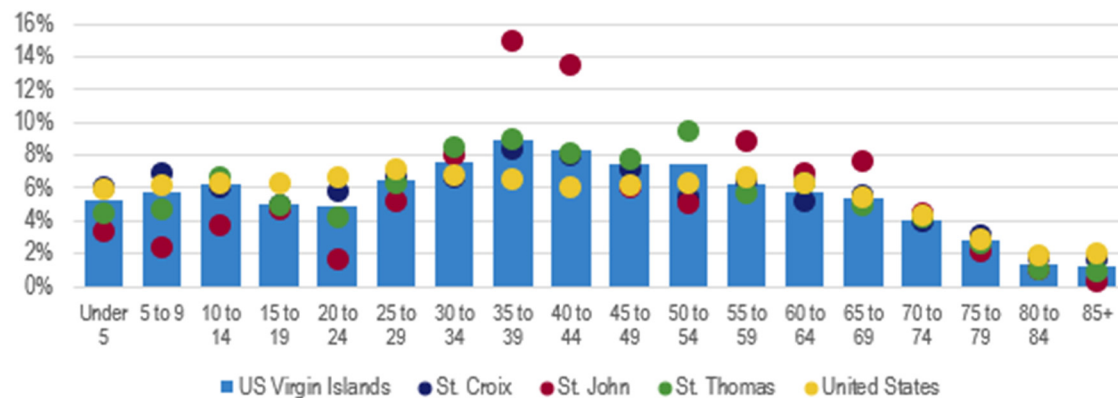
Source: US Virgin Islands Division of Economic Research, US Census Bureau American Community Survey.

Population Distribution by Island



Source: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands.

Population Distribution by Age, 2013



Source: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands.

LANGUAGE AND RACE

Language

Across the U.S. Virgin Islands, 72% of residents speak only English. Spanish is the next most common primary language (spoken by 17% of the population), followed by French, Patois, and Creole (collectively 9%), with other languages making up the remaining 2%. Of the 28% who speak a different primary language, the majority also speak English to a level categorized as very well or well. Therefore, 97% of U.S. Virgin Island residents are considered to be fluent in English. This is consistent across the islands, with St. John being slightly less, at 93%. This level of English fluency is slightly higher than in the United States, where 96% of residents either speak only English or speak English very well/well.

Race

In terms of race, most of the U.S. Virgin Islands population is Black (78%). 10% of the population is White, and the remaining 12% is comprised of other races. Other races include Asian, Pacific Islander, American Indian or Alaska Native, and any other race category not previously described. Among the islands, St. Croix and St. Thomas have a similar racial makeup, with St. John having a higher proportion of White residents (30%) and a smaller proportion of Black residents (63%) than the others.

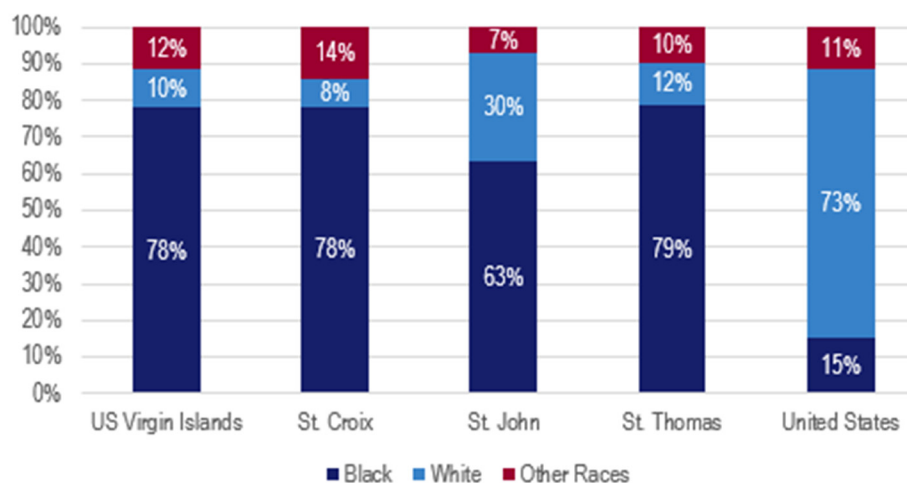
This breakdown is contrasted with the larger United States, where only 15% of the population is Black, 73% is White, and 11% is comprised of other races.

English Fluency, 2013

	US Virgin Islands	St. Croix	St. John	St. Thomas	United States
Speaks only English	72%	69%	75%	75%	79%
Speaks English Very Well/Well	25%	29%	18%	23%	17%
ENGLISH FLUENT POPULATION	97%	97%	93%	97%	96%

Source: Virgin Islands: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands; United States: Esri

Population by Race, 2013



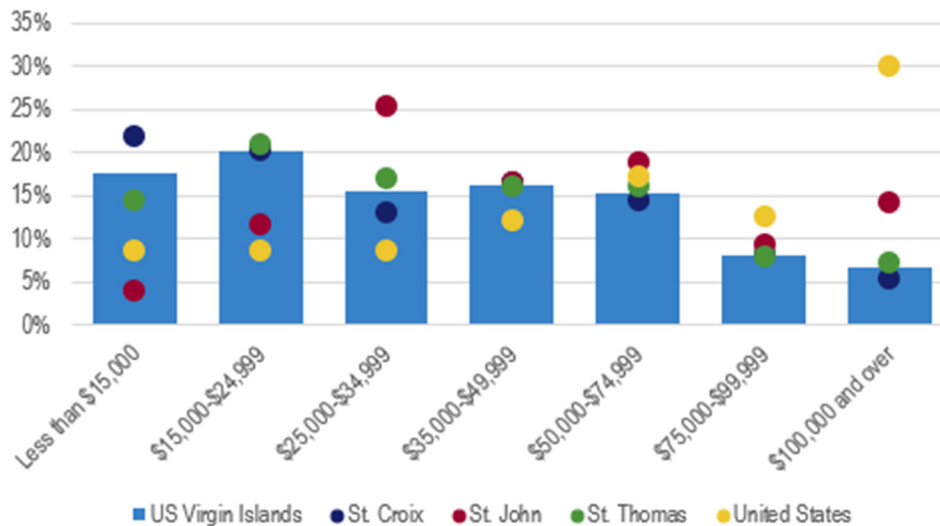
Source: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands.

INCOME

Incomes in the U.S. Virgin Islands are considerably lower than in the United States. As of 2013, median household income across the U.S. Virgin Islands was \$31,015 compared to \$62,203 in the United States. The highest median household income was \$43,000 in St. John and the lowest was \$29,024 in St. Croix.

Twenty percent (20%) of U.S. Virgin Island households fall into the \$15,000-\$24,999 income bracket. This is followed by 18% of households earning less than \$15,000, 16% of households earning between \$25,000-\$34,999, and 16% of households earning between \$35,000-\$49,999.

Household Income Distribution, 2013



*United States data is for 2020. Due to differences in data reporting, some categories are unavailable for the United States. United States data for "\$10,000-\$14,999" represents "Less than \$15,000." Source: US Virgin Islands: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands; United States: Esri

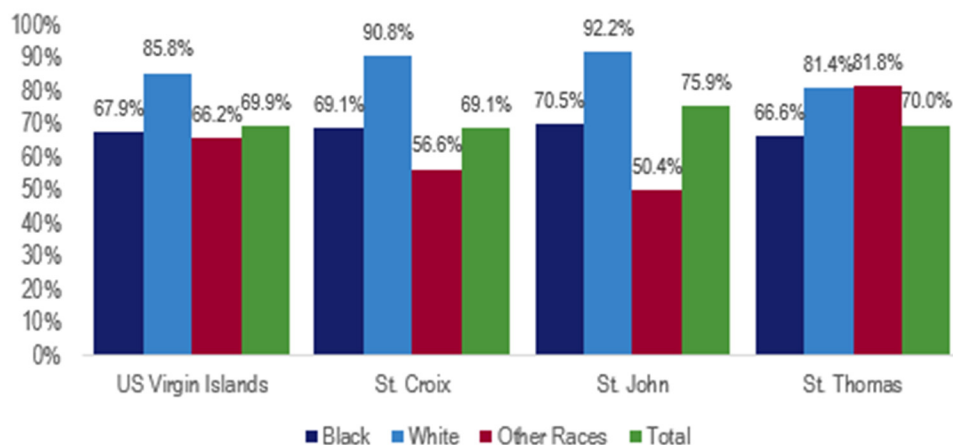
Households by Income, 2013

Income	US Virgin Islands	St. Croix	St. John	St. Thomas	United States
Less than \$15,000	8,324	4,797	70	3,457	13,017,162
\$15,000-\$24,999	9,596	4,433	205	4,958	11,075,245
\$25,000-\$34,999	7,374	2,855	448	4,071	10,966,334
\$35,000-\$49,999	7,731	3,603	294	3,834	15,355,728
\$50,000-\$74,999	7,276	3,141	333	3,803	21,754,456
\$75,000-\$99,999	3,876	1,812	164	1,900	15,916,453
\$100,000 and over	3,142	1,159	254	1,729	37,996,838
Median	\$31,015	\$29,024	\$43,000	\$31,789	\$62,203

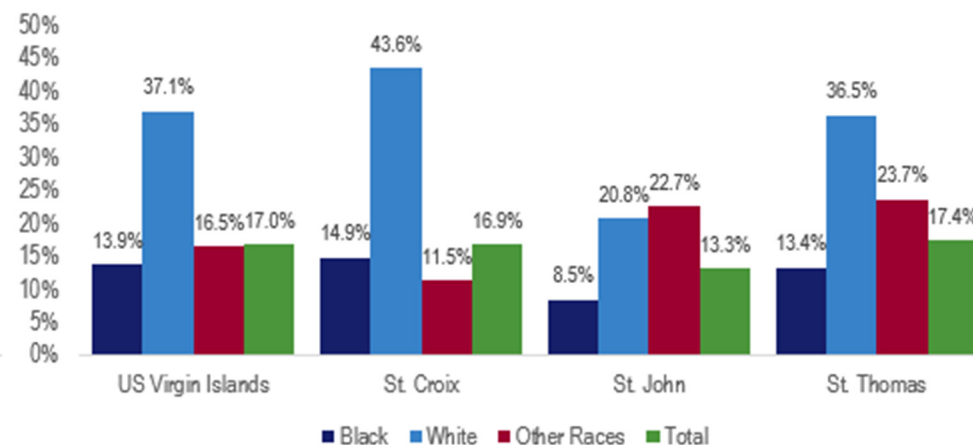
*United States data is for 2020. Due to differences in data reporting, some categories are unavailable for the United States. United States data for "\$10,000-\$14,999" represents "Less than \$15,000." "-" indicates a value of 0. "NA" indicates data is not available.

Source: US Virgin Islands: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands; United States: Esri

% of Adults With High School Diploma or Higher, 2013



% of Adults With Bachelor Degree or Higher, 2013



Source: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands.

EDUCATION

Nearly seventy percent (69.9%) of adults in the U.S. Virgin Islands hold at least a high school diploma and 17.0% of adults possess a bachelor’s degree or higher. This is compared to 88.7% of adults in the United States with at least a high school diploma and 33.1% with a bachelor’s degree or higher. Within the U.S. Virgin Islands, St. John has the highest level of high school educational attainment, with 75.9% of adults holding at least a high school diploma. St. Thomas has the highest level of post-secondary educational attainment, with 17.4% of adults holding at least a bachelor’s degree.

Across all of the islands, there is a disparity in educational attainment by race. A higher proportion of White residents have obtained a high school diploma or higher than Black residents or residents of other races. The disparity is more pronounced in the proportion of adults with a bachelor’s degree or

higher. Thirty seven percent (37.1%) of White Virgin Islands residents have obtained at least a bachelor’s degree, compared to 13.9% of Black adults.

Educational Attainment of Adult Population, 2013

Education	US Virgin Islands	St. Croix	St. John	St. Thomas	United States
Less than HS	23,021	10,810	818	11,393	25,985,262
High School graduate or GED	26,589	11,935	1,074	13,580	61,230,113
Some college, no degree	9,736	4,524	439	4,772	46,130,644
Associate degree	4,032	1,797	604	1,632	19,913,968
Bachelor degree	9,511	4,056	259	5,197	46,391,500
Advanced degree	3,487	1,871	193	1,423	29,533,959
% HIGH SCHOOL OR ABOVE	69.9%	69.1%	75.9%	70.0%	88.7%
% BACHELOR DEGREE OR ABOVE	17.0%	16.9%	13.3%	17.4%	33.1%

*United States data is for 2020. Due to differences in data reporting, some categories are unavailable for the United States. United States data for "9th or 10th grade" represents "9-12th grade/no diploma." "-" indicates a value of 0, "NA" indicates data is not available.

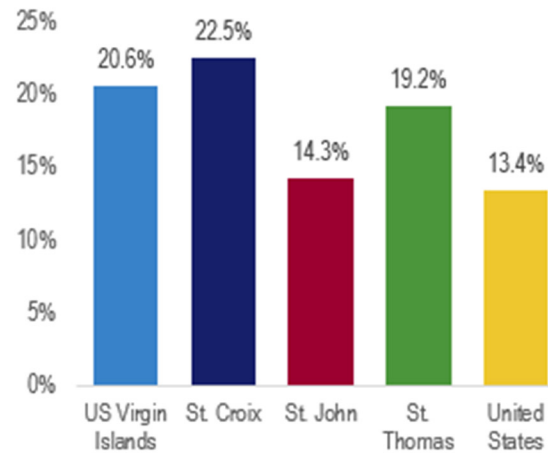
Source: US Virgin Islands: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands; United States: Esri

UNEMPLOYMENT AND POVERTY

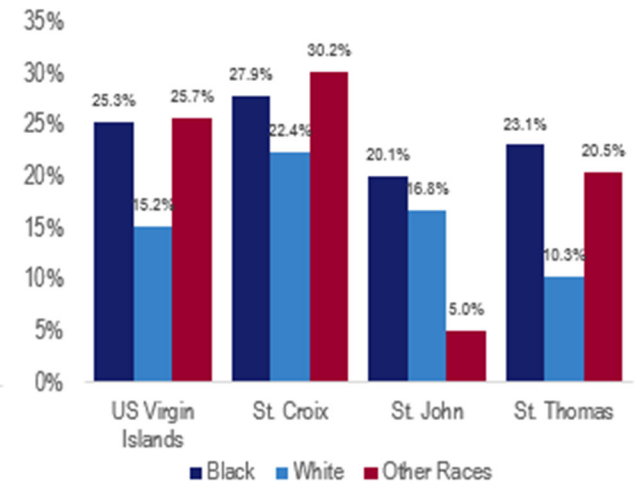
Since 2012, unemployment in the U.S. Virgin Islands has trended higher than in the United States. Unemployment rates in the U.S. Virgin Islands were at their lowest levels since 2010 in 2019 (5.2%). However, the unemployment rate has increased to 11.2% as a result of Covid-19 economic disruptions (as of August 2020). This is still below peak employment of 13.9% that resulted from the 2017 hurricanes.

More households are below the poverty level in the U.S. Virgin Islands than in the United States (20.6% vs. 13.4%). Within the U.S. Virgin Islands, household poverty rates are highest in St. Croix and lowest in St. John. In looking at the percentage of people below the poverty level in the U.S. Virgin Islands, Whites fare better than Blacks and people of other races; overall, 15.2% of White residents are below the poverty level while over 25.3% of Black residents and 25.7% of residents of other races are below the poverty level.

Households Below Poverty Level



% of People Below Poverty Level



Source: Virgin Islands: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands; United States: Esri (2018)

Unemployment Rate



Source: Virgin Islands Department of Labor, U.S. Bureau of Labor Statistics

MIGRATION PATTERNS

As of 2013, half of U.S. Virgin Islands residents were born in the U.S. Virgin Islands and half migrated from elsewhere.

With respect to reason for migration, 17% of residents migrated to the U.S. Virgin Islands for employment, followed by 11% who were the dependent of the employed person and 9% who were family members of employed residents. At 73% of total residents, St. John has the highest proportion of residents born outside of the U.S. Virgin Islands. St. Croix has the highest percentage of residents born in the U.S. Virgin Islands (57%).

Migration Patterns, 2013

	US Virgin Islands		St. Croix		St. John		St. Thomas	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Born in VI	52,637	50%	28,582	57%	1,070	27%	22,986	45%
Born outside VI	52,123	50%	21,407	43%	2,957	73%	27,759	55%
Reason for Migration								
Employment	17,676	17%	5,393	11%	1,083	27%	11,200	22%
Spouse of employed person	3,835	4%	1,809	4%	287	7%	1,739	3%
Dependent of employed person	11,416	11%	4,255	9%	626	16%	6,536	13%
Family member of employed resident	9,699	9%	4,935	10%	263	7%	4,501	9%
Student attending college	661	1%	410	1%	68	2%	184	0%
Missionary work	248	0%	46	0%	-	0%	201	0%
Medical reasons	147	0%	107	0%	-	0%	39	0%
Visiting/vacation	5,898	6%	3,262	7%	337	8%	2,299	5%
Other	2,543	2%	190	0%	293	7%	1,060	2%
Total	104,760	100%	49,989	100%	4,027	100%	50,745	100%

Source: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands



Macroeconomic Indicators

GROSS DOMESTIC PRODUCT (GDP)

Between 2002 and 2018, the real GDP of the U.S. Virgin Islands has shrunk by 19% while that of the United States has increased by 38%. As real GDP started to decrease beginning in 2010, the unemployment rate began to increase.

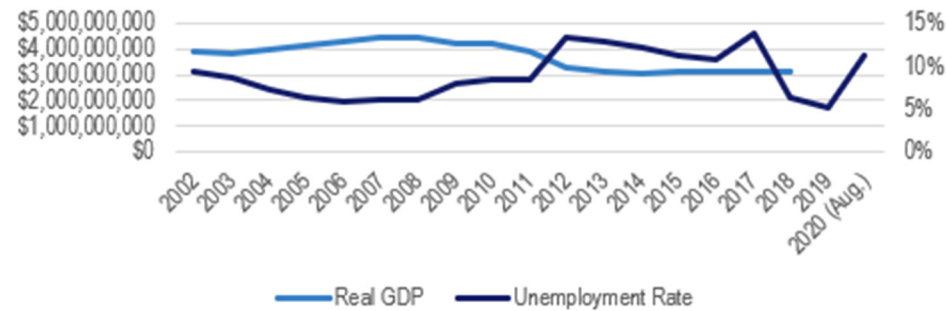
Gross Domestic Product (GDP)

measures the value and makeup of the region's output, the types of income generated, and how that income is used. It is the total value of goods and services produced.

GDP Components

Like in the United States, personal consumption expenditures—particularly on services—make up the largest portion of the U.S. Virgin Islands' GDP. Additionally, the U.S. Virgin Islands import a significant amount of goods, resulting in a negative net export figure.

Real GDP vs. Unemployment Rate, US Virgin Islands



Historical GDP (\$1,000)

Year	US Virgin Islands	United States
	Chained 2009 Dollars	Chained 2012 Dollars
2002	\$3,891,000	\$10,936,400,000
2003	\$3,878,000	\$11,458,200,000
2004	\$3,992,000	\$12,213,700,000
2005	\$4,137,000	\$13,036,600,000
2006	\$4,287,000	\$13,814,600,000
2007	\$4,460,000	\$14,451,900,000
2008	\$4,502,000	\$14,712,800,000
2009	\$4,203,000	\$14,448,900,000
2010	\$4,241,000	\$14,992,100,000
2011	\$3,895,000	\$15,542,600,000
2012	\$3,310,000	\$16,197,000,000
2013	\$3,117,000	\$16,784,900,000
2014	\$3,090,000	\$17,527,300,000
2015	\$3,098,000	\$18,238,300,000
2016	\$3,133,000	\$18,745,100,000
2017	\$3,114,000	\$19,543,000,000
2018	\$3,161,000	\$20,611,900,000
% CHANGE	-19%	88%

Source: Bureau of Economic Analysis

2018 GDP, US Virgin Islands

Category	US Virgin Islands - 2018		United States - 2019	
	Value	% of Total	Value	% of Total
Personal consumption expenditures	\$2,739,000,000	69%	\$14,544,600,000,000	68%
Goods	\$1,211,000,000	30%	\$4,512,200,000,000	21%
Durable goods	\$683,000,000	17%	\$1,534,400,000,000	7%
Nondurable goods	\$528,000,000	13%	\$2,977,900,000,000	14%
Foods, feeds, and beverages	\$358,000,000	9%	NA	NA
Other nondurable goods	\$170,000,000	4%	NA	NA
Services	\$2,417,000,000	61%	\$10,032,400,000,000	47%
Housing and utilities	\$877,000,000	22%	NA	NA
Health care	\$263,000,000	7%	NA	NA
Food services and accommodations	\$424,000,000	11%	NA	NA
Other services	\$853,000,000	21%	NA	NA
Net foreign travel	-\$888,000,000	-22%	NA	NA
Private fixed investment	\$483,000,000	12%	\$3,702,100,000,000	17%
Change in private inventories	\$962,000,000	24%	\$49,100,000,000	0%
Net exports of goods and services	-\$1,903,000,000	-48%	-\$610,500,000,000	-3%
Exports	\$2,140,000,000	54%	\$2,514,800,000,000	12%
Goods	\$1,242,000,000	31%	\$1,636,700,000,000	8%
Services	\$898,000,000	23%	\$878,000,000,000	4%
Imports	\$4,043,000,000	101%	\$3,125,200,000,000	15%
Goods	\$3,707,000,000	93%	\$2,525,600,000,000	12%
Services	\$336,000,000	8%	\$599,600,000,000	3%
Government consumption expenditures and gross investment	\$1,703,000,000	43%	\$3,747,900,000,000	17%
Federal	\$275,000,000	7%	\$1,419,200,000,000	7%
Territorial	\$1,428,000,000	36%	\$2,328,700,000,000	11%
Total	\$3,984,000,000	100%	\$21,433,200,000,000	100%

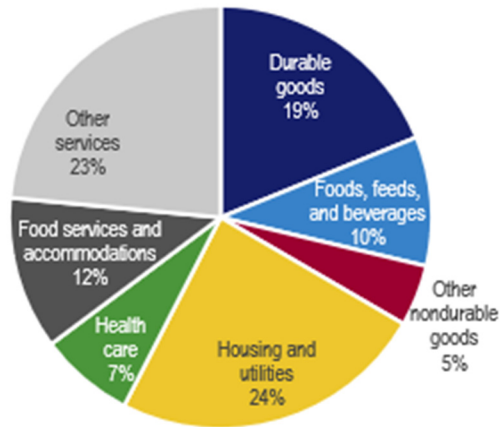
*Current dollars. A more extensive list of goods and services personal consumption expenditures is available for the United States. For the purposes of this analysis, the top level totals are shown to ensure alignment with the US Virgin Islands data.

Source: Bureau of Economic Analysis

Personal Consumption Expenditures

Spending on housing and utilities represents the highest proportion of personal consumption expenditures (24%). This is followed by spending on other services (23%), durable goods (19%), and food services and accommodations (12%). Health care represents one of the smallest portions of the major expenditure categories (i.e. not including anything that falls under other services).

2018 GDP: Personal Consumption Expenditures, US Virgin Islands



Source: Bureau of Economic Analysis

Services

Tourism-related services have become an increasingly important contributor to the U.S. Virgin Islands' GDP. The accommodation and food services value added has increased from 8% of GDP in 2002 to 13% in 2017. Wholesale and retail trade as well as other services have shown some fluctuation over this period but have remained relatively flat in their value added.

Value Added by Service Industry as a Percentage of GDP, US Virgin Islands

	Wholesale and Retail Trade	Accommodation and Food Services	Other Services, except Government
2002	11%	8%	41%
2003	10%	8%	41%
2004	10%	8%	38%
2005	9%	7%	35%
2006	9%	7%	34%
2007	9%	8%	35%
2008	10%	10%	37%
2009	10%	10%	36%
2010	10%	10%	37%
2011	10%	10%	37%
2012	10%	11%	40%
2013	11%	12%	41%
2014	11%	14%	40%
2015	10%	14%	41%
2016	10%	14%	42%
2017	9%	13%	43%

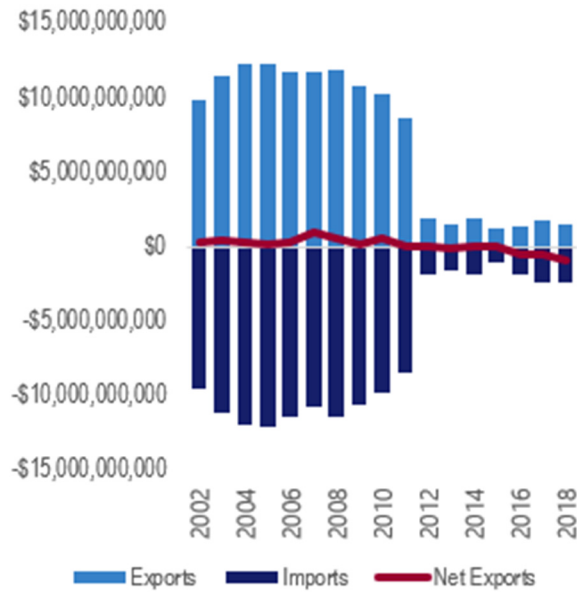
Source: Bureau of Economic Analysis

INTERNATIONAL TRADE

Net Exports

With the exception of 2015 that showed a nominal positive net export figure, the U.S. Virgin Islands' imports have exceeded exports since 2010, resulting in a negative net export figure. Between 2016 and 2018 the gap between imports and exports has steadily increased. As of 2018, imports exceeded exports by \$989 million.

Historical Trade, US Virgin Islands



*Chained 2009 dollars.

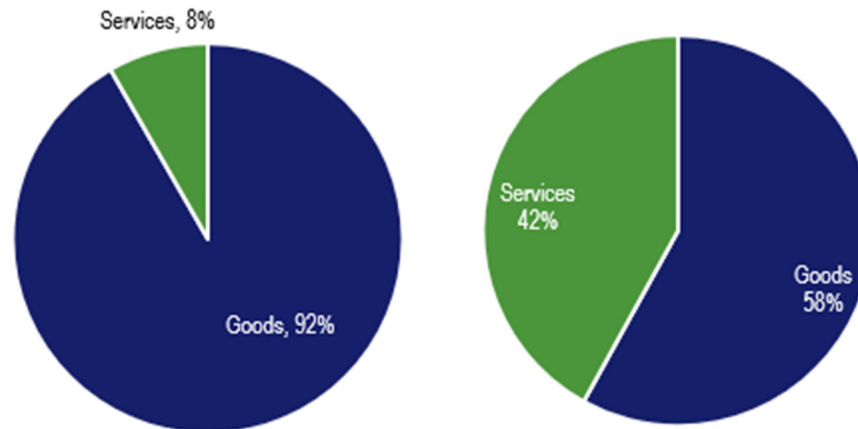
Source: Bureau of Economic Analysis

Goods and Services

As of 2018, the majority of imports to the U.S. Virgin Islands were goods. Ninety-two percent (92%) of imports were goods and 8% were services.

Exports are more evenly split. As of 2018, 58% of exports were goods and 42% were services.

2018 Imports, US Virgin Islands 2018 Exports, US Virgin Islands



Source: Bureau of Economic Analysis

Commodities

The U.S. Census Bureau provides data on trade originating from the U.S. Virgin Islands by NAICS commodity. This data considers only foreign imports and exports and not domestic trade with the continental United States. This differs from the aforementioned trade data from the Bureau of Economic Analysis which measures the total value of trade between the U.S. Virgin Islands and the rest of the world, for the calculation of GDP. Trade with the U.S. mainland accounts for 57% of exports and 61% of imports.

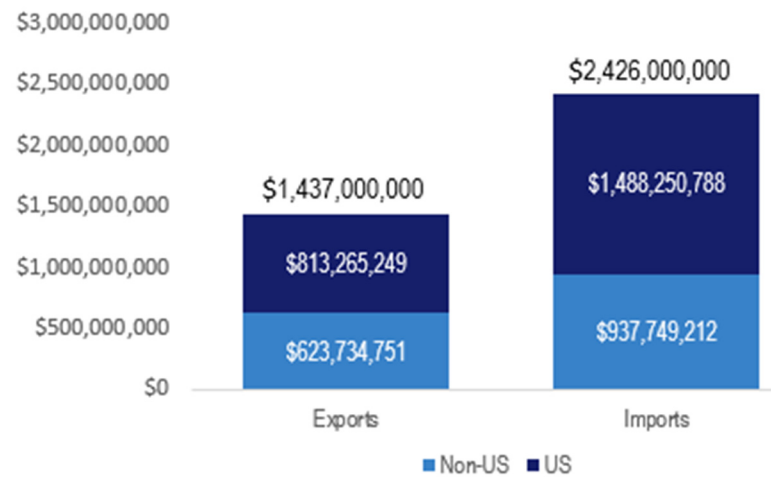
U.S. Virgin Islands trade is dominated by petroleum as a result of the prevalence of petroleum transshipment and storage in the region. This makes up just over 84% of foreign (non-U.S. mainland) imports and nearly 96% of foreign (non-U.S. mainland) exports. Petroleum is imported and stored from countries such as Algeria, India, South Korea, and Argentina, and is exported to countries such as Malaysia, Martinique, Guadeloupe, and Barbados.

Other top foreign imports include oil and gas (8.9%), plastics and rubber products (1.7%), and beverages and tobacco products (1.6%). Specific imported products include tubes and hoses, jewelry, beer, molasses, wood furniture, aluminum, rubber tires, wine, whiskey, vodka, and rum.

Very little is exported internationally outside of petroleum products. Specific exported products include jewelry, motorboats, electronic circuits, watch parts, and stones for concrete.

According to the Office of Management and Budget Bureau of Economic Research's 2020 report, *Review of the USVI Territorial Economy 2019*, rum accounts for 41% of total exports when mainland US and foreign exports are considered collectively. Cruzan Rum and Diageo are key players in U.S. Virgin Islands' production of rum, which is a major export from the region to the mainland United States.

US Virgin Islands Trade



Source: Bureau of Economic Analysis and US Census Bureau

US Virgin Islands Trade by NAICS Commodity, 2019

NAICS	Description	Exports		Imports	
		Value	% of Total	Value	% of Total
111	Agricultural Products	\$368,977	0.1%	\$33,052	0.0%
112	Livestock & Livestock Products	\$0	0.0%	\$435,324	0.0%
113	Forestry Products	\$33,859	0.0%	\$8,421	0.0%
114	Fish, Fresh/chilled/frozen & Other Marine Products	\$129,000	0.0%	\$64,623	0.0%
211	Oil & Gas	\$0	0.0%	\$83,409,775	8.9%
212	Minerals	\$606,639	0.1%	\$261,551	0.0%
311	Food & Kindred Products	\$88,011	0.0%	\$5,022,559	0.5%
312	Beverages & Tobacco Products	\$365,270	0.1%	\$14,738,426	1.6%
313	Textiles & Fabrics	\$0	0.0%	\$74,441	0.0%
314	Textile Mill Products	\$7,000	0.0%	\$265,401	0.0%
315	Apparel & Accessories	\$0	0.0%	\$1,049,722	0.1%
316	Leather & Allied Products	\$18,602	0.0%	\$197,391	0.0%
321	Wood Products	\$41,979	0.0%	\$337,211	0.0%
322	Paper	\$164,856	0.0%	\$166,647	0.0%
323	Printed Matter and Related Products	\$4,469	0.0%	\$298,789	0.0%
324	Petroleum & Coal Products	\$597,961,462	95.9%	\$788,618,818	84.1%
325	Chemicals	\$603,967	0.1%	\$193,330	0.0%
326	Plastics & Rubber Products	\$59,651	0.0%	\$15,757,741	1.7%
327	Nonmetallic Mineral Products	\$302,617	0.0%	\$560,644	0.1%
331	Primary Metal Mfg	\$676,883	0.1%	\$2,265,800	0.2%
332	Fabricated Metal Products	\$177,380	0.0%	\$2,639,278	0.3%
333	Machinery, Except Electrical	\$657,135	0.1%	\$511,991	0.1%
334	Computer & Electronic Products	\$5,089,336	0.8%	\$5,588,962	0.6%
335	Electrical Equipment, Appliances & Components	\$473,025	0.1%	\$1,145,895	0.1%
336	Transportation Equipment	\$4,092,921	0.7%	\$412,790	0.0%
337	Furniture & Fixtures	\$33,879	0.0%	\$2,404,165	0.3%
339	Misc. Manufactured Commodities	\$11,466,633	1.8%	\$10,428,343	1.1%
Other		\$311,200	\$0	\$858,122	\$0
TOTAL		\$623,734,751	100%	\$937,749,212	100%

*United States trade originating from the US Virgin Islands. 'Other' includes newspapers, books & other published material; published printed music and music manuscript; waste and scrap; used second-hand merchandise; goods returned; and other special classification

Source: US Census Bureau

Economic Base Analysis

SUMMARY

Virgin Islands

Outside of the public sector, accommodation and food services and retail trade are top job contributors to the U.S. Virgin Islands economy. These, along with professional, scientific, and technical services comprise the majority of businesses in the region.

Professional, scientific, and technical services jobs are also the most well-paying, with average annual gross pay of nearly \$71,000.

Though representing only 3% of jobs, the finance and insurance sector accounts for 20% of total sales in the U.S. Virgin Islands.

Industries are defined by the standard North American Industry Classification System (NAICS). NAICS codes range from broad 2-digit sectors, to specific 6-digit industries.

Industry Summary, US Virgin Islands, 2017

NAICS	Description	Percent of Total:			Avg. Gross Pay
		Jobs	Sales	Businesses	
11	Agriculture, Forestry, Fishing and Hunting	0%	NA	0%	\$22,932
21	Mining, quarrying, and oil and gas extraction	0%	0%	0%	\$64,962
22	Utilities	2%	NA	0%	\$66,809
23	Construction	3%	2%	6%	\$54,858
31-33	Manufacturing	1%	3%	2%	\$46,438
42	Wholesale trade	2%	9%	3%	\$40,587
44-45	Retail trade	15%	21%	20%	\$24,289
48-49	Transportation and warehousing	6%	6%	5%	\$33,624
51	Information	2%	2%	2%	\$48,305
52	Finance and insurance	3%	20%	5%	\$63,234
53	Real estate and rental and leasing	3%	3%	8%	\$38,510
54	Professional, scientific, and technical services	3%	4%	11%	\$70,813
55	Management of companies and enterprises	0%	1%	0%	\$51,295
56	Administrative and support and waste management and remediation services	5%	4%	7%	\$29,880
61	Educational services	0%	0%	1%	\$30,134
62	Health care and social assistance	8%	7%	9%	\$37,094
71	Arts, entertainment, and recreation	2%	2%	2%	\$26,323
72	Accommodation and food services	17%	9%	13%	\$28,359
81	Other services (except public administration)	3%	2%	7%	\$30,120
90	Government	24%	NA	NA	\$53,625

Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; Agriculture and Government figures sourced from US Virgin Islands Department of Labor.

St. Croix

The distribution of jobs and businesses by sector in St. Croix mirrors that of the overall U.S. Virgin Islands. Retail trade and accommodation and food services are the top contributors to the private sector. Retail trade contributes 13% of jobs, 18% of businesses, and 19% of sales while accommodation and food services contributes 11% of jobs and 5% of sales to St. Croix's economy.

Health care and social assistance also comprises a notable portion of St. Croix's economy, at 10% of jobs, 12% of businesses, and 10% of sales.

Industry Summary, St. Croix, 2017

NAICS	Description	Percent of Total:			Avg. Gross Pay
		Jobs	Sales	Businesses	
11	Agriculture, Forestry, Fishing and Hunting	0%	NA	NA	\$23,805
21	Mining, quarrying, and oil and gas extraction	0%	0%	0%	\$64,962
22	Utilities	0%	0%	0%	\$77,019
23	Construction	4%	3%	6%	\$59,022
31-33	Manufacturing	2%	7%	4%	\$50,236
42	Wholesale trade	3%	15%	2%	\$36,299
44-45	Retail trade	13%	19%	18%	\$21,740
48-49	Transportation and warehousing	6%	6%	4%	\$33,732
51	Information	1%	1%	2%	\$56,318
52	Finance and insurance	3%	16%	5%	\$72,412
53	Real estate and rental and leasing	2%	3%	6%	\$34,076
54	Professional, scientific, and technical services	3%	7%	12%	\$65,560
55	Management of companies and enterprises	0%	0%	0%	\$30,864
56	Administrative and support and waste management and remediation services	5%	3%	6%	\$33,678
61	Educational services	0%	0%	1%	\$26,959
62	Health care and social assistance	10%	10%	12%	\$32,776
71	Arts, entertainment, and recreation	2%	2%	2%	\$27,457
72	Accommodation and food services	11%	5%	11%	\$20,222
81	Other services (except public administration)	4%	3%	8%	\$29,560
90	Government	30%	NA	NA	\$50,039

Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; Agriculture and Government figures sourced from US Virgin Islands Department of Labor.

St. John

The economy of St. John is less diverse than the other islands. Accommodation and food services is much more critical to the economy of St. John, as this sector accounts for 46% of all jobs, 20% of businesses, and 26% of sales.

Retail trade is also important to the St. John economy, making up 18% of jobs, 19% of businesses, and 26% of sales.

Industry Summary, St. John, 2017

NAICS	Description	Percent of Total:			Avg. Gross Pay
		Jobs	Sales	Businesses	
11	Agriculture, Forestry, Fishing and Hunting	0%	NA	NA	\$0
21	Mining, quarrying, and oil and gas extraction	0%	0%	0%	\$0
22	Utilities	0%	0%	0%	\$0
23	Construction	5%	5%	7%	\$49,747
31-33	Manufacturing	1%	1%	1%	\$33,765
42	Wholesale trade	0%	0%	0%	\$0
44-45	Retail trade	18%	26%	19%	\$30,020
48-49	Transportation and warehousing	6%	7%	5%	\$27,931
51	Information	0%	0%	0%	\$37,430
52	Finance and insurance	1%	13%	3%	\$35,312
53	Real estate and rental and leasing	8%	10%	21%	\$34,544
54	Professional, scientific, and technical services	3%	2%	7%	\$41,441
55	Management of companies and enterprises	0%	0%	0%	\$0
56	Administrative and support and waste management and remediation services	3%	2%	6%	\$37,110
61	Educational services	0%	0%	1%	\$36,485
62	Health care and social assistance	1%	2%	3%	\$23,744
71	Arts, entertainment, and recreation	3%	3%	2%	\$39,175
72	Accommodation and food services	46%	26%	20%	\$36,067
81	Other services (except public administration)	2%	2%	5%	\$33,762
90	Government	0%	NA	NA	\$50,395

Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; Agriculture and Government figures sourced from US Virgin Islands Department of Labor.

St. Thomas

The industry composition of St. Thomas most closely resembles that of St. Croix, with retail trade and accommodation and food services continuing to be of high importance to the island's economy.

Construction, manufacturing, and wholesale trade make up a slightly smaller portion of jobs on St. Thomas than on St. Croix, while information, real estate and rental and leasing, and administrative support make up a slightly larger portion of the jobs on St. Thomas than on St. Croix.

Industry Summary, St. Thomas, 2017

NAICS	Description	Percent of Total:			Avg. Gross Pay
		Jobs	Sales	Businesses	
11	Agriculture, Forestry, Fishing and Hunting	0%	NA	NA	\$15,080
21	Mining, quarrying, and oil and gas extraction	0%	0%	0%	\$0
22	Utilities	3%	NA	0%	\$61,209
23	Construction	2%	2%	5%	\$47,986
31-33	Manufacturing	1%	1%	1%	\$41,204
42	Wholesale trade	2%	6%	3%	\$43,897
44-45	Retail trade	16%	21%	22%	\$25,149
48-49	Transportation and warehousing	6%	6%	5%	\$34,568
51	Information	3%	3%	2%	\$44,519
52	Finance and insurance	3%	23%	5%	\$57,731
53	Real estate and rental and leasing	3%	3%	7%	\$42,481
54	Professional, scientific, and technical services	2%	3%	11%	\$78,386
55	Management of companies and enterprises	1%	1%	1%	\$57,862
56	Administrative and support and waste management and remediation services	6%	5%	7%	\$26,925
61	Educational services	0%	0%	0%	\$31,451
62	Health care and social assistance	7%	6%	9%	\$41,931
71	Arts, entertainment, and recreation	2%	2%	2%	\$24,175
72	Accommodation and food services	18%	10%	12%	\$29,215
81	Other services (except public administration)	2%	2%	6%	\$30,261
90	Government	23%	NA	NA	\$34,954

Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; Agriculture and Government figures sourced from US Virgin Islands Department of Labor.

EMPLOYMENT

Employment by Sector

Over the five-year period from 2012 to 2017, the total number of jobs in the U.S. Virgin Islands decreased by 6%. The biggest loss led by Hovensa's refinery closure, was in the manufacturing sector, with a reduction of 1,383 jobs. In contrast, transportation and warehousing and health care and social assistance realized the biggest job gains over this period. Employment in transportation and warehousing is driven by support activities for transportation, water transportation, and truck transportation.

Manufacturing job losses occurred in St. Croix, and contributed to the island's 18% decrease in non-government jobs. St. John, on the other hand, added jobs in tourism-based industries (retail trade and accommodation and food services), and grew non-government employment by 22%. Non-government employment in St. Thomas remained flat, with losses and gains dispersed among a variety of sectors. Health care and social assistance added over 500 jobs in St. Thomas: a 50% change from 2012.

Virgin Islands Employment by Sector

NAICS	Description	2012 Jobs	2017 Jobs	2012-2017 Change	2012-2017 % Change
11	Agriculture, Forestry, Fishing and Hunting	9	8	(1)	-11%
21	Mining, quarrying, and oil and gas extraction	<20	-	NA	NA
22	Utilities	807	651	(156)	-19%
23	Construction	1,729	1,298	(431)	-25%
31-33	Manufacturing	1,984	601	(1,383)	-70%
42	Wholesale trade	686	872	186	27%
44-45	Retail trade	6,596	6,118	(478)	-7%
48-49	Transportation and warehousing	1,682	2,366	684	41%
51	Information	918	870	(48)	-5%
52	Finance and insurance	1,156	1,078	(78)	-7%
53	Real estate and rental and leasing	961	1,112	151	16%
54	Professional, scientific, and technical services	2,108	1,134	(974)	-46%
55	Management of companies and enterprises	68	128	60	88%
56	Administrative and support and waste management and remediation services	1,904	2,108	204	11%
61	Educational services	65	50	(15)	-23%
62	Health care and social assistance	2,639	3,262	623	24%
71	Arts, entertainment, and recreation	743	936	193	26%
72	Accommodation and food services	6,864	6,737	(127)	-2%
81	Other services (except public administration)	1,539	1,193	(346)	-22%
Total Non-Government		32,474	30,514	(1,960)	-6%
Government		10,311	9,676	(635)	-6%
TOTAL		42,785	40,190	(2,595)	-6%

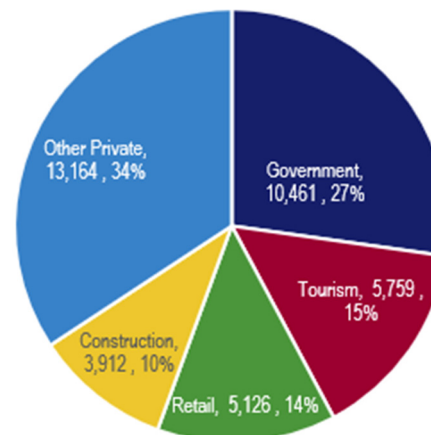
* "-" indicates a value of 0. "NA" indicates data is not available or can't be calculated.

Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; Agriculture and Government figures sourced from US Virgin Islands Department of Labor.

More recent data from the U.S. Virgin Islands Department of Labor shows that as of 2019, the government, tourism,¹⁴ retail, and construction sectors are the biggest job contributors to the U.S. Virgin Islands. According to this data, government accounts for 27% of jobs, tourism for 15%, retail for 14% and construction for 10%.

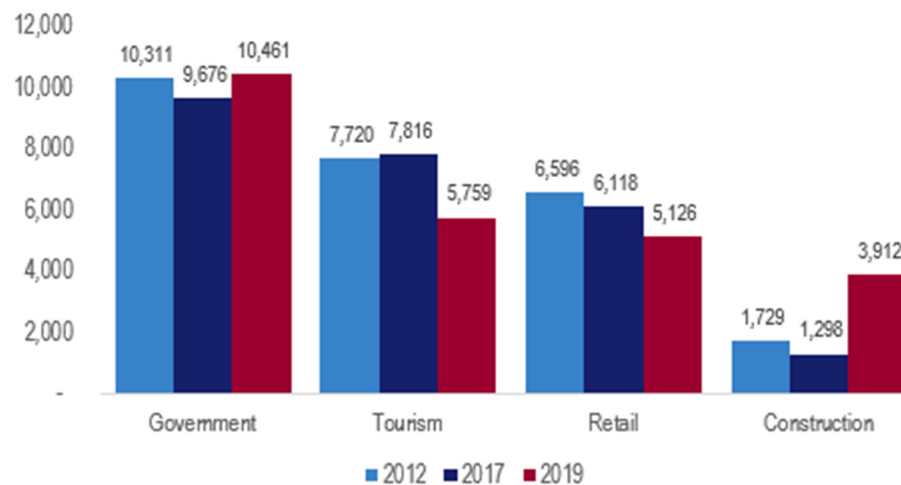
Of these sectors, construction has experienced the biggest job increase. This sector has increased from 1,729 jobs in 2012 to 3,912 jobs in 2019. Job creation in this sector is occurring as a result of federal disaster assistance prompting reconstruction, infrastructure repair, and hazard mitigation activities. Demand for construction workers for federally financed infrastructure projects is projected to continue in the coming years.

Top Job Producing Sectors, 2019



Source: Virgin Islands Department of Labor.

Job Change in Top Sectors, US Virgin Islands

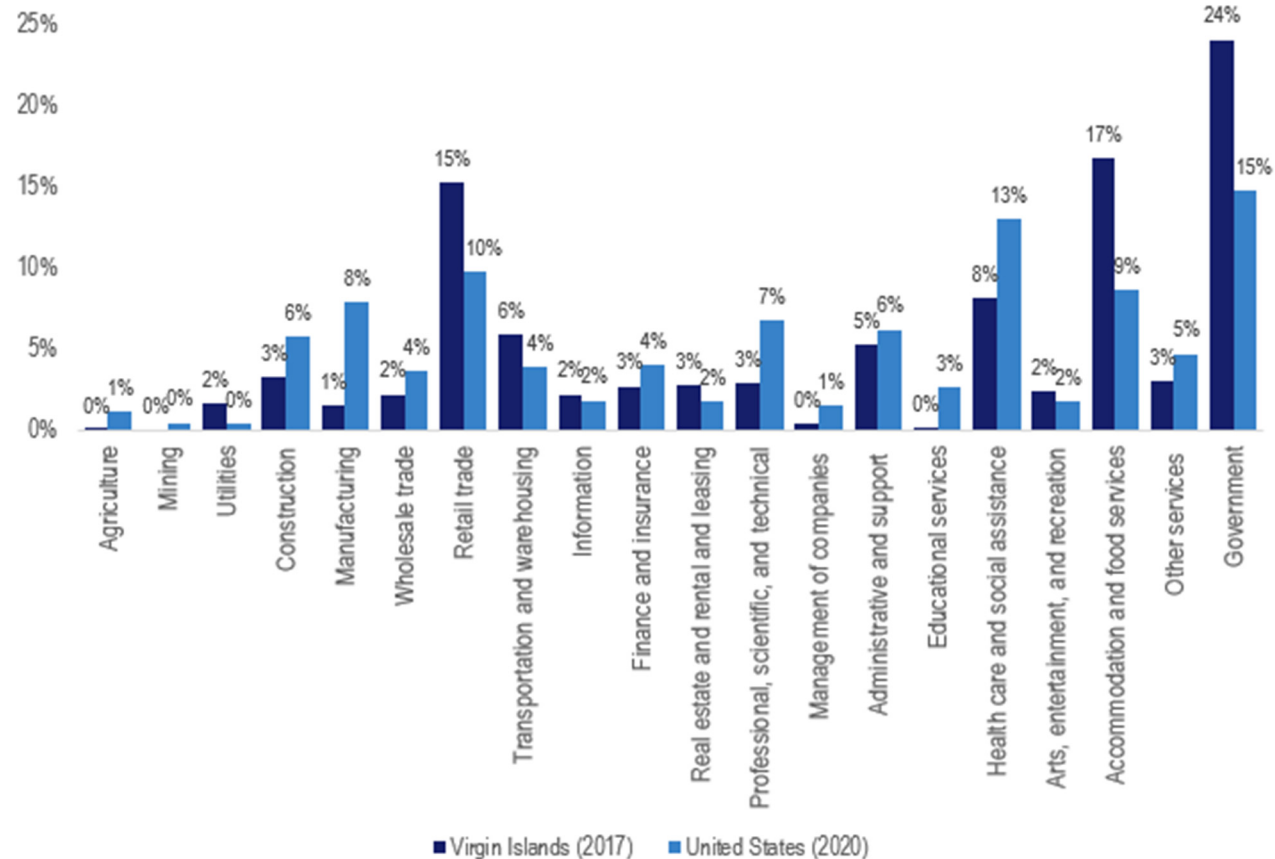


Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; Virgin Islands Department of Labor.

¹⁴ The tourism sector is defined to include accommodation and food services; arts, entertainment, and recreation; and sightseeing transportation.

Compared to the United States, a higher portion of the U.S. Virgin Islands' jobs is dependent on tourism-based industries of retail trade and accommodation and food services. Government jobs also account for a much larger portion of U.S. Virgin Islands jobs than United States mainland jobs.

Sector Share of Total Jobs



Source: Virgin Islands: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; United States: Emsi

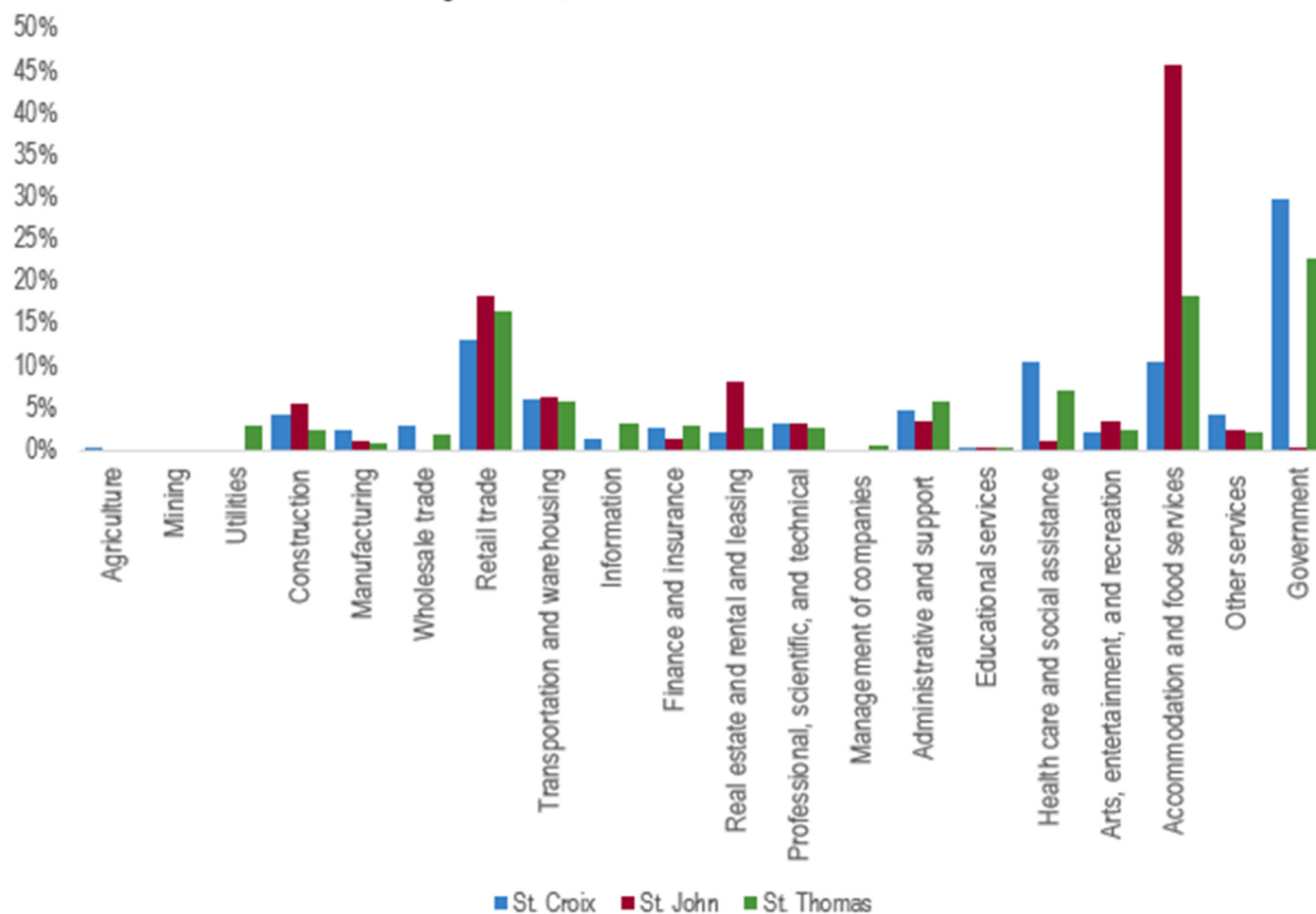
The economies of St. Croix and St. Thomas are more diverse than St. John. While accommodation and food services is a top jobs contributor across all three islands, jobs in this sector account for a much

higher percentage of jobs on St. John than on the other islands.

Government accounts for a large portion of jobs on St. Croix and St. Thomas, while St. John can attribute

a larger portion of its jobs to real estate and rental and leasing than the other islands.

Sector Share of Total Jobs by Island, 2017



Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017.

Employment by Industry

Using NAICS data available from the U.S. Virgin Islands Department of Labor,¹⁵ the food services and drinking places industry is the top jobs contributor to the U.S. Virgin Islands. This is followed by administrative and support services, heavy and civil engineering construction, and accommodation. Of the top industries, heavy and civil engineering construction and professional and technical services are the highest paying.

The top industries on St. Croix are similar, with heavy and civil engineering construction contributing the most jobs, followed by administrative and support services and food services and drinking places. Four of the top eight industries on St. Croix have average weekly wages greater than \$1,000.

Virgin Islands Employment in Top Industries, 2019

NAICS	Description	Jobs	Establishments	Avg. Weekly Wage
722	Food Services and Drinking Places	2,770	298	\$399
561	Administrative and Support Services	2,110	220	\$941
237	Heavy and Civil Engineering Construction	1,680	22	\$2,189
721	Accommodation	1,633	59	\$723
541	Professional and Technical Services	1,407	382	\$1,679
445	Food and Beverage Stores	1,306	64	\$498
236	Construction of Buildings	1,272	128	\$958
621	Ambulatory Health Care Services	1,051	162	\$874

Source: US Virgin Islands Department of Labor

St. Croix Employment in Top Industries, 2019

NAICS	Description	Jobs	Establishments	Avg. Weekly Wage
237	Heavy and Civil Engineering Construction	1,608	12	\$2,161
561	Administrative and Support Services	1,131	78	\$1,292
722	Food Services and Drinking Places	985	108	\$379
811	Repair and Maintenance	857	40	\$1,701
236	Construction of Buildings	639	55	\$799
541	Professional and Technical Services	643	179	\$1,617
621	Ambulatory Health Care Services	523	67	\$743
445	Food and Beverage Stores	542	24	\$490

Source: US Virgin Islands Department of Labor

¹⁵ Data on certain industries is designated as confidential and is not available.

Within St. John, the top industries are heavily tourism focused, with food services and drinking places being the top jobs contributor. Accommodation and a number of retail industries (clothing, food and beverage, general merchandise) are also some of the top industries.

Of the industries for which data is available, accommodation and food services and drinking places are top job contributors on St. Thomas. Construction of buildings and professional and technical services have the highest average weekly wages.

Occupations

Office and administrative support occupations are the top occupation in the U.S. Virgin Islands in terms of number of jobs. This is followed by management occupations and food preparation and serving occupations. Not surprisingly, management occupations are the highest paying.

Virgin Islands Top Occupations, 2019

Occupation	Jobs	Avg. Hourly Wage	Avg. Annual Earnings
Office and Administrative Support	5,460	\$16.62	\$34,570
Management	3,080	\$39.81	\$82,810
Food Preparation and Serving Related	3,040	\$12.67	\$26,350
Sales and Related	3,030	\$15.43	\$32,090
Protective Service	2,280	\$17.00	\$35,350
Transportation and Material Moving	2,170	\$15.68	\$32,610

Source: US Virgin Islands Department of Labor

St. John Employment in Top Industries, 2019

NAICS	Description	Jobs	Establishments	Avg. Weekly Wage
722	Food Services and Drinking Places	1,590	154	\$396
561	Administrative and Support Services	939	130	\$544
721	Accommodation	898	29	\$772
448	Clothing and Clothing Accessories Stores	785	148	\$676
541	Professional and Technical Services	700	176	\$1,791
445	Food and Beverage Stores	683	35	\$489
452	General Merchandise Stores	605	6	\$377
236	Construction of Buildings	569	65	\$1,110

Source: US Virgin Islands Department of Labor

St. Thomas Employment in Top Industries, 2019

NAICS	Description	Jobs	Establishments	Avg. Weekly Wage
721	Accommodation	260	9	\$ 812
722	Food Services and Drinking Places	195	36	\$ 504
483	Water Transportation	90	5	\$ 527
531	Real Estate	85	37	\$ 695
445	Food and Beverage Stores	81	5	\$ 629
236	Construction of Buildings	64	8	\$1,033
541	Professional and Technical Services	64	27	\$1,024
532	Rental and Leasing Services	55	17	\$ 597

Source: US Virgin Islands Department of Labor

BUSINESSES

Though the number of retail businesses in the U.S. Virgin Islands has decreased since 2012, as of 2017 the retail trade sector continued to have the most businesses in the region (489). This is followed by accommodation and food services (304) and professional, scientific, and technical services (254).

Sectors that experienced the most business growth over this five-year period include accommodation

and food services (25); professional, scientific and technical services (22); and transportation and warehousing (19). Most of the transportation and warehousing businesses are located on St. Thomas and according to the U.S. Census Bureau, there were 70 of these businesses on the island in 2017, an increase of 10 since 2012.

Virgin Islands Number of Businesses by Sector

NAICS	Description	2012	2017	2012-2017 Change	2012-2017 % Change
11	Agriculture	NA	9	NA	NA
21	Mining, quarrying, and oil and gas extraction	2	-	(2)	-100%
22	Utilities	11	6	(5)	-45%
23	Construction	161	137	(24)	-15%
31-33	Manufacturing	57	52	(5)	-9%
42	Wholesale trade	64	62	(2)	-3%
44-45	Retail trade	560	489	(71)	-13%
48-49	Transportation and warehousing	101	120	19	19%
51	Information	46	50	4	9%
52	Finance and insurance	107	122	15	14%
53	Real estate and rental and leasing	180	196	16	9%
54	Professional, scientific, and technical services	232	254	22	9%
55	Management of companies and enterprises	5	9	4	80%
56	Administrative and support and waste management and remediation services	146	162	16	11%
61	Educational services	17	16	(1)	-6%
62	Health care and social assistance	236	228	(8)	-3%
71	Arts, entertainment, and recreation	50	50	-	0%
72	Accommodation and food services	279	304	25	9%
81	Other services (except public administration)	160	160	-	0%
TOTAL		2,414	2,419	5	0%

Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017

TOP EMPLOYERS

According to the U.S. Virgin Islands Department of Labor (Q3, 2019), the largest non-governmental employers in terms of number of employees are (in order from largest):

1. National Industrial Services, LLC
2. K-Mart
3. PSI Tire Supply, LLC
4. INSERV Field Services, USVI, LLC
5. HDVI Holdings Co., Inc.
6. Sun Constructors, Inc.
7. Pinnacle Services, LLC
8. Plaza Extra Supermarket West
9. Virgin Islands Telephone Corporation
10. World Fresh Market, LLC
11. Ritz Carlton Virgin Islands, Inc.
12. Westin Resort
13. Allison Industrial Services, LLC
14. J. Benton Construction
15. Limetree Bay Refining, LLC
16. Plaza Extra Supermarket East
17. Buccaneer Hotel, Inc.
18. WENVI, Inc.
19. Elite Turnaround Specialist, Ltd.
20. Ranger American of the VI, Inc.
21. TOPA Equities VI, Corp.
22. First Bank Virgin Islands
23. R&T Unlimited Security, LLC
24. ESS Worldwide Services
25. Lutheran Social Service of the VI

Business Licenses

According to the U.S. Virgin Islands Department of Licensing and Consumer Affairs, Importer of Goods is the top current business license held in the U.S. Virgin Islands. This is followed closely by Retail Shop and Store. Apartment House (4 units or less) and Tavernkeeper are the next most common business licenses.

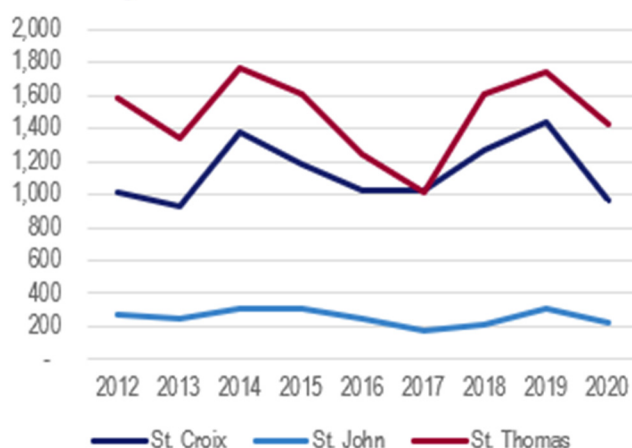
Virgin Islands Top 20 Current Business License Types (2020)

License Type	#	% of Total
Importer of Goods	1,090	7%
Retail Shop & Store-No Liquor/Beer	1,025	7%
Apartment House D (4 units or less)	583	4%
Tavernkeeper A (Distilled & Fermented)	322	2%
Itinerant Vendor License	301	2%
Business & Management Consulting	297	2%
Tavern	277	2%
Commercial Farming Plants & or Animals	274	2%
Solicitor, Sales & Commission Agt.	255	2%
Trucking, Trans. & Delivery	242	2%
Restaurant A (Seating Capacity 25 or more)	231	2%
Restaurant B (Less than 25)	231	2%
Landscaping, Garden, Maint. Service	229	2%
Real Estate Broker	214	1%
Rental of Equipment	207	1%
Rental of Commercial Space	206	1%
Real Estate Salesman	194	1%
Tobacco Retailer	184	1%
Repair & Main of Misc. Items	174	1%
Carpentry Contractor	172	1%

Source: US Virgin Islands Department of Licensing and Consumer Affairs

Since 2012, St. Thomas issued an average of 1,480 licenses per year, which is the most of the three islands. St. Croix issued an average of 1,132 per year while St. John issued 257. All three islands experienced a dip in licenses issued in 2017 and 2020 as a result of hurricane activity and the Covid-19 pandemic, but have remained relatively consistent in their license issuing activity.

Number of New Business Licenses Issued by Year



Source: US Virgin Islands Department of Licensing and Consumer Affairs

In comparing the number of business licenses issued by license type in 2010 to those issued in 2020, Commercial Farming Plants and/or Animals and Retail Sales (Internet) experienced the biggest increase in number of licenses issued.

Biggest Increase in Licenses Issued (2010 vs. 2020)

License Type	#
Commercial Farming Plants & or Animals	102
Retail Sales-Internet	84
General Business License	40
Tavern	37
Apartment House D (4 units or less)	36
Temporary Real Estate Salesperson Permit.(6 month)	32
Janitorial Service & Supply	31
Business & Management Consulting	30
Engineer (Civil)	29
Motor Vehicle Dealer (Used Only-Home Based)	29
Engineering Services	26
General Construction Co.	24
Consultant - Business & Management	24
Project Coordinator/Consultant	24
Office of Real Estate Agents and Brokers	24
Hemp Products Retailer	22
Installation of Equipment	20
Personal Affairs Mgt	20
Real Estate Salesman	19
Boat Charter Service (per boat)	16

Source: US Virgin Islands Department of Licensing and Consumer Affairs

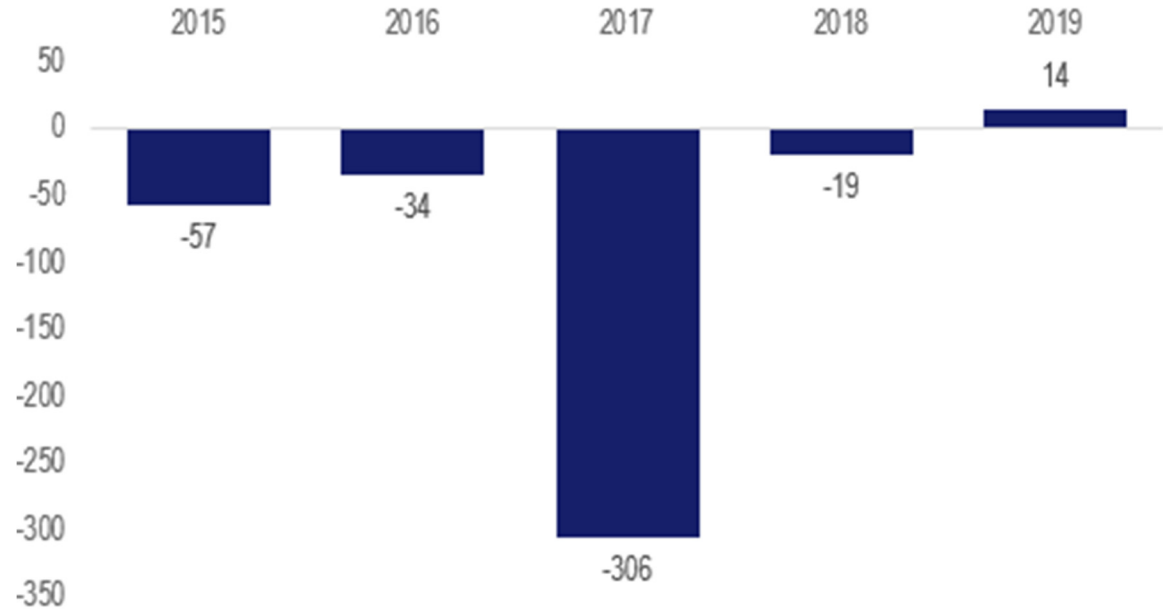
Business Growth

Although new business licenses are being issued, the total net change in companies between 2015 and 2019 was -80 for the U.S. Virgin Islands. This means that the number of closing establishments outweighs the number of opening establishments on the islands.

The annual net change in jobs was negative for each year between 2015 and 2018, with 2017's data reflective of a high number of business closures and a low number of business openings as a result of the hurricanes.

The trajectory shows some promise, as the net change in businesses rebounded from -306 in 2017 to -19 in 2018, and shifted into a positive 14 in 2019. Though 2020 data is not yet available from the Bureau of Labor Statistics, it is expected that the Covid-19 pandemic stalled this momentum.

Virgin Islands Annual Net Change in Businesses

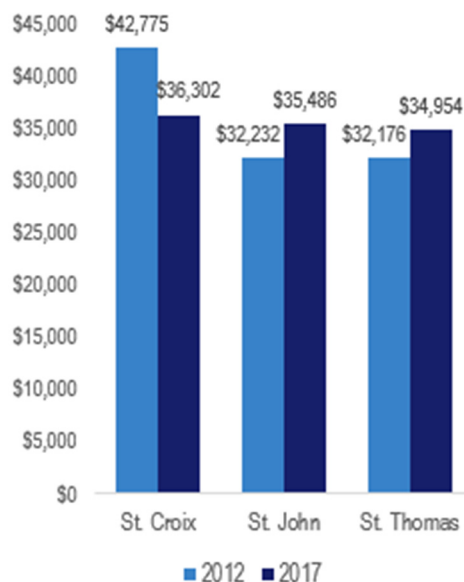


Source: US Bureau of Labor Statistics Business Employment Dynamics Survey

EARNINGS

Average annual gross pay in the U.S. Virgin Islands for non-government sector jobs has decreased slightly since 2012. As of 2017, average annual gross pay in non-government jobs was \$35,495 compared to \$53,625 for government sector jobs.

Average Annual Gross Pay, Non-Government



Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017.

The drop in average annual pay can be attributed to St. Croix, where earnings per job for manufacturing decreased significantly following the closure of the Hovensa refinery.

Virgin Islands Average Annual Gross Pay

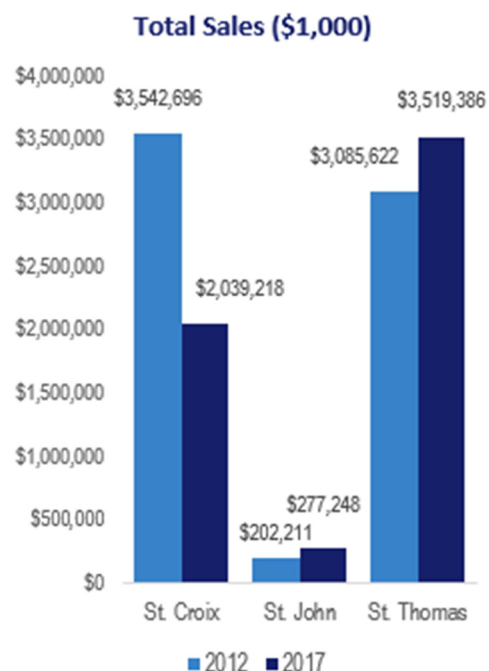
NAICS	Description	2012	2017	2012-2017 Change	2012-2017 % Change
11	Agriculture, Forestry, Fishing and Hunting	\$16,719	\$22,932	\$6,213	37%
21	Mining, quarrying, and oil and gas extraction	\$47,484	\$64,962	NA	NA
22	Utilities	\$57,307	\$66,809	NA	NA
23	Construction	\$39,383	\$54,858	\$15,475	39%
31-33	Manufacturing	\$124,153	\$46,438	-\$77,715	-63%
42	Wholesale trade	\$41,434	\$40,587	-\$847	-2%
44-45	Retail trade	\$23,488	\$24,289	\$801	3%
48-49	Transportation and warehousing	\$32,615	\$33,624	\$1,009	3%
51	Information	\$53,195	\$48,305	-\$4,890	-9%
52	Finance and insurance	\$51,687	\$63,234	\$11,547	22%
53	Real estate and rental and leasing	\$35,386	\$38,510	\$3,124	9%
54	Professional, scientific, and technical services	\$52,797	\$70,813	\$18,016	34%
55	Management of companies and enterprises	\$65,011	\$51,295	-\$13,716	-21%
56	Administrative and support and waste management and remediation services	\$29,544	\$29,880	\$336	1%
61	Educational services	\$26,947	\$30,134	\$3,187	12%
62	Health care and social assistance	\$33,345	\$37,094	\$3,749	11%
71	Arts, entertainment, and recreation	\$23,745	\$26,323	\$2,578	11%
72	Accommodation and food services	\$24,481	\$28,359	\$3,878	16%
81	Other services (except public administration)	\$46,291	\$30,120	-\$16,171	-35%
TOTAL NON GOVERNMENT		\$36,284	\$35,495	-\$789	-2%
GOVERNMENT		\$45,379	\$53,625	\$8,246	18%

Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; Agriculture and Government figures sourced from US Virgin Islands Department of Labor.

SALES

Total sales in the U.S. Virgin Islands decreased by approximately 15% between 2012 and 2017. A drop in manufacturing sales is the largest contributor to this loss.

This loss can be attributed to a decrease in manufacturing sales in St. Croix, again due to the closure of the Hovensa refinery. St. John and St. Thomas experienced slight upticks in sales over this period.



Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017.

Virgin Islands Total Sales by Sector (\$1,000)

NAICS	Description	2012	2017	2012-2017 Change	2012-2017 % Change
21	Mining, quarrying, and oil and gas extraction	NA	-	NA	NA
22	Utilities	366,880	NA	NA	NA
23	Construction	237,929	145,688	(92,241)	-39%
31-33	Manufacturing	1,962,639	175,294	(1,787,345)	-91%
42	Wholesale trade	221,006	527,485	306,479	139%
44-45	Retail trade	1,318,244	1,205,381	(112,863)	-9%
48-49	Transportation and warehousing	333,476	348,008	14,532	4%
51	Information	155,438	123,087	(32,351)	-21%
52	Finance and insurance	492,552	1,153,834	661,282	134%
53	Real estate and rental and leasing	168,337	180,052	11,715	7%
54	Professional, scientific, and technical services	306,886	239,734	(67,152)	-22%
55	Management of companies and enterprises	4,725	38,305	33,580	711%
56	Administrative and support and waste management and remediation services	174,834	236,349	61,515	35%
61	Educational services	3,611	3,704	93	3%
62	Health care and social assistance	313,883	411,635	97,752	31%
71	Arts, entertainment, and recreation	76,348	113,312	36,964	48%
72	Accommodation and food services	539,442	520,417	(19,025)	-4%
81	Other services (except public administration)	152,599	129,364	(23,235)	-15%
TOTAL		6,830,529	5,835,853	(994,676)	-15%

* "-" indicates a value of 0. "NA" indicates data is not available or can't be calculated. Data is unavailable for Agriculture and Government.

Source: US Census Bureau, Economic Census of Island Areas, 2012 and 2017

SECTOR CONCENTRATION

The concentration of industries was analyzed for each island and the Territory as a whole. When an industry is concentrated it means there is a relatively high proportion of workers employed in the sector and often indicates a strength or competitive advantage.

The analysis calculated Location Quotient (LQ) for each industry and island. LQ is a measure of industry concentration, indicating how concentrated a certain sector is in a given area of study, relative to the nation. It can reveal what makes a region “unique” in comparison with the national average. A location quotient greater than 1 indicates that sector employment in the Territory is more concentrated than it is at the mainland U.S. level. A location quotient of 1 indicates that employment in the Territory’s industry sector is equally concentrated as the mainland U.S. as a whole. The table on the following page provides an overview of the location quotient analysis.

Location Quotient (LQ) is a measure of industry concentration, indicating how concentrated a certain sector is in a given area of study, relative to the nation. It can reveal what makes a region “unique” in comparison with the national average. A location quotient greater than 1 indicates that sector employment in the Territory is more concentrated than it is at the mainland U.S. level.

Within the U.S. Virgin Islands, the utilities sector is the most concentrated and driven on St. Thomas. Concentration in utilities can be attributed to the government-run Water and Power Authority (WAPA). It should be noted that due to the way industry data is tabulated, all utility employment in the Territory is captured on St. Thomas.

The other top concentrated sectors in the U.S. Virgin Islands include accommodation and food services (1.94), real estate and rental and leasing (1.62), and retail trade (1.57). These results illustrate the dominance of the tourism industry in the Territory, which has resulted in a large proportion of jobs in sectors that are closely linked with visitation, including arts, entertainment and recreation with a relatively high LQ of 1.32.

Aside from tourism-related sectors and utilities, only the information industry (1.20) and transportation and warehousing (1.53) have a greater concentration than the U.S. overall.

Notable sectors with relatively low concentration in the Territory include finance and insurance (0.67), professional, scientific, and technical services (0.42), healthcare and social assistance (0.63), and manufacturing (0.19). These results illustrate the lack of diversity of the Territory’s economy and indicate the potential need to grow these sectors to create a diversified and resilient economy.

St. Croix

The most concentrated sectors in St. Croix are transportation and warehousing (1.55), retail trade (1.35), and accommodation and food services (1.22).

While St. Croix is not regarded as having the level of tourism activity as St. John and St. Thomas, the data indicates that industry sectors closely related to tourism are important to the local economy in St. Croix.

St. John

St. John is highly concentrated in accommodation and food services (5.30) and real estate and rental and leasing (4.76) reflecting its status as a tourism destination with a generally undiversified local economy.

St. Thomas

In addition to utilities, St. Thomas is most concentrated in accommodation and food services (2.10), retail trade (1.69), and information (1.67). The results also indicate a strong tourism-oriented local economy with a relative lack of job concentration in other industry sectors.

Sector Concentration (Location Quotient)

NAICS	Description	Virgin			
		Islands	St. Croix	St. John	St. Thomas
11	Agriculture, Forestry, Fishing and Hunting	0.02	0.04	0.00	0.00
21	Mining, quarrying, and oil and gas extraction	0.00	0.00	0.00	0.00
22	Utilities	4.84	0.00	0.00	8.53
23	Construction	0.56	0.72	0.95	0.41
31-33	Manufacturing	0.19	0.31	0.12	0.11
42	Wholesale trade	0.60	0.83	0.00	0.50
44-45	Retail trade	1.57	1.35	1.89	1.69
48-49	Transportation and warehousing	1.53	1.55	1.65	1.49
51	Information	1.20	0.72	0.00	1.67
52	Finance and insurance	0.67	0.65	0.32	0.72
53	Real estate and rental and leasing	1.62	1.19	4.76	1.59
54	Professional, scientific, and technical services	0.42	0.48	0.47	0.37
55	Management of companies and enterprises	0.22	0.00	0.00	0.36
56	Administrative and support and waste management and remediation services	0.85	0.77	0.54	0.93
61	Educational services	0.05	0.09	0.07	0.02
62	Health care and social assistance	0.63	0.80	0.08	0.55
71	Arts, entertainment, and recreation	1.32	1.14	1.93	1.38
72	Accommodation and food services	1.94	1.22	5.30	2.10
81	Other services (except public administration)	0.63	0.91	0.51	0.44

Source: Virgin Islands: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; United States: Emsi

SECTOR COMPETITIVENESS

Shift-share analysis examines how much regional job growth or decline can be attributed to local, national, and industry factors. This assessment is used to determine how much of the employment change is based on the competitiveness of a region versus how much is based on national economic and/or industry trends.

The shift-share analysis for the U.S. Virgin Islands shows that the region is competitive in the wholesale trade and health care and social assistance. Overall, the region has been performing worse compared to the national average and shows negative competitive effects in all other sectors.

Shift Share Analysis, US Virgin Islands

NAICS	Description	Industrial Mix	National Growth	Expected Change	Competitive Effect
11	Agriculture, Forestry, Fishing and Hunting	-	-	-	-
21	Mining, quarrying, and oil and gas extraction	-	-	-	-
22	Utilities	(42)	10	(32)	(132)
23	Construction	134	239	373	(804)
31-33	Manufacturing	(24)	25	1	(1,384)
42	Wholesale trade	(38)	33	(4)	190
44-45	Retail trade	(122)	377	255	(733)
48-49	Transportation and warehousing	270	462	732	(48)
51	Information	(27)	44	18	(66)
52	Finance and insurance	(22)	66	43	(121)
53	Real estate and rental and leasing	44	135	179	(28)
54	Professional, scientific, and technical services	55	147	202	(1,176)
55	Management of companies and enterprises	7	18	25	35
56	Administrative and support and waste management and remediation services	87	259	346	(142)
61	Educational services	0	4	4	(19)
62	Health care and social assistance	111	377	488	135
71	Arts, entertainment, and recreation	61	137	197	(4)
72	Accommodation and food services	488	1,037	1,525	(1,652)
81	Other services (except public administration)	(106)	(9)	(115)	(231)

Source: Virgin Islands: US Census Bureau, Economic Census of Island Areas, 2012 and 2017; United States: Emsi

SHIFT SHARE

Factors

Industrial Mix Effect: Represents the share of regional industry growth explained by growth of the specific industry at the national level.

National Growth Effect: Explains how much of the regional industry's growth is explained by the overall growth of the national economy. Therefore, if the nation's whole economy is growing, you would generally expect to see some positive change in each industry in your local region.

Expected Change: The rate of growth of the industry at the national level. Algebraically, the expected change is the sum of the industrial mix and the national growth effects.

Regional Competitive Effect: The most telling of the indicators, this explains how much of the change in a selected industry is due to some unique competitive advantage that the region possesses, because growth cannot be explained by national trends in that industry or the economy as a whole. This is calculated by taking the total regional growth of an industry and subtracting national growth for that same industry. This can be positive even as regional employment declines, thereby indicating regional decline is less than national decline.

Significant Industries

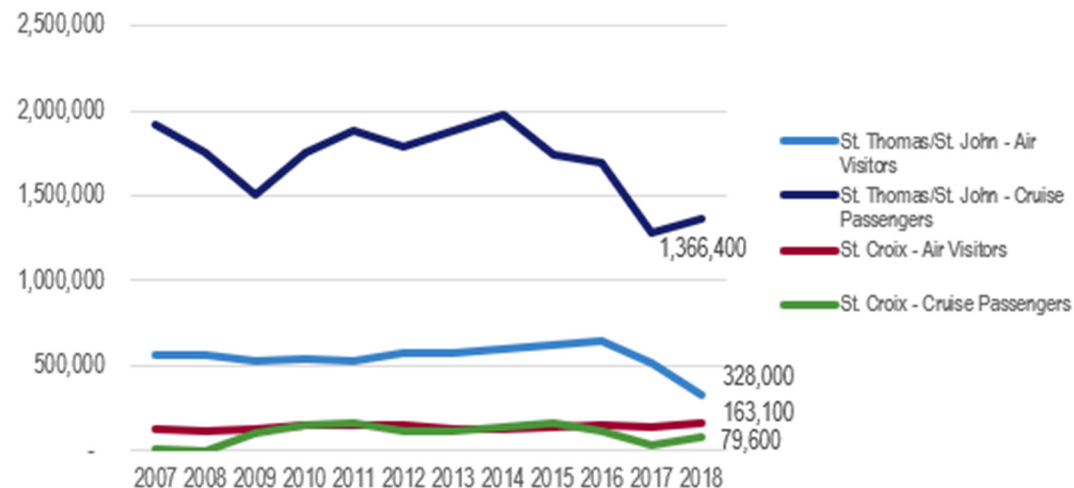
TOURISM

Tourism has been a key driver of the U.S. Virgin Islands' economy. Between 2007 and 2018, the U.S. Virgin Islands averaged nearly 2.5 million visitors annually bringing over \$1.2 billion in visitor spending to the Territory.¹⁶

Most visitors to the U.S. Virgin Islands visit St. Thomas by way of cruise ship. In 2018, nearly 1.4 million cruise passengers visited St. Thomas, over four times the amount of air visitors to the island (328,000). In the same year, 163,100 air visitors and 79,600 cruise passengers visited St. Croix.

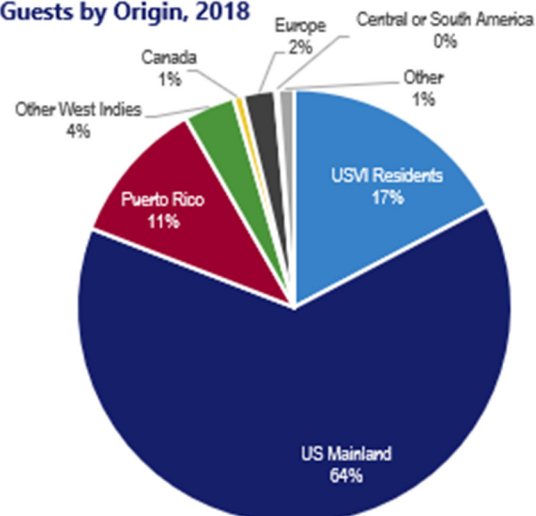
Most hotel guests are from the U.S. mainland (64%). This is followed by 17% of guests who are residents of the U.S. Virgin Islands. Eleven (11%) of guests are from Puerto Rico and 4% of guests are from other Caribbean island locations. A small amount of guests are from Canada, Europe, and other locations.

Visitor Breakdown



Source: US Virgin Islands Bureau of Economic Research

Hotel Guests by Origin, 2018



Source: US Virgin Islands Bureau of Economic Research

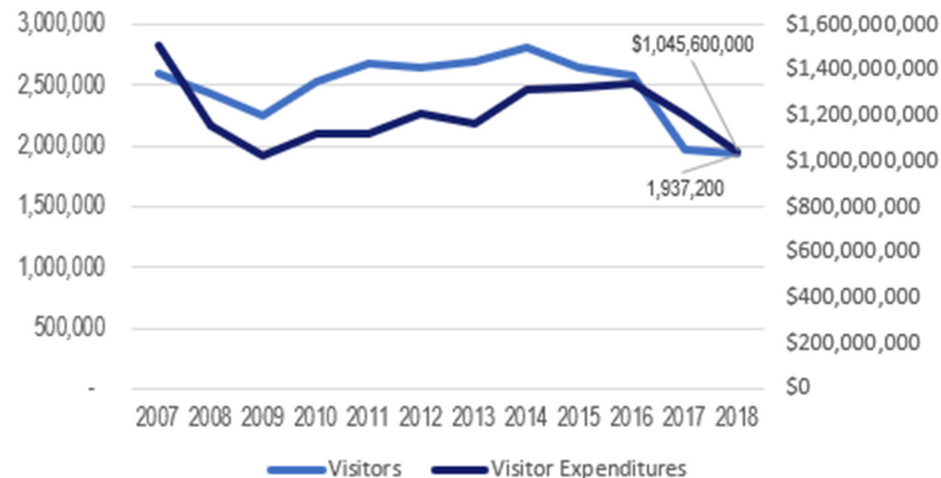
¹⁶ Source: US Virgin Islands Bureau of Economic Research.

Industry Challenges

Following the 2008/2009 recession, the number of visitors to the U.S. Virgin Islands and accompanying expenditures trended upward. While the number of visitors to the region began decreasing slightly in 2015, there has been a more substantial decrease in visitors and spending following the 2017 hurricanes. This is likely to be further exacerbated by global trends resulting from the Covid-19 pandemic and reduced travel worldwide.

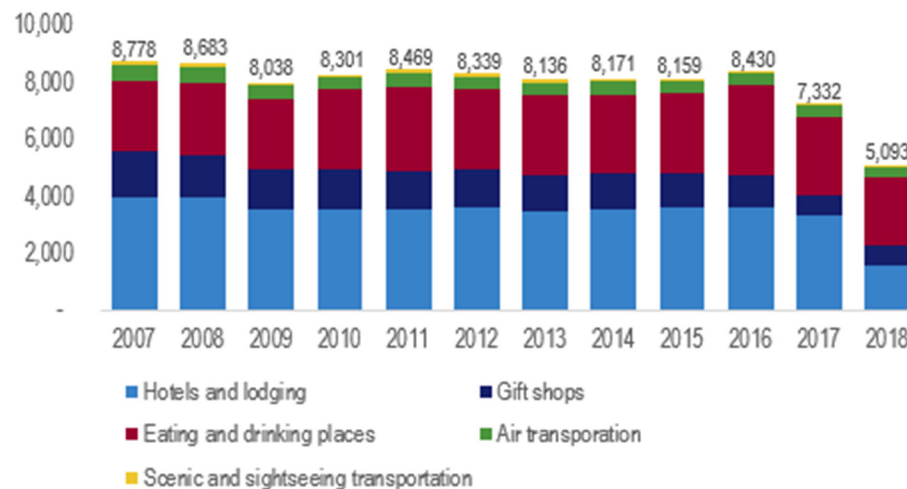
As a result of less tourism activity, industry employment has suffered. Since 2007, tourism-related employment in the U.S. Virgin Islands has decreased by 42% from 8,778 jobs to 5,093 jobs (in 2018). The bulk of industry employment is at hotels and lodging and eating and drinking places, with hotels and lodging experiencing the biggest percent decrease in employment since 2007 (54%).

Total Visitors and Expenditures, US Virgin Islands



Source: US Virgin Islands Bureau of Economic Research

Tourism Related Employment, US Virgin Islands



Source: US Virgin Islands Bureau of Economic Research

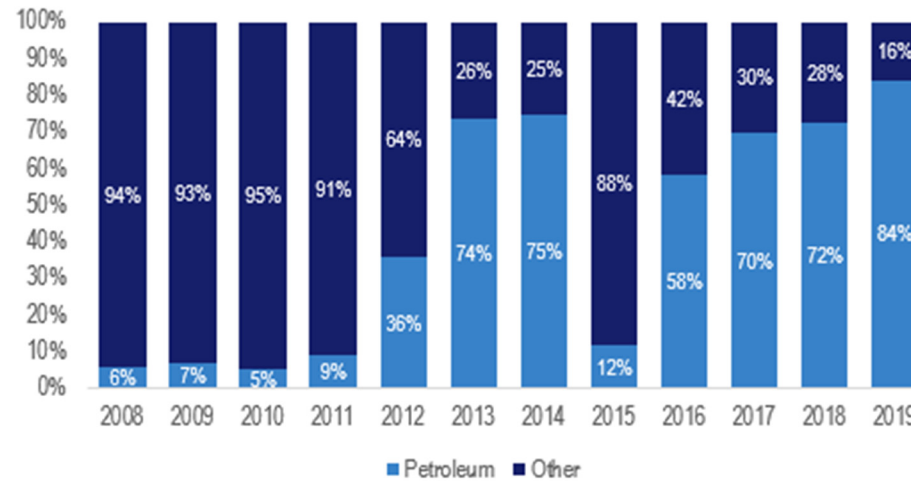
PETROLEUM

The storing and shipping of petroleum products is a critical economic activity for the U.S. Virgin Islands. Petroleum products accounted for 42% of total good exports in 2018. However, this is largely a reexport business, and little value is added in the territory. The Limetree Refinery restarted operations in February 2020 and it is expected that much more value-added output will occur, and the value of exports will increase. Assuming this occurs, the facility would meet demand for low-sulfur fuels from Latin American and Caribbean markets.

According to the U.S. Census Bureau, over \$788.6 million in petroleum imports made up 84.1% of the U.S. Virgin Islands' 2019 imports and nearly \$598.0 million in petroleum exports made up 95.9% of total exports.

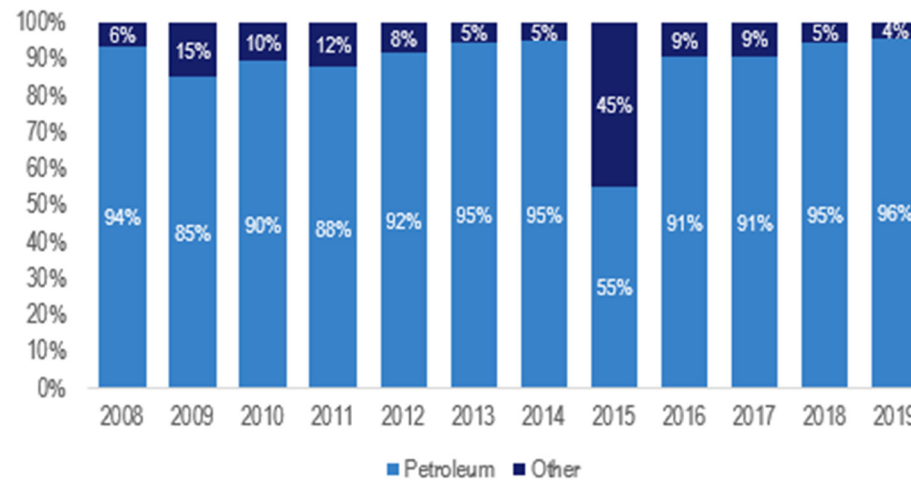
Petroleum exports have been a substantial portion of U.S. Virgin Islands international trade for many years. Imports on the other hand started to become increasingly important in 2012 and became a significant portion of the region's imports in 2013.

Petroleum Share of US Virgin Island Imports



Source: US Census Bureau

Petroleum Share of US Virgin Island Exports



Source: US Census Bureau

RUM

Globally, rum production generates 6.2% of revenue for the distilled spirits manufacturing industry. Over the last five years, rum's share of the global market has increased as new spice blends have become increasingly popular across the world.¹⁷

Within the U.S. Virgin Islands, there were 210 jobs and 16 establishments in the beverage and tobacco product manufacturing industry in 2019. Jobs are concentrated in St. Croix where Captain Morgan, one of the most popular rums in the world, has a distillery. Other brands, including Cruzan in St. Croix and Bones in St. Thomas, also produce rum in the U.S. Virgin Islands.

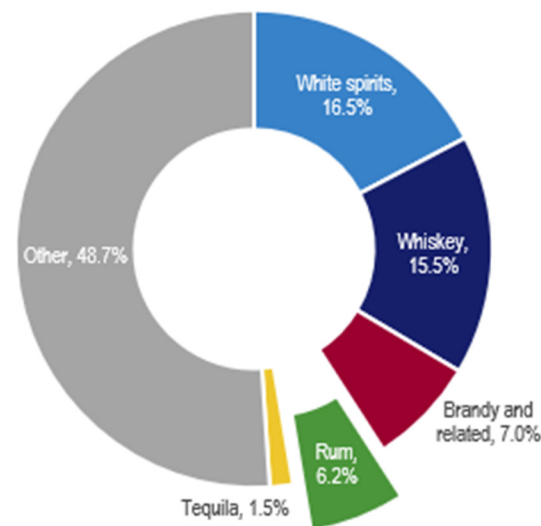
Diageo, which produces Captain Morgan, is one of the world's largest spirits manufacturers. The company manages six of the world's top 20 spirits brands, services 180 countries around the world, and boasts a nearly 18% market share in the spirits industry.

Both the U.S. Virgin Islands and Puerto Rico benefit from rum "cover-over" payments from the US federal government, which transfer US excise tax collections on rum to each territory based on the amount of rum produced.¹⁸ These cover-over payments are a significant revenue source for the U.S. Virgin Islands. Both territories have used a portion of their cover-over proceeds to incentivize distillers, resulting in what has amounted to a bidding war.

¹⁷ IBISWorld.

¹⁸ Molasses, the key ingredient to rum, must be imported from outside the U.S. Virgin Islands.

Share of Global Spirits Manufacturing Revenue, 2019



Source: IBISWorld.

Beverage/Tobacco Manufacturing Jobs, US Virgin Islands, 2019

	Jobs	Establishments	Total Wage
St. Croix	175	9	\$3,799,035
St. John	35	6	\$364,227
St. Thomas	Confidential	1	Confidential
US VIRGIN ISLANDS	210	16	\$4,163,262

*Data is for NAICS 312: Beverage & Tobacco Product Manufacturing

Source: US Virgin Islands Department of Labor

AGRICULTURE/AQUACULTURE

In 2018, the U.S. Virgin Islands had 565 farms accounting for 9,324 acres of farmland. This is an increase in number of farms by 158% and in acres of farmland by 59% since 2007. Over the same time period farms became smaller; the average farm size decreased from 26.9 acres in 2007 to 16.5 acres in 2018.

Farms and Farmland, US Virgin Islands

	2007	2018	Change	% Change
Number of Farms	219	565	346	158%
Land in Farm Size (acres)	5,881	9,324	3,443	59%
Average Farm Size (acres)	27	17	(10)	-39%

Source: USDA 2018 Census of Agriculture

Across most farm size groups, the number of farms increased significantly. Small farms with less than 3 acres increased by 212% (182 farms) and represented the largest change.

Farm Counts by Size, US Virgin Islands

	2007	2018	Change	% Change
>3 acres	86	268	182	212%
3-9 acres	63	139	76	121%
10-19 acres	35	77	42	120%
20-49 acres	15	44	29	193%
50-99 acres	12	23	11	92%
100+ acres	8	14	6	75%

Source: USDA 2018 Census of Agriculture

Vegetables account for 34% of total sales and have experienced the largest increase in dollar sales since 2007. The largest vegetable crops (as considered by the USDA) by pounds produced are cucumbers, tomatoes, and squash. By the same measure, the largest fruit commodity is bananas.

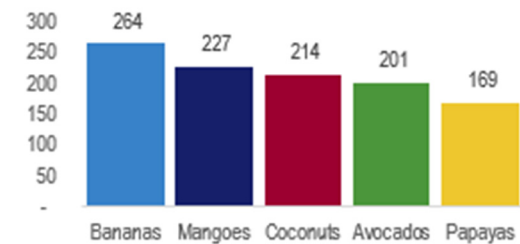
Commodity Group by Value of Sales, US Virgin Islands

	2007	2018	Change	% Change
Vegetables	\$366,195	\$1,130,809	\$764,614	209%
Nursery Crops	\$946,636	\$725,125	-\$221,511	-23%
Fruit and nuts	\$216,877	\$544,305	\$327,428	151%
Other livestock	\$190,190	\$465,247	\$275,057	145%
Field and forage crops	\$49,104	\$128,692	\$79,588	162%
Poultry	\$4,620	\$109,662	\$105,042	2274%
Cattle and calves	\$165,150	\$100,349	-\$64,801	-39%
Hogs and pigs	\$107,200	\$83,590	-\$23,610	-22%
Chicken eggs	NA	\$35,503	NA	NA
Fish	NA	NA	NA	NA
Total	\$2,045,972	\$3,323,282	\$1,277,310	62%

Source: USDA 2018 Census of Agriculture

Bananas are produced by the highest number of farms. This is followed by mangoes, coconuts, avocados, and papayas.

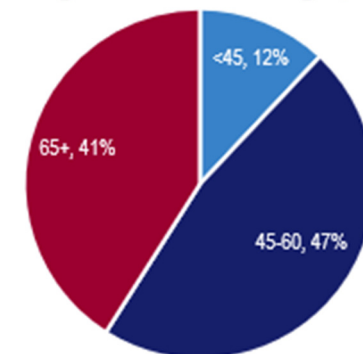
Top Commodities by Number of Farms, 2018



Source: USDA 2018 Census of Agriculture

Farmers are aging. Only 12% of farmers in the U.S. Virgin Islands are younger than 45. 47% are age 45-64 and 41% are 65 or older.

US Virgin Island Farmer Ages, 2018



Source: USDA 2018 Census of Agriculture

Of these farmers, 65% have spent over 10 years working on a farm. For 63% of farmers, farming is their primary occupation while 37% of farmers have another primary occupation. Thirty-six percent (36%) of farmers worked exclusively on their farm, while 33% of farmers spent 1-199 days working off the farm, and 31% spent 200 or more days working off the farm.

Entrepreneurship

BUSINESSES AND JOBS

According to the U.S. Small Business Administration (SBA), there are 2,514 small establishments in the U.S. Virgin Islands.¹⁹

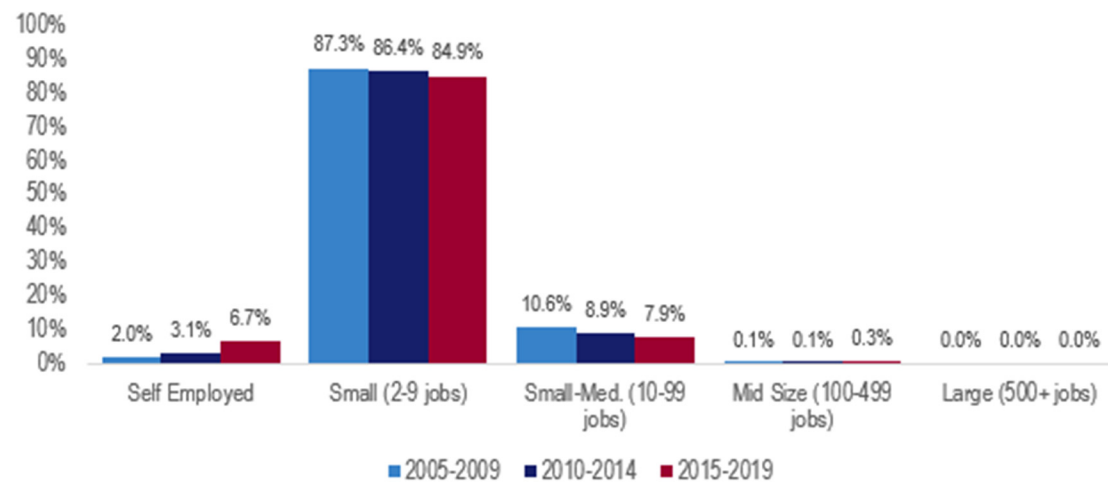
The SBA determines business “size standards,” which are usually stated in number of employees or average annual receipts. These represent the largest size that a business may be to remain classified as a small business for SBA programs. The definition of “small” varies by industry.

Since 2005, a number of “small” establishments have made up a decreasing portion of the region’s companies and jobs. The proportion of small-sized establishments in the U.S. Virgin Islands has decreased from 87.3% in the 2005-2009 period to 84.9% in the most recent 2015-2019 timeframe. At the same time, the percentage of the U.S. Virgin Islands’ total jobs at small companies has decreased from 63.2% to 56.5%. Self-employed and mid-size companies (100-499 employees) make up an increasingly larger portion of the economy.

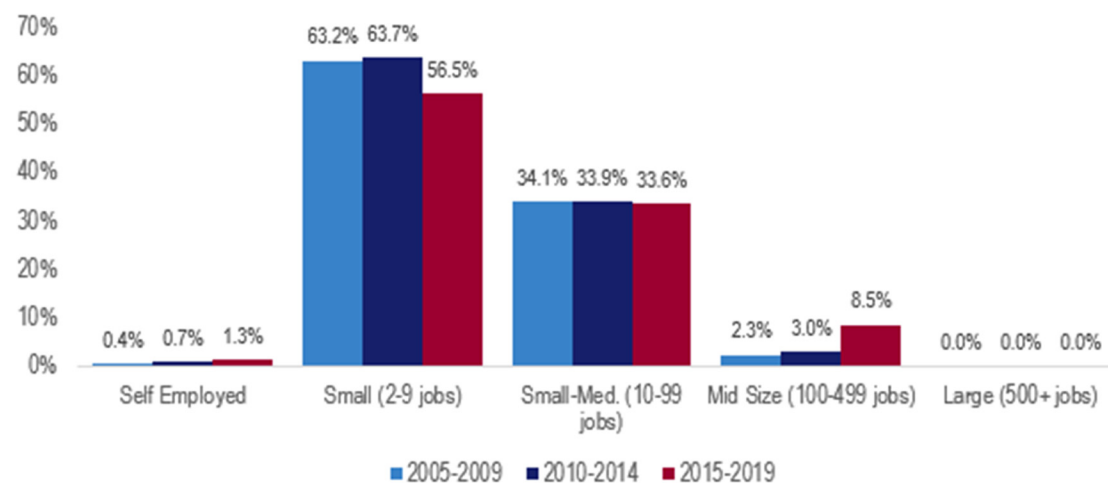
Job Changes

Most new jobs in the U.S. Virgin Islands are created either through the expansion of existing businesses (76.9% of new jobs) or new business starts (22.8%). Few new jobs can be attributed to companies that

Virgin Islands Establishment Size - % Total Establishments



Virgin Islands Establishment Size - % Total Jobs



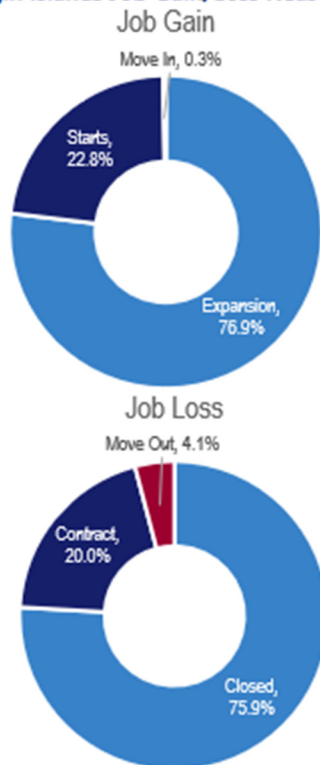
Source: YourEconomy

¹⁹2020 Small Business Profile: US Virgin Islands. U.S. Small Business Administration Office of Advocacy.

move their entire operation into the U.S. Virgin Islands from elsewhere (0.3%).

Job losses are similarly distributed. The majority of job losses were the result of business closures (75.9%). Contracts ending represented 20.0% of losses, and companies leaving the U.S. Virgin Islands accounted for 4.1%.

US Virgin Islands Job Gain/Loss Reasons, 2019



Source: YourEconomy

Small Business Programming

The U.S. Virgin Islands' Small Business Development Center (SBDC) is intended to grow the territory's economy by providing the tools, training, and guidance that small businesses need to succeed. With locations on all three islands, the SBDC offers workshops, tools, and advising to businesses across the U.S. Virgin Islands. In response to Covid-19, the SBDC has hosted 2-3 virtual events per week and has continued to provide coaching to small businesses, including a four-part series on how to use Quickbooks.

Small business development in the U.S. Virgin Islands is also aided by the Virgin Islands Economic Development Authority (USVIEDA or VIEDA). Notably, VIEDA supports a Small Business Incubator, which surrounds new and existing entrepreneurs with the necessary support services to foster sustainable economic growth and to advance the region's entrepreneurial endeavors.

According to USVIEDA, the Small Business Incubator promotes resource collaborations between the local university, research organizations, government and other community institutions. Additionally, it mentors entrepreneurs through the process of launching a new or expanding an existing business.

Other initiatives supported by the USVIEDA include the Made in the USVI initiative, which helps to promote small-scale manufacturing and artisans.

INCUBATOR

USVIEDA Client Success Stories

NEARix, LLC has worked with the University of the Virgin Islands to provide internships and to produce the first student Hackathon.

Island Services Group, LLC completed the Spanish Town Solar Farm project. The company is currently working on a solar project at the new Margaritaville Hotel in St. Thomas.

Neighborhood Pharmacy, LLC is a pharmacy in Frederiksted that opened in August 2015. They have hired four full-time employees and one part-time employee.

Netwave Unlimited Services is a Fiber Optic Technician/Installer training program provider. The company has been extremely successful on St. Croix, particularly in job placement after graduation. As a result of this success, they began offering classes in St. Thomas and have been approached to bring their training program to Massachusetts and Dubai.

INNOVATION AND ENTREPRENEURSHIP

Entrepreneurship Programming

The University of the Virgin Islands (UVI) offers formal education programs to support entrepreneurship. UVI offers both a minor, which is open to all UVI students, and a certificate in entrepreneurship, which is open to students and anyone else in the community.

The entrepreneurship minor is designed to provide students with the tools and experiences necessary to explore the role of new venture creation within their primary discipline. The certificate program will provide anyone interested in pursuing entrepreneurship with skills that may be utilized to expand current career possibilities or maximize a current business venture.

In addition to these degree programs, UVI provides access to other entrepreneurship and innovation resources. In 2016, UVI launched Innovation Centers as places for students to gather and discuss ideas. These spaces include equipment such as computers, a 3D imaging camera, and white boards that can be leveraged by students to create prototypes of new ideas. These centers have been established at both campuses of the school.

Programming such as the 13D Entrepreneurship Competition, in which students pitch business plans for a chance of winning seed money; Hackfest, where students work together to find technology-based solutions to real-world problems; and Health Design Slam, in which students design and build health-promoting apps and devices, round out UVI's entrepreneurship offering.

Additional entrepreneurship programming is offered in the U.S. Virgin Islands outside of UVI. RTPark, for example, was created in 2002 by UVI leaders working closely with members of the legislature and the private sector in an attempt to diversify the territory's economy and to stimulate growth. The park offers tax incentives and services for businesses and aims to attract companies in financial technology, health and medicine, energy research, and business process outsourcing. Through its structured three-month pre-accelerator program, early-stage companies have an opportunity to grow and scale their businesses in the U.S. Virgin Islands. For more detailed descriptions of entrepreneurship and small business resources see Volume 5.

Patents

The number of patents issued is indicative of the amount of innovation occurring within a region. Between 2000 and 2015, 46 patents were issued to inventors residing in the U.S. Virgin Islands. 22 of these were in St. Thomas, 19 in St. Croix, and 5 in St. John. Though the number of patents issued is small, the number of patents issued annually has been trending upward over this period.

Number of Patents Granted

Year	US Virgin				United States
	Islands	St. Croix	St. John	St. Thomas	
2000	3	2	-	1	85,068
2001	3	3	-	-	87,600
2002	1	-	-	1	86,969
2003	2	-	-	2	87,891
2004	2	1	-	1	84,256
2005	4	2	-	2	74,632
2006	1	1	-	-	89,814
2007	2	2	-	-	79,522
2008	2	2	-	-	77,500
2009	1	-	-	1	82,379
2010	2	-	-	2	107,788
2011	3	-	2	1	108,614
2012	3	-	-	3	121,013
2013	6	1	1	4	133,582
2014	4	4	-	-	144,610
2015	7	1	2	4	140,928
Total	46	19	5	22	1,592,166

*Represents count of utility patents originating from each geography; patents are distributed by year of patent grant. 2015 is the most recent year for which data is available.

Source: US Patent and Trade Office

Real Estate

RESIDENTIAL MARKET

The number of residential homes and condos sold annually has been trending upward in the U.S. Virgin Islands since 2010. In 2018, 539 homes were sold and 382 condos were sold.

US Virgin Islands Residential Sales



Source: US Virgin Islands Bureau of Economic Research

The combined St. Thomas/St. John residential real estate market has been slightly more active than St. Croix, with more total homes and condos sold over the 2010-2018 time period.

Number of Homes Sold

	US Virgin Islands	St. Croix	St. Thomas/St. John
2010	278	158	120
2011	272	134	138
2012	252	106	146
2013	340	146	194
2014	355	161	194
2015	355	175	180
2016	431	205	226
2017	353	191	162
2018	539	266	273
Total	3,175	1,542	1,633

Source: US Virgin Islands Bureau of Economic Research

Number of Condos Sold

	US Virgin Islands	St. Croix	St. Thomas/St. John
2010	253	63	190
2011	162	63	99
2012	336	39	297
2013	196	80	116
2014	286	140	146
2015	289	123	166
2016	325	138	187
2017	290	135	155
2018	382	221	161
Total	2,519	1,002	1,517

Source: US Virgin Islands Bureau of Economic Research

Sale prices of residential units, both homes and condos, have remained relatively flat over this period. The average sale price of homes has decreased slightly since 2014, as has the sale price of condos since 2017 (in 2020 they began to rise).

Average Home Sale Price

	US Virgin Islands	St. Croix	St. Thomas/St. John
2010	\$474,728	\$388,536	\$588,214
2011	\$533,862	\$379,024	\$684,213
2012	\$440,808	\$391,310	\$476,745
2013	\$538,369	\$306,083	\$713,183
2014	\$568,295	\$321,910	\$772,770
2015	\$508,811	\$368,789	\$644,945
2016	\$500,791	\$336,215	\$650,076
2017	\$491,574	\$350,495	\$646,118
2018	\$455,350	\$318,495	\$588,727

Source: US Virgin Islands Bureau of Economic Research

Average Condo Sale Price

	US Virgin Islands	St. Croix	St. Thomas/St. John
2010	\$227,708	\$178,533	\$244,013
2011	\$202,852	\$210,361	\$198,075
2012	\$247,630	\$154,485	\$259,862
2013	\$208,205	\$147,438	\$250,114
2014	\$201,990	\$148,059	\$253,705
2015	\$215,142	\$174,096	\$245,557
2016	\$223,237	\$183,861	\$252,291
2017	\$225,480	\$160,923	\$281,708
2018	\$203,622	\$179,265	\$237,057

Source: US Virgin Islands Bureau of Economic Research

COMMERCIAL MARKET

Retail and Small Office

Within the U.S. Virgin Islands there is an adequate supply of available sites for retail and small office/service operations. At the time of this writing, Seaglass Properties, a real estate brokerage, shows 103 commercial property listings across the three islands, of which the vast majority were for investment residential, retail, or small service/office uses.²⁰ Sixty-three (63) of these listings are in St. Croix, 33 in St. Thomas, and 7 in St. John. It is anticipated that there will be an increase in availability in this category, particularly in St. Thomas, as more businesses close due to Covid-19's impact on tourism and the lack of cruise ship arrivals.

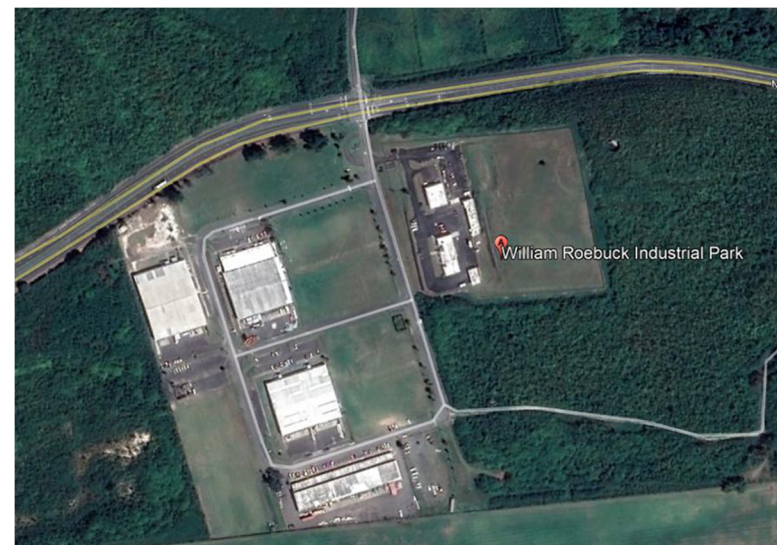
Large Commercial Properties

There are many fewer opportunities for larger commercial uses. Of the 103 commercial property listings, only 27 were of 5,000 square feet or more. Many of these are residential investment properties and two are hotels. Seven are listed as "Under Contract" at the time of this writing, further reducing the supply.

Industrial

There are a few industrial property availabilities within the territory. Two industrial parks, the 158,700-square-foot William D. Roebuck Industrial Park on St. Croix and the 20,000-square-foot Virgin Islands Industrial Park on St. Thomas, are operated by USVIEDA: both are reported to be fully occupied

as of January 2021. The William D. Roebuck Industrial Park appears to have land for additional development, but information on this is not available. It was reported that ELAXiMA TechStyles, Inc., which plans to grow and process hemp, is seeking to lease seven acres of raw land at the park at \$10,000 per acre for a term of 25 years, with the option to renew for another 25 years to erect a manufacturing plant that would employ 300 to 400 people. This is still in negotiation.²¹



William Roebuck Industrial Park, St. Croix. Source: Google Earth



Virgin Islands Industrial Park, St. Thomas. Source: Google Earth

²⁰ Source: <http://www.seaglassvi.com/commercial/>

²¹ St. Thomas Source, 9 Dec. 2020.

There are additional industrial parks beyond those operated by USVIEDA, including the UVI Research and Technology Parks. The RTPark has a 20,000-square-foot headquarters adjacent to the UVI campus on St. Croix; it was substantially damaged during the 2017 hurricanes and is only now being reoccupied. As of January 2021, Peter Chapman, the RTPark director reported that the repaired building currently has space for one to three new occupants, but that this would be filled quickly. The RTPark’s proposed Virgin Islands Tech Village in Estate Lower Love on St. Croix (across the street from the UVI campus) will include 10,500 square feet of commercial space focused on developing sustainable agriculture. The RTPark’s St. Thomas location does not have any available space, and many of the park’s client companies are located elsewhere on the island.

Beyond industrial parks, there is some publicly owned land that is suitable for industrial development. For example, the Virgin Islands Port Authority owns 74.8 acres in Estate Lindbergh Bay (parcel 68) on St. Thomas in close proximity to the UVI campus. This area is quite hilly however and is adjacent to a residential neighborhood to the east. This site would be more suitable for multistory office buildings with smaller footprints than for industrial operations.

Some portion of the approximately 1,244-acre Renaissance Industrial Park is available for future development. Not all of the land in this park is developable, including the approximately 215 acres of water which is the port and turn basin, 149-acre cooling pond, and the 22.5-acre Diageo Captain

Morgan rum distillery. Nonetheless, this tract of land is the largest currently available for future business development.

Renaissance Park Property Breakdown

Lot	Lot Name	Acreage
1	Northeast	92.1
2	Diageo	22.5
3	The Hill	20.2
4	Limestone Borrow Area 1	31.1
5	Limestone Borrow Area 2	25.9
6	Limestone Borrow Area 3	5.4
7	Energy Island East	26.8
8	Energy Island North	23.9
9	Energy Island West	33.5
10	Area A Mound	80.8
11	Area A Units	87.4
12	Area B	91.7
13	Central	9.8
14	Turning Basin West	14.2
15	Port Renaissance	201.6
16	Southeast	211.7
17	Lower Cooling Pond	149.3
18	Lower Cooling Pond Fringe	62.3
19	Seawater Intake	10.6
20	West Access	2.9
21	Road Association	40.5
Total		1,244.2

Source: Renaissance Industrial Park

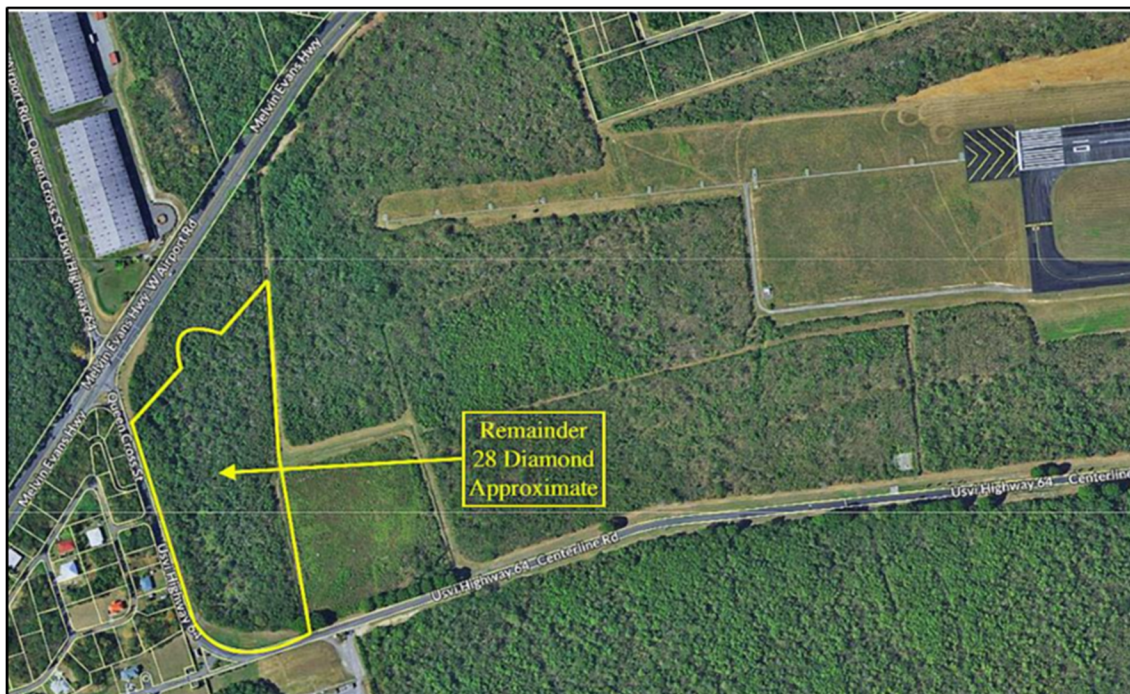


Renaissance Park Conceptual Plan. Source: St. Croix Renaissance Group

An additional site of 12.27 acres at the west end of St. Croix airport is zoned for commercial use, but would be suitable for industrial development given its location close to the flight path of arriving aircraft.

Agricultural

In 2018 there were 9,324 acres of agricultural land in the Territory, but this inventory has been declining. While there were once 2,000 acres of designated agricultural land on St. Croix, this inventory has been reduced to about 800 acres as the land was used for other purposes. There are, however, other large tracts of land, much of which is owned by the government, that could be put into agricultural use.



12.27 Acre Site at West End of St. Croix Airport. Source: Google Earth

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4

VOICES & VISION OF THE PEOPLE



Photo Source: U.S. Virgin Islands Department of Tourism



VOLUME 4

VOICES & VISION OF THE PEOPLE

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COMMON DENOMINATORS & DISTINGUISHING CHARACTERISTICS

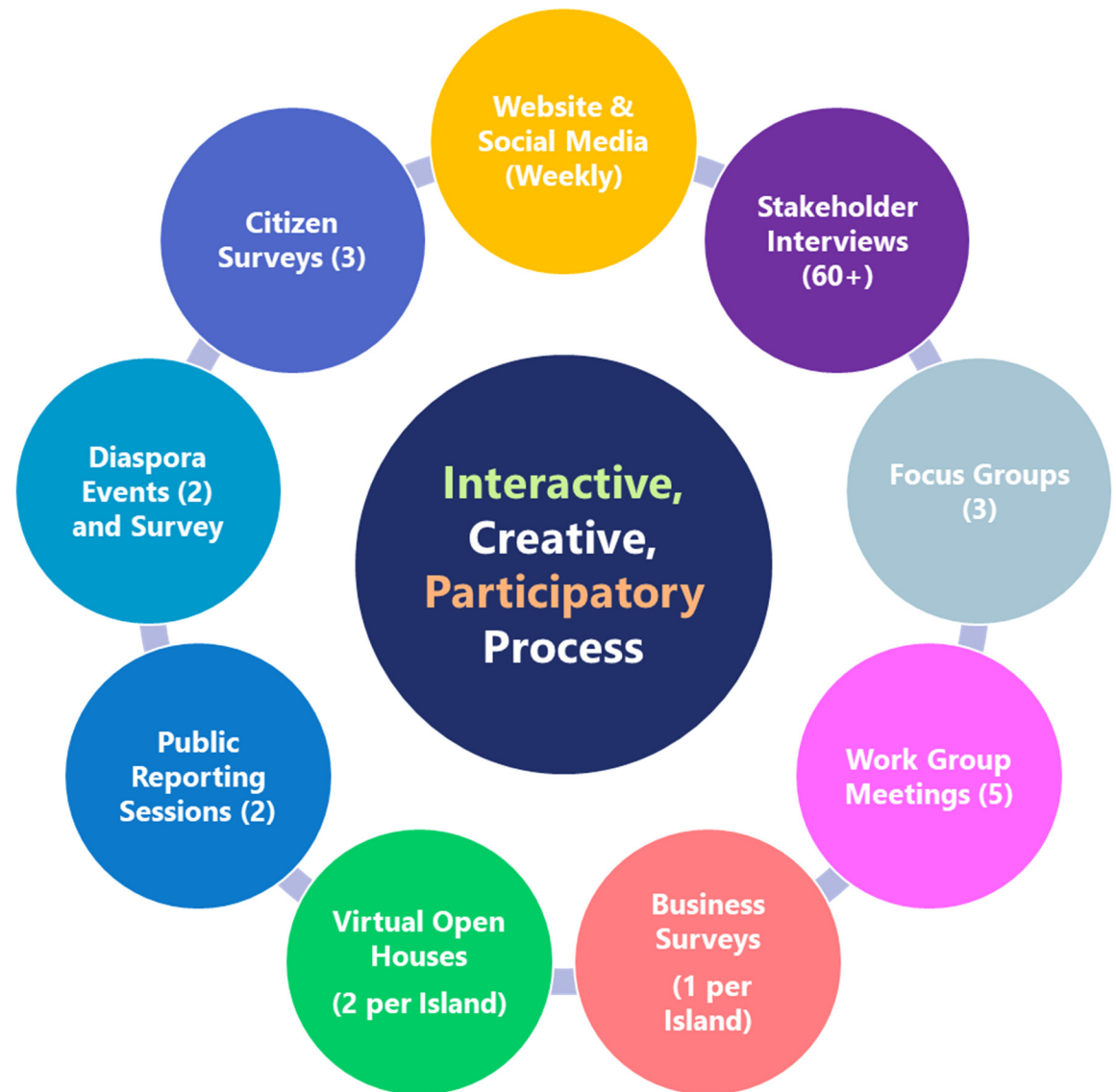
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OUTREACH & ENGAGEMENT

Vision 2040 is a community-driven economic development plan rooted in the long-term aspirations and outlook of U.S. Virgin Islands residents and those throughout the diaspora. The planning process included extensive outreach and engagement efforts to ensure that that Vision 2040 reflects the ideas, priorities, and concerns of a broad cross-section of the U.S. Virgin Islands community.

Meaningful participation by the community during the planning process was considered essential to building trust among participants and stakeholders. This trust and understanding led to community support and buy-in, helping to reinforce that the final strategy would include ideas that had been vetted by community actors, and lead to an actionable economic development strategic plan.

The planning process is essential to build trust among participants and stakeholders. This trust and understanding helps build community support.



The planning process was conducted during the Covid-19 pandemic, which required utilizing an extensive array of virtual engagement techniques including video conference meetings, online surveys, social media and website engagement, virtual open houses, and other techniques.

Website and Social Media

A dedicated website (www.USVI2040.com) was developed as a one-stop information and engagement portal. The website featured a calendar of upcoming events, background information on the process, links to online surveys, a comment form to

send questions and comments directly to the project team, and a resources page with meeting materials, project documents, links, and other related project resources for download.

The Vision 2040 process also included a robust social media presence, including a dedicated Facebook page that was used to provide regular updates on the project, promote opportunities for public engagement, and live stream public meetings. A Vision 2040 YouTube channel was also created to make recordings of public meetings and engagement events available for repeat viewing.



The Vision 2040 Website Homepage

COMMUNITY ENGAGEMENT PRINCIPLES

The community engagement process was carried out based on the following principles.

- ✓ **Inclusive.** All residents, including traditionally marginalized and hard to reach populations, are aware of the planning process, know how to provide input, and can provide input.
- ✓ **Transparent.** The process is transparent, and activities and scope of the Project Team are known to all.
- ✓ **Meaningful.** Community members have an opportunity early on to shape the focus and direction of the plan.
- ✓ **Accountable.** Community members can see and ensure that their input was considered as part of the planning process and was incorporated as necessary into the draft plan.
- ✓ **Accessible.** That the plan is shared and communicated in such a way that is easily understandable by all residents.



Two video commercials were created as part of the Vision 2040 plan to encourage participation in public engagement events and activities.

Outreach and Promotion

The Vision 2040 process included a wide-reaching outreach and promotion campaign to raise awareness of the plan and gain input from a large and diversified group of residents and stakeholders. Promotional activities included the following:

- **Two Video Commercials**
- **180 Promotional Radio Spots**
- **6 Radio Interviews**
- **Radio & Television Broadcast of Public Meetings**
- **Electronic Board Advertising**
- **Print Newspaper Advertisements**
- **Influencer Promotion of Vision 2040**
- **Social Media Page and Engagement**
- **Dedicated Vision 2040 Website**

- **Vision 2040 Subscriber List E-mail Blasts**
- **Five (5) Published News Articles**

Public Engagement

A total of eleven (11) engagement events were held throughout the research process along with three (3) community surveys.

PUBLIC KICKOFF MEETING: This meeting featured a presentation by the project team providing an overview of the Vision 2040 process and details on how community members could provide input throughout the process.

VIRTUAL OPEN HOUSES (3): A virtual open house was held for each individual island. Each virtual open house was web-based on the project website and featured an interactive experience for participants who could provide input via eight “stations” or activities. The stations included:

VOICES OF THE PEOPLE BY THE NUMBERS

3,116 Total Survey Responses

1,117 St. Croix Community survey

602 St. Thomas Community survey

203 St. John Community survey

706 Diaspora (Live Abroad) survey

488 Business Owner survey

4,360 Total Website Users

570 Website Subscribers

60+ Stakeholder Interviews


1. **Research Briefing:** A brief overview of key economic research findings.
2. **From the Future:** Participants were asked to write a hypothetical message from the future outlining what they hope the U.S. Virgin Islands will be like in twenty years.
3. **Post-it! Strengths and Opportunities:** A virtual bulletin board where participants added notes about what they believe are the key positive things the Territory has going for it and what it can capitalize on in the future for success.
4. **Post-it! Challenges and Weaknesses:** Similar to the previous station, this exercise invited participants to help identify critical issues that must be addressed for economic success over the next two decades.
5. **Map-It! Economic Assets:** This station offered a chance for participants to drop a pin on a map to identify key economic assets on their island.
6. **Map-It! Economic Weaknesses:** This station offered a chance for participants to drop a pin on a map to identify key economic assets on their island.
7. **Governor for a Day:** In this participatory exercise, participants were able to score and rank various economic development priorities.
8. **Open Thinking:** As a final station, this provided a chance to collect any additional thoughts, comments, and ideas from participants.

Economic Strengths & Opportunities - St. Croix

Click the plus sign in the bottom right to add a new idea. Use the thumbs up/down buttons to show where you agree or disagree with ideas from others.

Rum tourism

Barbados has 2 distilleries on the top 10 Caribbean, why can't STX?




These 10 rum distilleries are the best in the C...
A golden nectar born in the Caribbean, rum is ...
10best

👍 0 👎 0

➕ Add comment

Existing Farming Infrastructure

We can tap into the knowledge, facilities, and distribution networks already in place and strive to feed everybody



👍 1 👎 0

Caribbean Hub

St. Croix geographic location, untapped ports, grossly underutilized southern shore (for industry), large and underutilized airport (with room to grow) that adjoins unused government land and the High-Speed Fiber Infrastructure make it suitable for a stepping stone to all of the other Caribbean islands.

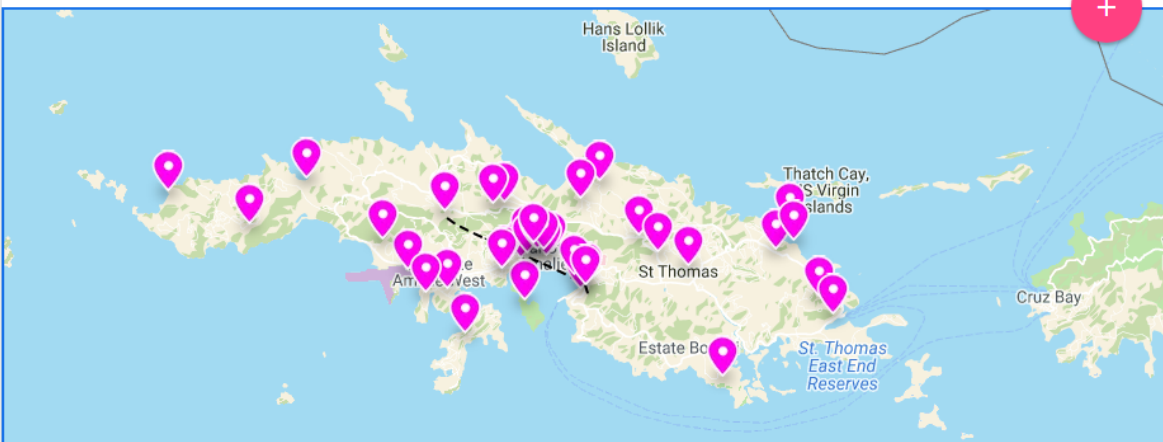
👍 0 👎 0

➕ Add comment

When you can work from anywhere... +

Map the Economic Assets - St. Thomas

Zoom into the asset and click the pink plus sign to pin it. The first white box will ask what you're pinning, if your asset is not listed, just choose the latitude/longitude option and name it yourself. If someone already mapped the asset, give it a 'thumbs up' and feel free to add your own comment. Please do not delete any pins.



Examples of two stations part of the Virtual Open House for each island.

PUBLIC FORUM EVENT



A territory-wide virtual public forum meeting was held on November 23, 2020 to collect public input around economic strengths, challenges, and opportunities for the U.S. Virgin Islands. The meeting was held via Zoom and broadcast throughout the territory on WTJX and Government Access Channel as well as livestreamed on Facebook via multiple Facebook pages, including Government Access Channel, Vision 2040, USVIEDA, WTJX, and Government House. It was also broadcast on radio stations throughout the U.S. Virgin Islands. A telephone hotline was set up to allow those without internet access the ability to call into the meeting to provide comments.

The Vision 2040 Public Forum was widely available through multiple channels and provided an opportunity for all residents to come together to help shape a vision for the future economy.

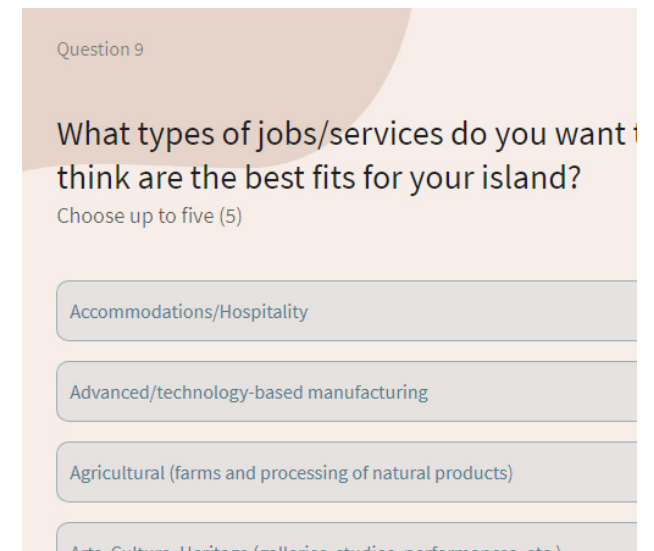
ISLAND TOWN HALLS

In December 2020, three virtual town hall meetings were held for each of the Islands, recognizing the unique assets, challenges, and opportunities facing each. A presentation of each island’s community survey results was made, followed by open discussion during which participants were invited to share ideas about goals and strategies specific to their island.

A Community Town Hall for each island allowed residents to focus on locally important issues and opportunities, recognizing the unique assets, challenges, and culture of each island.

RESIDENT SURVEYS

A total of three (3) resident surveys were conducted throughout the Vision 2040 process. An online community survey was created for each island to collect input on priorities, ideas, key issues and concerns, potential strategies and plan directions, and other thoughts on the future of the U.S. Virgin Islands economy. The survey details and results are included in the following section.



Resident Survey Question Example

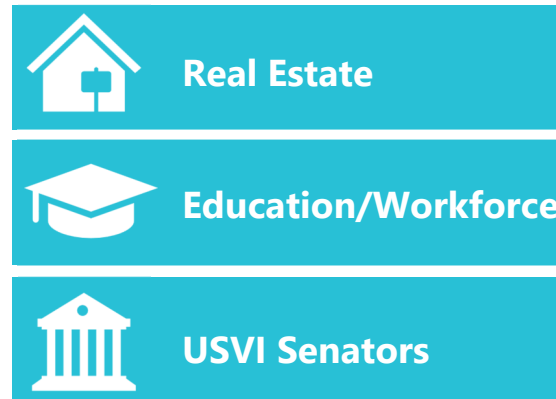
Stakeholder Engagement

In addition to the extensive public engagement activities, economic development and other relevant and expert stakeholders were consulted as part of the planning process. Stakeholder engagement for Vision 2040 included 60 one-on-one interviews, three focus group sessions, and five working group meetings around specific industry sectors. As previously discussed, the process was also overseen by a task force of government, business, economic development, and other representatives and stakeholders.

STAKEHOLDER INTERVIEWS: Interviews were held with a wide variety of stakeholders to represent a range of perspectives, industries, population segments, backgrounds, and expertise. Among the key stakeholder interview categories were the following:

- Economic Development Officials
- Site selection professionals
- Government Officials and Agency Heads
- Education and Workforce
- Finance and Financial Services
- Community Groups/Non-Profit Organizations
- Business Owners and Leaders
- Utilities and Infrastructure
- Service Industry
- Technology and Communications
- Energy
- Agriculture
- Manufacturing
- Health Care
- Marine Businesses

FOCUS GROUPS: Three (3) focus groups were held for the following topics/groups:



WORKING GROUP MEETINGS: Five (5) working group meetings were also held to discuss specific industry sectors, including the following:



Diaspora Engagement (Expats)

The Vision 2040 process included input from former USVI residents living abroad to better understand why they left. Most reasons given included education and job opportunities, military service, and for medical care, along with relocations following losses from severe hurricanes.

DIASPORA (LIVE ABROAD) SURVEY: A diaspora survey was also created to collect valuable insights from U.S. Virgin Islanders currently living abroad, whether temporarily, having just moved, or having left years ago. The diaspora survey focused on the reasons that many U.S. Virgin Islanders leave the Territory, as well as what could be done to draw those living abroad to return. The diaspora survey is discussed further in this chapter.

DIASPORA TOWN HALLS: Two virtual town halls were held for U.S. Virgin Islanders living outside of the Territory during the first week of December 2020. Participants in the town halls shared their personal experiences and discussed reasons for leaving as well as challenges and barriers to potentially returning to the Territory.

Common Denominators & Distinguishing Characteristics

Community Survey Findings

SURVEY RESPONDENTS

The community survey was completed by residents of St. Croix, St. Thomas, and St. John. In total, 1,921 surveys were completed with 58% from St. Croix, 31% from St. Thomas, and 11% from St. John.

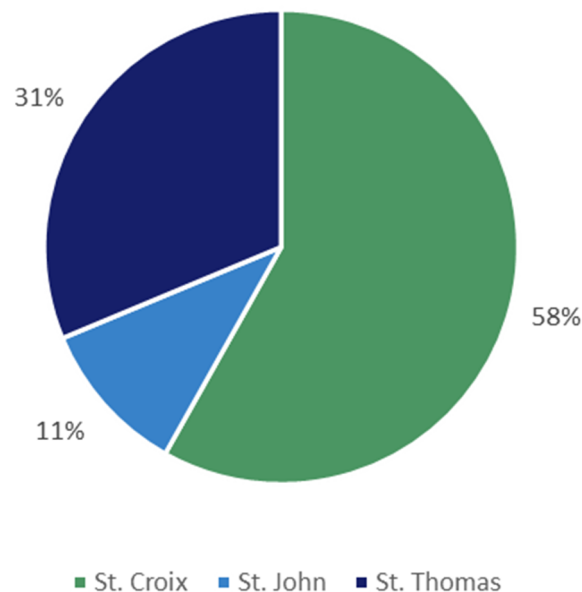
The age of respondents varied, with 22% aged 40-49, 21% aged 50-59, 17% aged 30-39, 17% aged 60-69, 15% under age 30, and 7% aged 70 and up.

Fifty-four percent (54%) of respondents were born and raised in the USVI, whereas 46% were not. When asked what brought them here, top reasons include because of a family decision (23%), job opportunity (22%), vacationed and decided to stay (18%), or a place to retire (15%).

Most have lived in the Territory for at least 10 years. Thirty-nine (39%) have lived in the U.S. Virgin Islands more than 10 years, 57% their entire lives, and 4% less than 10 years. A majority of respondents own their home (67%) versus rent (33%).

A majority of respondents are employed (72%) whereas 16% are retired and 4% are unemployed. 8% were in another situation such as being a student or in transition.

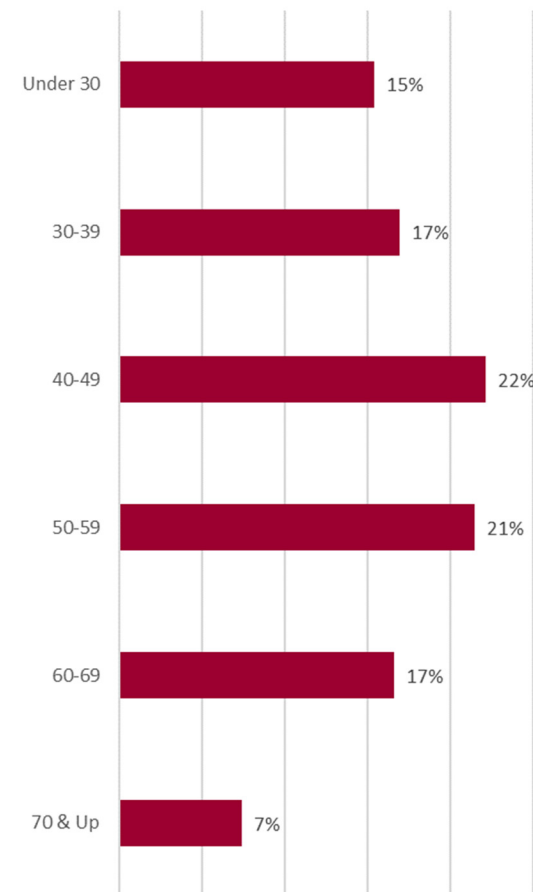
RESPONSES BY ISLAND



- 54% of respondents were born and raised in the USVI.
- 39% have lived on the Islands more than 10 years; 57% their entire lives.
- The USVI is the primary residence of 80% of respondents.

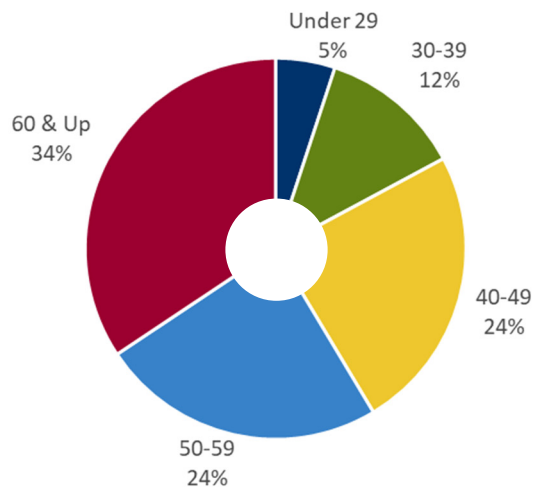
AGE OF RESPONDENTS

Age of Respondents

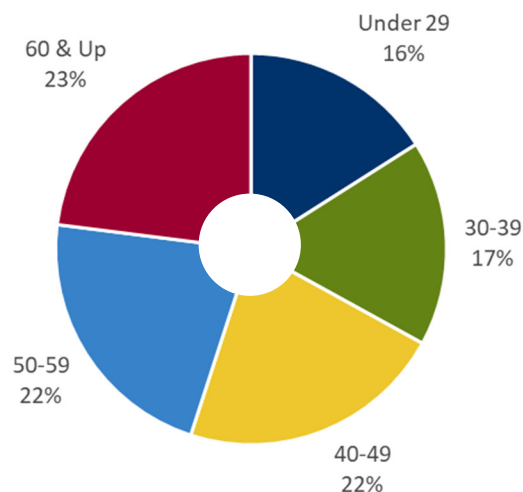


RESPONDENTS BY AGE & ISLAND

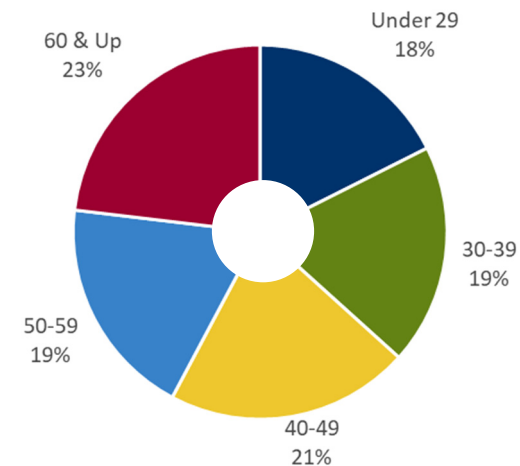
ST. THOMAS



ST. CROIX



ST. JOHN



ST. THOMAS RESPONSES

- 602 TOTAL RESPONSES
- 63% WERE BORN & RAISED IN THE USVI
- 60% HAVE LIVED IN ST. THOMAS THEIR WHOLE LIFE, 37% MORE THAN 10 YEARS

ST. CROIX RESPONSES

- 1,117 TOTAL RESPONSES
- 52% WERE BORN & RAISED IN THE USVI
- 54% HAVE LIVED IN ST. CROIX THEIR WHOLE LIFE, 41% MORE THAN 10 YEARS

ST. JOHN RESPONSES

- 203 TOTAL RESPONSES
- 66% WERE BORN & RAISED IN THE USVI
- 59% HAVE LIVED IN ST. JOHN THEIR WHOLE LIFE, 33% MORE THAN 10 YEARS

COMMUNITY SENTIMENT

Generally, people feel positive about the future, with over 80% feeling opportunities will present themselves, feeling more fortunate than others, or believing conditions will improve in the Territory.

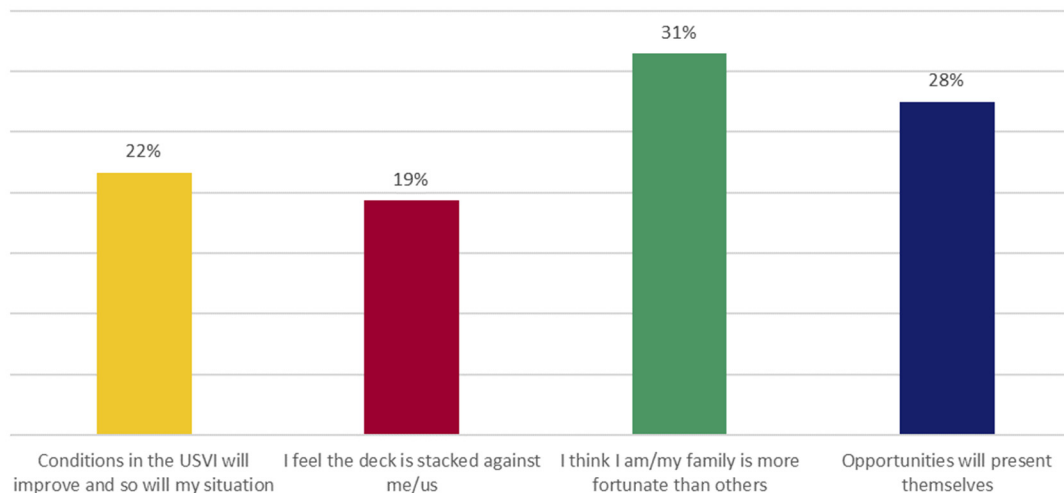
Positive sentiment is similar among each island, but differs depending on one's age. Those under 40 years of age are slightly less optimistic (74%) than those aged 40 and up (83%). Those aged 60 and up are even more optimistic with people feeling they are better off than others, that opportunities will present themselves, and conditions will improve (89%).

Those working in the public sector are only slightly less optimistic (80%) than private sector with employees (82%). Self-employed workers are the most optimistic (89%).

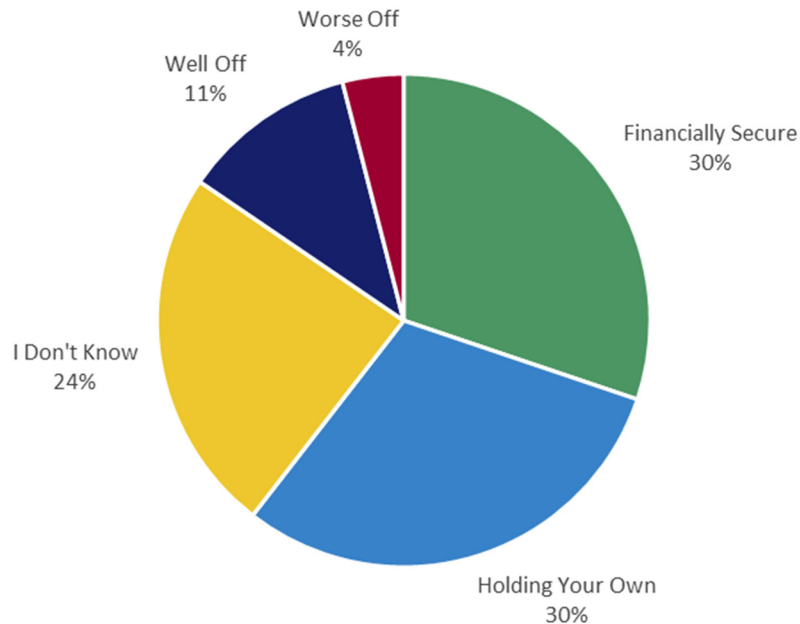
Renters feel like the "deck is stacked against us" (29%) more often than homeowners (14%). This could be due to the uncertainty and temporary nature of renting, as renters typically spend more of their income on housing, and affordable housing is a major cause of concern among respondents.

- Residents age 60+ are the most optimistic age group
- Homeowners are more optimistic than renters
- Self-employed workers are more optimistic than all other workers

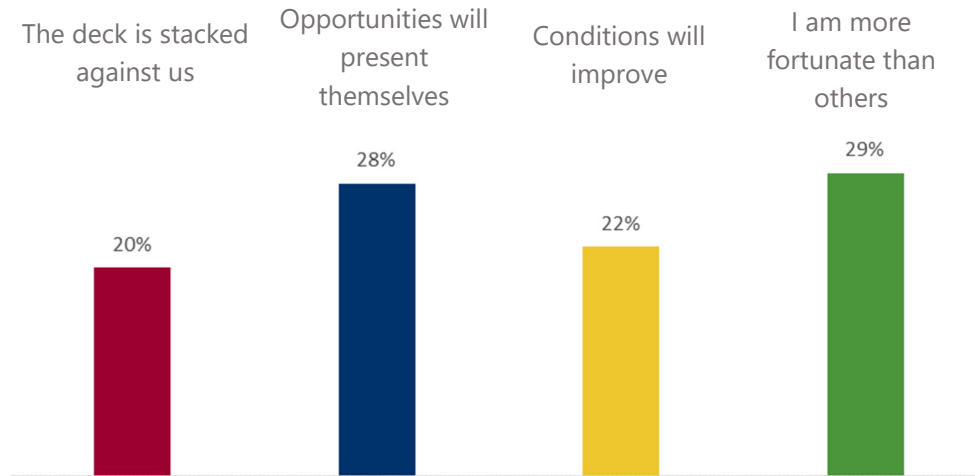
WHICH STATEMENT IS CLOSEST TO YOUR POINT OF VIEW?



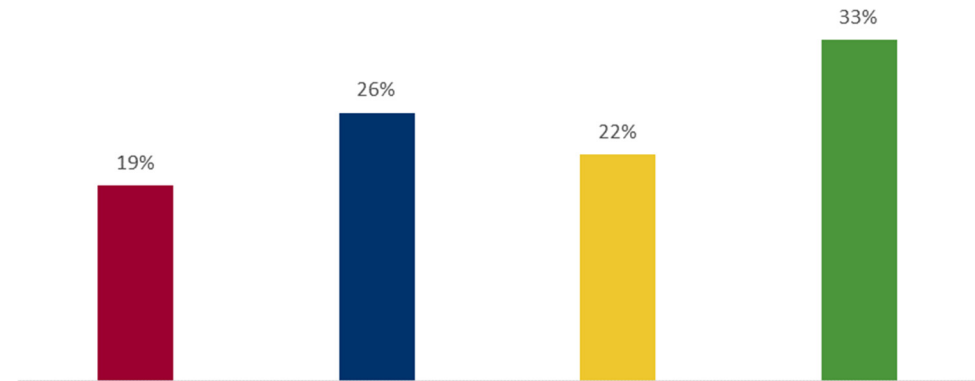
IN 20 YEARS, DO YOU THINK YOU WILL BE...



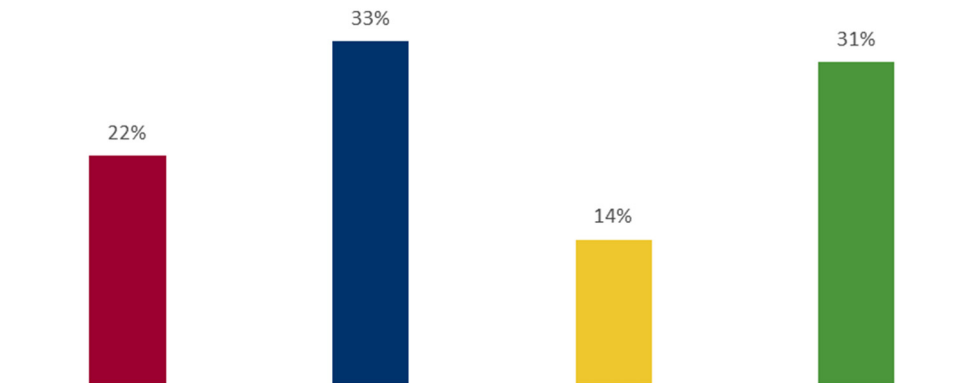
St. Thomas Responses



St. Croix Responses



St. John Responses



CURRENT CONDITIONS

While people feel generally positive about their personal outlook, they feel less positive about the current conditions in the Territory. We asked respondents to rank conditions on the island using the choices of "Poor," "Fair," "Good," or "Excellent." To understand overall conditions, we translated these into numerical values 1 (poor) through 4 (excellent). The least favorably ranked conditions include:

- Infrastructure (Electricity-price/reliability) (1.1)
- Ability to address social problems (manage substance abuse, mental health needs, etc.) (1.2)
- Housing Affordability/Cost (1.3)
- Infrastructure (Transportation: roads, sidewalks, air access, bridges, ports, ferry, etc.) (1.4)

There was no condition ranked over a 2.1 (slightly better than "fair" condition). The least negatively ranked conditions include:

- Quality of Life (recreation, culture, access to nutritious food, liberty, enjoyment, etc.) (2.1)
- Residents' outlook/attitude/pride (2.0)
- Acceptance of change and diversity (new residents, ideas, experiences, races, etc.) (1.9)
- Commercial and office property (abundance and attractiveness) (1.9)

Conditions were ranked similarly between age groups, people who have a more negative or positive outlook, or people considering leaving the Territory.

Conditions we asked citizens to rate.

(1=Poor, 2=Fair, 3=Good, 4=Excellent)

2.1	Quality of Life (recreation, culture, access to nutritious food, liberty, enjoyment, etc.)
2.0	Residents' outlook/attitude/pride
1.9	Acceptance of change and diversity (new residents, ideas, experiences, races, etc.)
1.8	Commercial and office property (abundance and attractiveness)
1.8	Infrastructure (high-speed internet)
1.8	Local regulations, taxes
1.8	Presence of young, educated adults
1.8	Housing quality
1.7	Amenities (retail, professional services, etc.)
1.7	Support for small business
1.7	Workforce (skilled, trained, meet workplace demands)
1.6	Schools and quality of education
1.6	Infrastructure (water and sewer)
1.6	Employment opportunities/jobs
1.5	Removal of trash and lack of debris
1.5	Services for the elderly
1.5	Healthcare needs/services
1.5	Housing availability
1.5	Government service and responsiveness
1.4	Crime Rate (personal and property safety—Excellent is safest)
1.4	Infrastructure (transportation: roads, sidewalks, air access, bridges, ports, ferry, etc.)
1.3	Housing affordability/cost
1.2	Ability to address social problems (manage substance abuse, mental health needs, etc.)
1.1	Infrastructure (electricity-price/reliability)

Citizens have major issues with most conditions in the Territory. When asked to rank conditions either "Poor," "Fair," Good," or "Excellent," no issue received a higher score than "Fair."

LEAVING THE TERRITORY

The survey included two questions about leaving the Territory. First, “Why do you think people leave?” The top response is that they desire a better quality of life (34%). This is followed by health or medical reasons (21%), a job opportunity (21%), or to seek a lower cost of living (16%).

The second question sought to identify why residents might need to leave in the future. Medical (33%) and career reasons (32%) are the most cited reasons followed by family reasons (16%) and other reasons (15%). Other reasons include the cost of living, other economic reasons, and reaching retirement age.

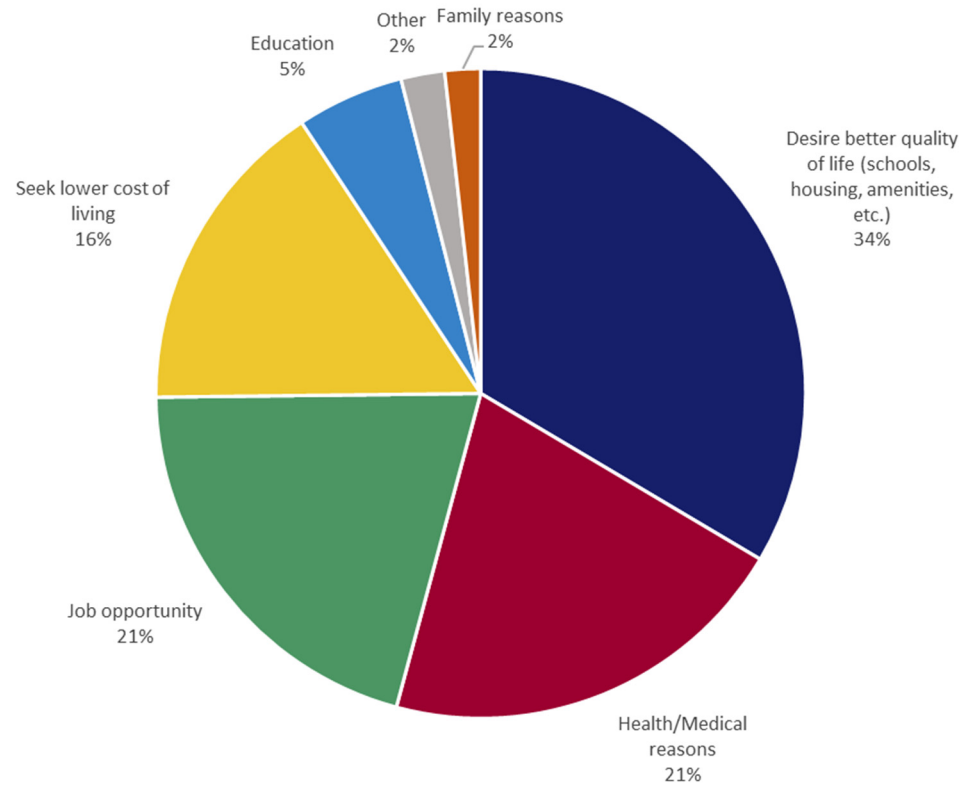
8 out of 10 residents expect to live in the USVI 20 years from now.

For those that expect to leave, medical or health reasons (33%) and career or professional reasons (32%) top the list.

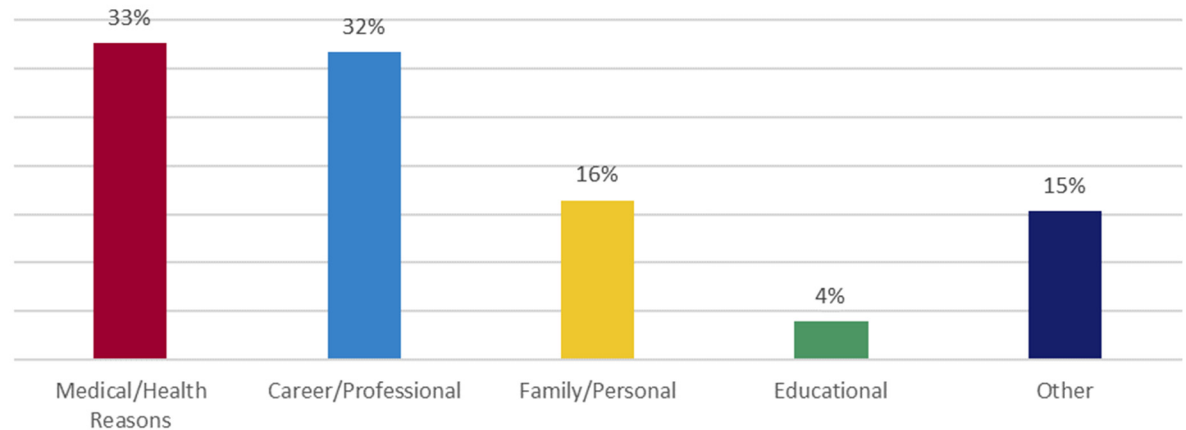
While younger residents feel they will move for career and professional reasons, older individuals select health and medical reasons. Many older individuals plan to move to the U.S. mainland for better healthcare services upon retirement, while the younger generation may leave seeking job opportunities.

The most commonly cited reason for moving for renters would be career or professional (35%) followed by family or personal reasons (23%) and

WHY DO YOU THINK PEOPLE LEAVE THE US VIRGIN ISLANDS?



FOR THOSE THAT THINK THEY MIGHT HAVE TO LEAVE: WHY?



medical and health reasons (19%). For homeowners, medical and health reasons top the list (52%) followed by other reasons (16%) and career or professional reasons (16%).

who are serious about helping its residents is needed. Affordable housing and utilities, activities for youth, more jobs that allow for career growth, and infrastructure improvements top the list.

MAJOR CONCERNS

The word cloud to the right illustrates themes that appeared when residents were asked to list what they think the USVI needs most. Residents most often cite the need for a government that invests in and cares about its people, improved infrastructure, more educational opportunities, quality health care, opportunities for youth and more job opportunities overall, affordable housing, and a lower cost of living.

Residents who indicated they regretted their move to the Territory, they would first change governmental leadership. There is a feeling that the government does not care about its residents, is stealing from its people, and overall lacks leadership. Medical care, educational systems, infrastructure, and more modern technology are also mentioned by these residents that require improvement.

Citizens are looking for leadership that invests in the community via better education, infrastructure, jobs, and healthcare.

For those who have a negative outlook on their move to the Territory, respondents would first change the leadership on the island. Many respondents cite better government and leadership

WHAT ONE THING WOULD YOU SAY THE US VIRGIN ISLANDS NEEDS MOST?



FUTURE DEVELOPMENT

Respondents of each island were asked to identify what kind of development they would like to see by region. Top types of development are listed by island and by region below.

St. Croix

Within the entire island, the top types of development desired include retail/commercial (31%), residential (29%), health & social services (27%), and hotel (26%). By region top responses include:

1. **Christiansted** | Retail (55%) & Health & Social Services (43%)
2. **East End** | Residential (44%) & Hotel (39%)
3. **Frederiksted** | Retail (68%), Hotel (55%), Health & Social Services (54%) & Residential (50%)
4. **Northside Central** | Residential (44%)
5. **Southside Central (Container Port)** | Industrial (60%)
6. **Southside E** | Residential (37%)
7. **Southside W (Centerline Rd - M. Evans Highway)** | Retail (41%)

As USVI leadership works to implement strategies and direct investment to each island, or develop visions for each region of each island, these responses should be used to inform what redevelopment and new development happens and where it should be located.

Top Types of Development Wanted by Island:

St. Croix | retail/commercial (31%), residential (29%), health & social services (27%), and hotel (26%)

St. Thomas | residential (36%), health & social services (24%), hotel (22%), and retail (22%)

St. John | residential (28%), health & social services (25%), retail (23%), and hotel (16%). A small number surveyed selected “No Development”, of which 30% specified that they did not wish to see hotels.



St. Croix

FUTURE DEVELOPMENT

St. Thomas

Within the entire island, the top types of development desired include residential (36%), health & social services (24%), hotel (22%), and retail (22%). By region top responses include:

1. **Charlotte Amalie** | Retail (50%) & Health & Social Services (43%)
2. **East End/Red Hook** | Residential (44%) & Retail (44%)
3. **Northside** | Residential (59%)
4. **Southside** | Residential (43%)
5. **Tutu** | Residential (42%) & Health & Social Services (38%)
6. **Water Island** | Hotel (46%) & Residential (37%)
7. **West End** | Residential (55%) & Health & Social Services (34%)



St. Thomas

St. John

Within the entire island, the top types of development desired include residential (28%), health & social services (25%), retail (23%), and hotel (16%). By region top responses include:

1. **Central** | Health & Social Services (45%) & Residential (38%)
2. **Coral Bay** | Retail (47%) & Health & Social Services (47%)
3. **Cruz Bay** | Retail (43%) & Health & Social Services (44%)
4. **East End** | Residential (41%)
5. **North Central** | Residential (32%)



St. John

JOBS OF THE FUTURE

Jobs that Fit

When respondents were asked to choose what types of jobs would be the best fit for the Territory, agricultural (13.8%), health and social services (10.4%), education (8.7%), and arts & culture jobs (8.7%) ranked highest. Conservation jobs are a top choice for those over the age of 70. Accommodation & hospitality are a top choice for those under 20 and those 40-49. **The top five ranked types of jobs desired are traditionally among the lowest paying sectors of the economy.**

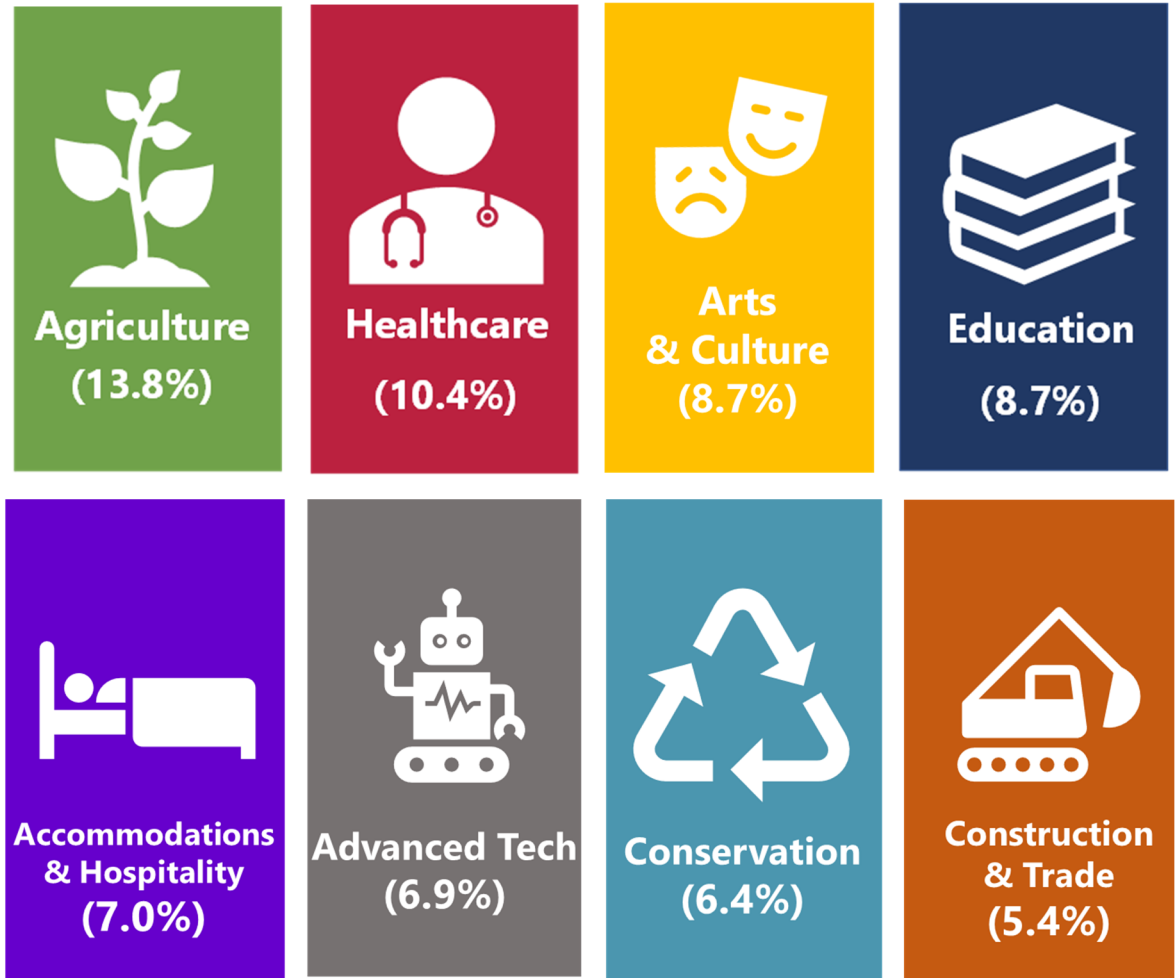
Interestingly, the top choice for those under 20 was advanced/technology-based manufacturing, which are among the highest paying jobs in America today.

USVI residents under age 20 were the only age group to select advanced/technology-based manufacturing as the type of job they want to see most/have the best fit for their island. These are typically the highest paying jobs.

Those who have moved to the island value conservation jobs more than those who are born and raised (8.7% versus 4.0%). Those who are born and raised on the island value advanced/technology-based manufacturing jobs more than those who have moved to the island (8.1% versus 5.1%). Otherwise, they both value agricultural, health and social services, education, and arts & culture jobs similarly.

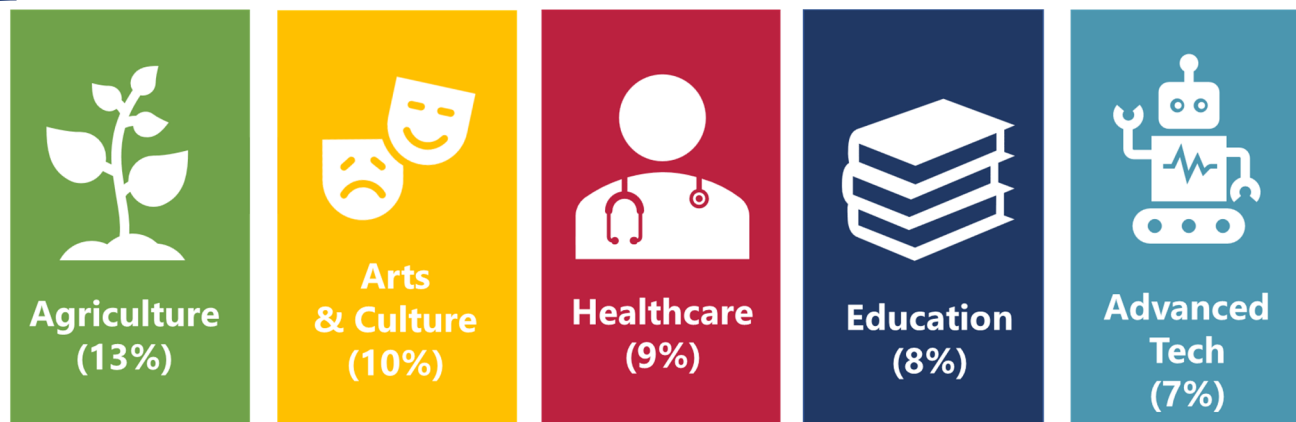
WHAT TYPES OF JOBS/SERVICES DO YOU WANT TO SEE MORE OF AND THINK ARE THE BEST FITS FOR YOUR ISLAND?

TOP RESPONSES (OF 22 OPTIONS)

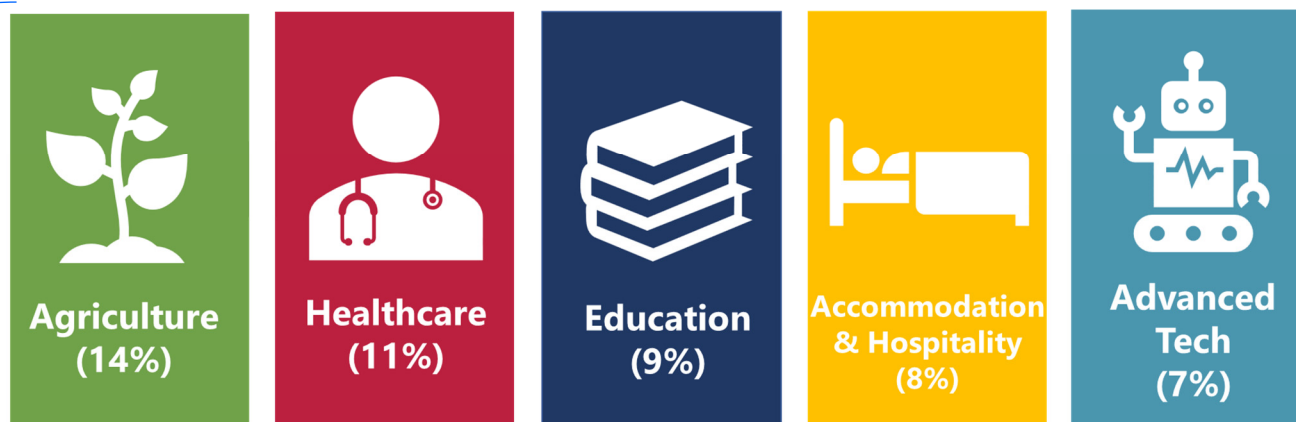


**JOBS OF THE FUTURE BY ISLAND
(RESIDENT OPINION)**

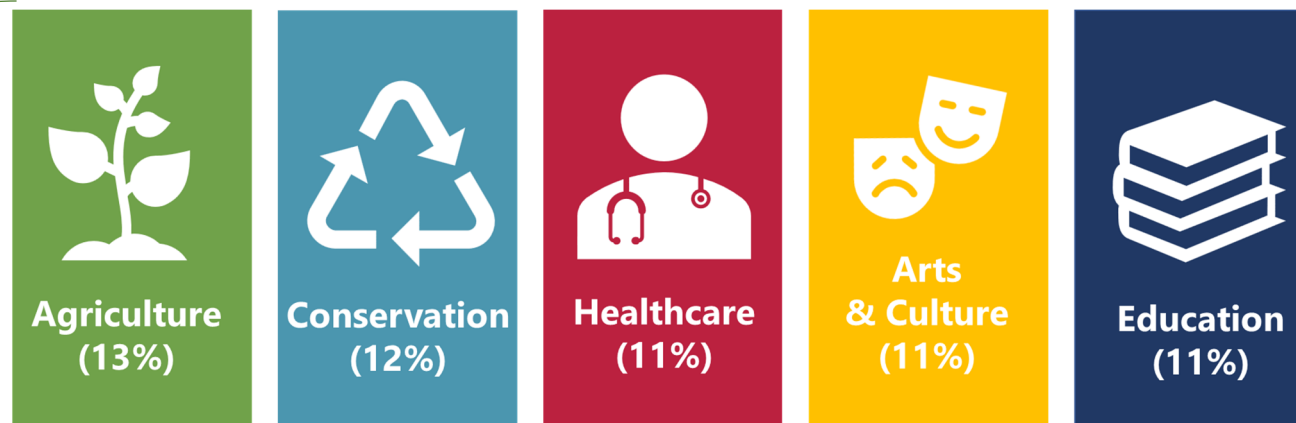
ST. THOMAS



ST. CROIX



ST. JOHN



Public Forum Event

The November 2020 public forum event provided residents an opportunity to share input on strengths, assets, weaknesses, challenges, and

opportunities for the future of the U.S. Virgin Islands economy. Participants identified a wide range of issues and priorities that helped shape the goals and strategies for the Vision 2040 plan. The input

received during this virtual participatory meeting is shown below.

STRENGTHS & ASSETS

WHAT IS UNIQUE ABOUT THE USVI? HOW CAN WE TAP INTO THAT TO CREATE MORE JOBS?

- Broadband internet
- Free trade zone area on St. Croix
- Near shore offshore location
- Rich culture
- Food/culinary arts
- Beautiful beaches/beauty and great weather
- Entrepreneurial minded
- Diversity of workforce and loyal workforce
- Agricultural tourism
- Environment: Clean air and water
- Views and quiet parks
- Family-owned and run small businesses
- Enormous diaspora population
- Ecotourism
- Energy resources and jobs
- Advantageous tax regime
- People deeply love and are willing to promote USVI
- Major resorts
- University of Virgin Islands and aquaponics

WEAKNESSES & CHALLENGES

WHAT IS PREVENTING ECONOMIC GROWTH?

- (Lack of) services for homeless and mentally ill (job training, services, support, wellbeing)
- Cost and reliability of energy
- No recycling/reuse activity or facilities
- High cost of living including high cost of food/groceries
- Being out of the customs zone
- Lack of adequate healthcare facilities
- Lack of diversification
- Losing youth
- Internet reliability issues
- Supply chain issues/barriers
- Security and crime prevention
- Disconnection from CARICOM
- US control of trade zone
- Off-island online purchases (rather than local)
- Lack of opportunities for middle class growth
- Lack of programs to encourage innovation/entrepreneurship (among youth)
- Lack of housing/high cost of housing

OPPORTUNITIES

WHERE DO YOU SEE FUTURE BUSINESS OPPORTUNITIES FOR THE USVI?

- Export fresh drinkable water
- Access to capital for farmers to grow agriculture industry
- Job training for inmates
- South shore trade zone
- High value manufacturing industry
- Financial businesses
- Technology/E-commerce
- Renewable energy
- Make spaces for small local craftspeople/manufacturers
- Urban agriculture
- Cultural heritage
- Culinary/Dining
- Recycling plastics and paper products
- Ecological services and research
- Marine industry/dry dock facility
- Healthcare and wellness destination/tourism
- Retirement/Assisted Living facilities
- Children's museums
- Heritage tourism
- Construction trades (job training)
- Business side of storm recovery

Virtual Open House Input

The virtual web-based open houses collected community input for each island separately on economic strengths and opportunities, the economic assets of each island, weaknesses and challenges, and economic development priorities for the future. Residents of St. Croix and St. Thomas chose to participate in these open houses, those from St. John did not.

ECONOMIC STRENGTHS AND OPPORTUNITIES:

A wide variety of strengths and opportunities were identified by open house participants, ranging from broad feedback to ideas for specific sites and properties. Overall, the key theme that emerged from responses was to better utilize each island's existing assets. Participants identified many assets in the Territory that are currently underutilized, but offer opportunities for economic revitalization and growth for the future. These assets include historic neighborhoods, infrastructure including broadband and telecommunications, tourism assets, and others. Select responses from participants are shown to the right.

MAPPING ECONOMIC ASSETS: Participants identified on a map the assets they believe to be the most significant for economic growth. The identified assets are shown on the maps on the following pages with select assets highlighted.

ST. CROIX STRENGTHS & OPPORTUNITIES

- **Rum Tourism:** add distilleries on St. Croix
- Existing **Farming Infrastructure:** tap into the knowledge, facilities and distribution networks already in place
- Untapped **ports**
- Underutilized **southern shore**
- Opportunity to better utilize **airport** that is adjacent to potential development areas
- High speed **fiber infrastructure**
- Great opportunity for **remote workers** to live
- **Telecommunications** infrastructure and connectivity
- Opportunity for **collaboration** on business ventures for schools and communities
- Strength as a **global location, holistic environment,** and open **ports** for commerce.

ST. THOMAS STRENGTHS & OPPORTUNITIES

- **Sugar Bay Resort** and the opportunity to renovate and use for hotel training program
- Revitalization of **Historic Neighborhoods**, including in Charlotte Amalie (Savanne and Frenchtown) and others.
- Expand **banking, financial, and legal** options to entire Caribbean
- **Modernize and expand tourism** both on islands and on the water

“Utilize the potential and resources of the University of the Virgin Islands along with the private sector, such as Coral World, and eco-tourism to establish the USVI as a world class marine research destination.”



Christiansted/Historic Towns

Photo Source: Flickr user Than You (20,5 millions+) views



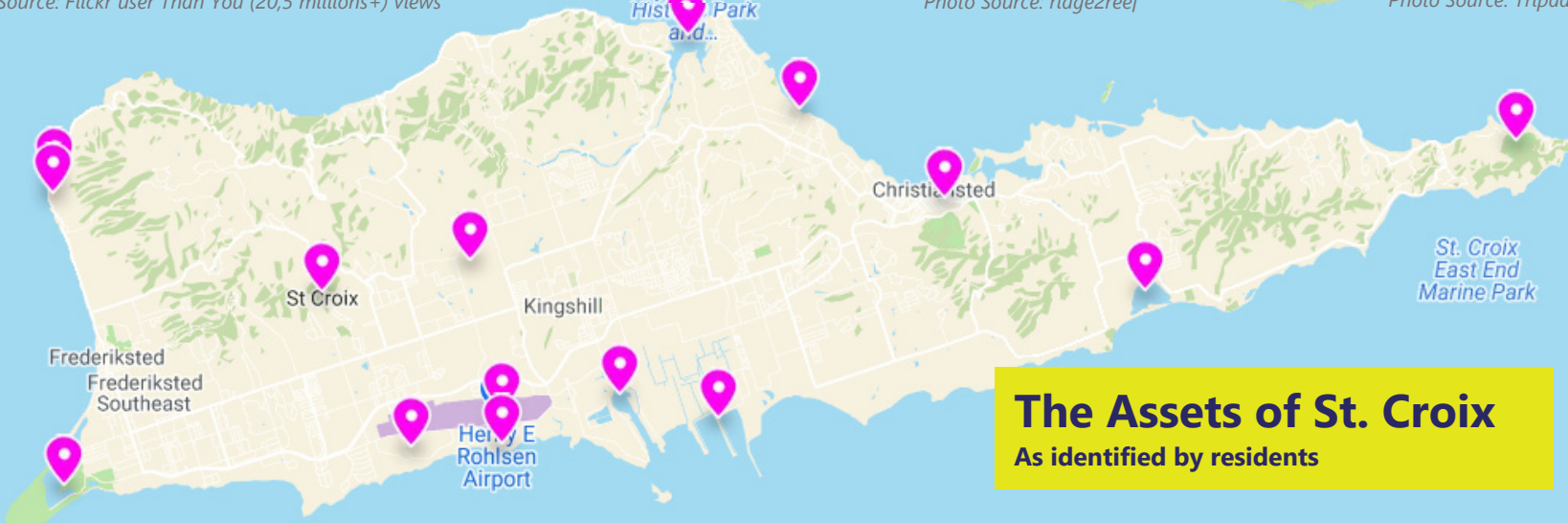
Farmland

Photo Source: ridge2reef



Buck Island Reef

Photo Source: Tripadvisor



The Assets of St. Croix
As identified by residents



Underutilized Land Adjacent to Airport

Photo Source: Google Earth



Henry E. Rohlsen Airport



Deep Water Port & Facilities

Photo Source: U.S. Virgin Islands Port Authority



Cyril E. King Airport

Photo Source: VI Consortium



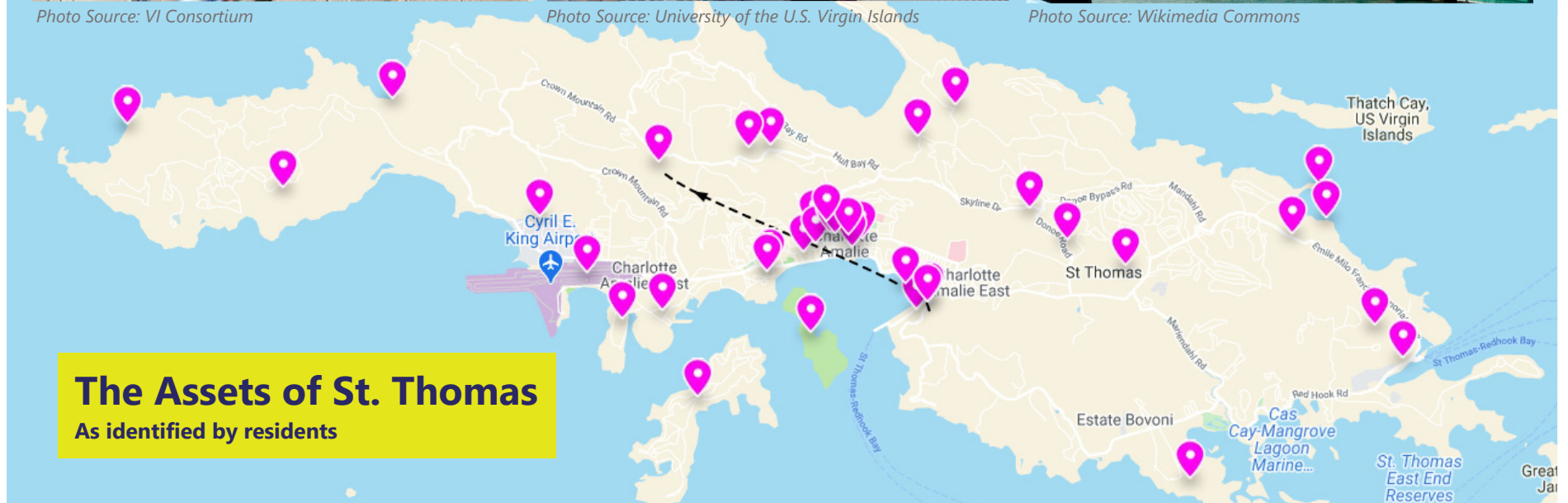
Etelman Observatory

Photo Source: University of the U.S. Virgin Islands



Red Hook

Photo Source: Wikimedia Commons



The Assets of St. Thomas
As identified by residents



University of the Virgin Islands (STT Campus) & Reichhold Center for the Arts

Photo Source: University of the U.S. Virgin Islands



Charlotte Amalie: Historic and Cultural Assets

Photo Source: St. Thomas Source



Havensight: Mall & Children's Museum

Photo Source: 10best.com

ECONOMIC CHALLENGES AND WEAKNESSES:

Participants also shared their perceptions of the economic challenges and weaknesses facing each island.

St. Croix: In St. Croix, these challenges and weaknesses focused largely on infrastructure. The condition of the island's infrastructure was identified as a critical challenge, including roads, bridges, and government and school buildings and facilities. Participants identified the U.S. Virgin Islands Water and Power Authority (WAPA) as a major challenge/weakness due to the high cost and unreliability of electric service.



The USVI Water and Power Authority (WAPA), St. Croix, USVI. Photo Source: VI Consortium

St. Thomas: The St. Thomas virtual open house also identified electric service from WAPA as a critical challenge. Other infrastructure challenges identified included road and waste management. Participants also identified challenges with government, including a need to improve the efficiency of

government services by modernizing agencies, U.S. Virgin Islands tax refunds and tax incentives.

PRIORITIES:

Participants were asked to rank hypothetical economic development initiatives to help identify community priorities. The results of the exercise are shown in the box below.

Note that no residents on St. John provided input in the virtual Open House section of the website.

Priorities: Which Initiatives Ranked Highest?

ST. THOMAS

HIGHEST PRIORITIES

- Recruiting new businesses to diversify the Territory's economy
- Improving entrepreneurship and job training and support to develop new homegrown businesses in the Territory

High Priorities

- Programs to support agri-businesses and a more robust agriculture industry
- Crime prevention initiative
- Build modern healthcare facilities

Moderate Priorities

- Provide high speed internet service for every resident and business
- New marketing and other initiatives to expand the tourism industry

ST. CROIX

HIGHEST PRIORITIES

- Provide high speed internet service for every resident and business
- Crime prevention initiative
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High Priorities

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- Improving entrepreneurship and job training and support to develop new homegrown businesses in the Territory

Moderate Priorities

- Programs to support agri-businesses and a more robust agriculture industry
- New marketing and other initiatives to expand the tourism industry

Community Town Halls

The community Town Halls collected feedback from each island; some common themes emerged for the six focus areas as indicated below.

INFRASTRUCTURE

- Go green and embrace renewable energy including solar
- Modernize infrastructure but maintain unique sense of place and heritage
- Improve the quality of road systems throughout the Territory
- Provide safe pedestrian infrastructure, including sidewalks
- Provide reliable and cost-effective electricity urgently

BUSINESS CLIMATE

- Improve transparency with government and with WAPA
- Improve Telecommunications (internet) to support businesses of the future
- Modernize Government operations using technology and the internet
- Improve Business interactions with government agencies, including faster processing of applications and reliable timelines

EDUCATION & WORKFORCE

- Change curriculum throughout the educational system to be geared toward jobs of the future
- Better engage K-12 students through new programs and internships
- Become more of a global educational system
- Build on the strengths of the University of the Virgin Islands
- Focus on tech jobs and trades for which there aren't enough workers

TECHNOLOGY

- Integrate new technology tools across industries
- Explore and monitor emerging technologies of the future such as cryptocurrency for opportunity
- Provide more technology training and certification opportunities for residents
- Provide access to technology for residents that don't have access through libraries and community centers

DIVERSIFY ECONOMY

- Reduce dependency on tourism industry, particularly cruise tourism
- Build resiliency to economic uncertainties caused by hurricanes and Covid-19 impacts
- Diversify tourism industry including medical, sports, cultural/heritage, and conventions
- Grow other areas of the economy, including agriculture and manufacturing

QUALIFY OF LIFE/PLACE

- Improve public spaces, including signage, sidewalks, lighting, and green spaces
- Consider extremely high cost of living, including for necessities such as food and housing
- Address crime, which is a critical issue that currently gives the Territory a "bad name"
- Think differently about waste management on the islands and how this relates to economic development

The Expat Factor

What is the opinion of the diaspora regarding the future of the Territory? Why did they leave, and would they consider moving back?

Survey Findings

SURVEY RESPONDENTS

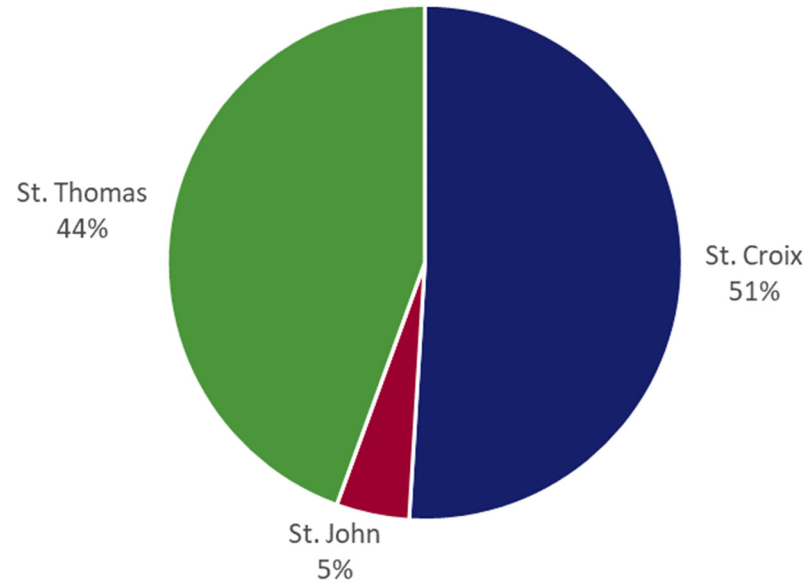
With 706 people responding, 78% still have family in the Territory and 22% do not. Approximately 51% have closest ties to St. Croix, 44% to St. Thomas, and 4% to St. John. There was only one response from Water Island. A total of 95% live in the United States and the most inhabited states include (in order) Florida, Georgia, Maryland, Texas, and Virginia.

Most of the diaspora visit at least once every few years, but typically more often.

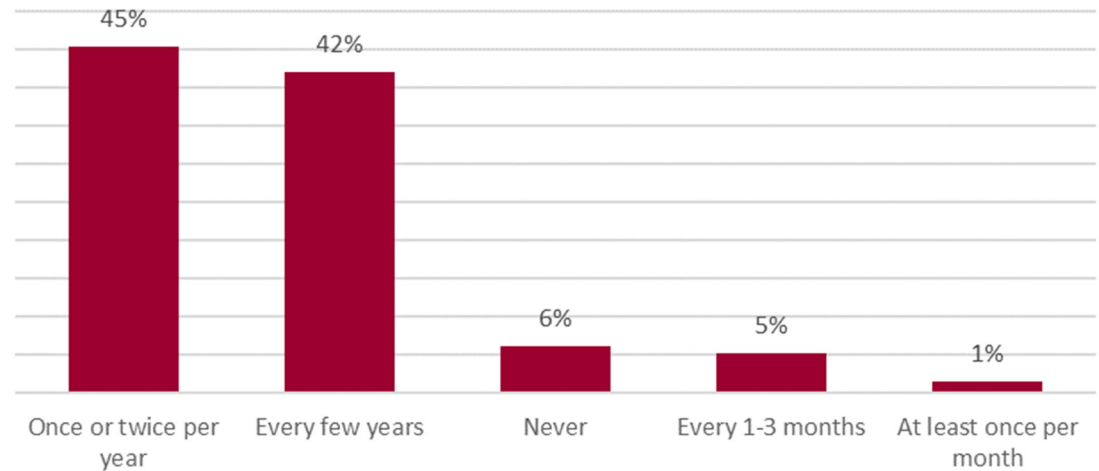
Most of the diaspora visit once or twice per year (45%) or every few years (42%). Of these, 39% are under the age of 40, 28% are between the ages 40-49, and 20% between 50-59. A total of 40% have been gone 11-25 years, 29% have been gone more than 25 years, 21% have been gone 5-10 years and 9% have been gone less than 5 years.

The results also found that 36% of respondents have a bachelor's degree, 32% have a master's degree or PhD, 21% have some college, 5% have a trade or certification, and 4% have a high school diploma.

TO WHAT ISLAND DO YOU HAVE THE CLOSEST TIES?



HOW OFTEN DO YOU VISIT THE US VIRGIN ISLANDS?



MOVING AWAY

A total of 37% of respondents have been gone from the Territory 11-25 years, 28% have been gone more than 25 years, 21% have been gone 5-10 years, and 14% left less than 5 years ago.

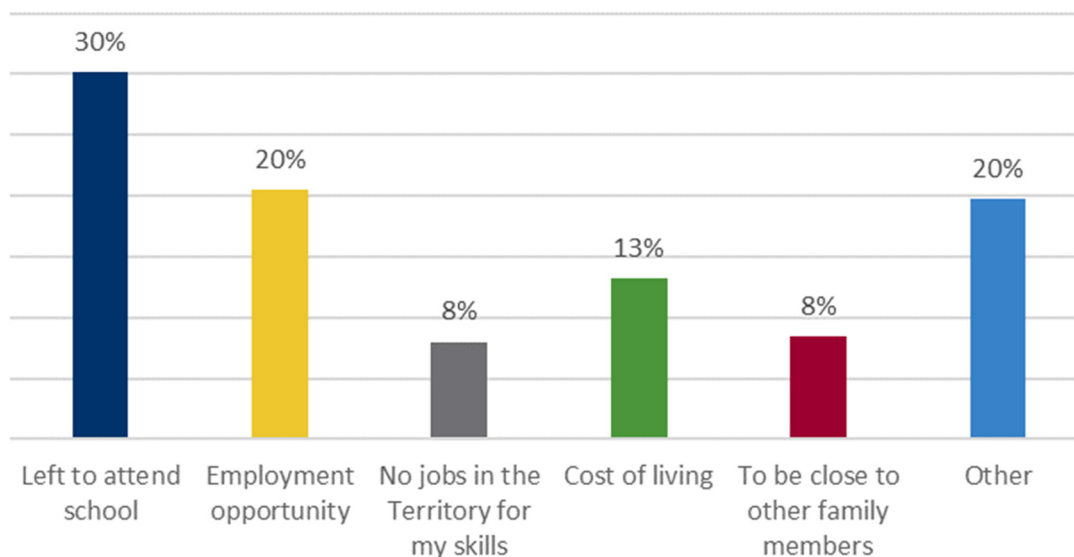
The results indicate that 30% of people left to attend school, 20% for an employment opportunity, 13% because of the cost of living, 8% to be closer to family, 8% because there were no jobs given their skills, and 20% for another reason (namely medical, a hurricane, or military).

Respondents who felt there were no jobs for their skills were asked to identify those skills. There were a wide variety of skills including management, technician, accounting, technology, information, computer/ programming, and healthcare.

The major reasons why people have moved away have changed over time. The cost of living is increasingly cited as a reason people move away; 21% who moved away less than 5 years ago cite this as a reason compared to just 6% who have been away more than 25 years. Leaving for school is another reason that has changed over the years; whereas those who have been away more than 25 years cite this as the biggest reason for leaving the islands (43%), just 15% of those who have been away less than 5 years cite this reason.

Reasons for leaving are largely consistent between the islands, with leaving to attend school, employment opportunity, and other reasons (hurricanes and military) topping the list.

WHY DID YOU LEAVE THE US VIRGIN ISLANDS?



ROOM FOR IMPROVEMENT

Respondents repeatedly referenced people, culture, beaches, and the general pace of life when asked to cite three (3) things that make the U.S. Virgin Islands unique or special. However, the diaspora cites a multitude of community development issues that need to be addressed across the islands. Issues like crime and illegal guns were mentioned as a baseline to address, in addition to beautification efforts, infrastructure upgrades (roads, airport, interisland transportation, electricity cost and reliability), and more than any other aspect mentioned, education.

The diaspora would like to see more investment in the Territory's youth: not only K-12 but mentorships, internships, and other ways to upskill. They would also like to see more recreational opportunities, particularly for youths. Access to adequate healthcare was also mentioned, as was housing (especially for seniors).

The overall sentiment is that too much focus is being spent on drawing tourism to the islands and not enough resources are being directed to those who live and work in the Territory. This is within a job market that does not have wages and benefits commensurate with the cost of living and has issues with nepotism.

Several respondents mentioned corrupt governmental practices as an issue of concern.

Many mentioned the difficulty of getting a job without knowing the "right" person. To many of the diaspora it seems the government does not care, as seen through a lack of public investment.

MOVING BACK

The survey results found that 54% of people would consider moving back to the Territory, 17% would not, and 29% might consider. To return “home”, 39% would need a job opportunity, 22% would need to retire, 17% would need to keep their current job and work remotely, and 23% provided an “other” reason. “Other” responses are summarized in the box at bottom right. Of those who would consider moving back to the Territory:

- **Their time away does not impact their interest to potentially move back.** The results show that 37% of those who have been off the islands 11-25 years, 28% of those off the islands over 25 years, 22% who have been off the islands 5-10 years, and 13% of those who have been off the islands less than 5 years.
- **They vary in age.** The results show that 26% of people who want to move back are aged 40-49, 21% are aged 50-59, 18% are aged 30-39, 15% are aged 20-29, and 14% are aged 60-69.
- **Most do not own a business.** The results show that 70% of those interested in moving back do not own a business, but 30% do.
- **They are educated.** Approximately 37% have a bachelor’s degree, 32% have a master’s degree or PhD, 20% have at least some college.
- **A majority are tied to St. Croix.** Approximately 54% have closest ties to St. Croix, 41% have closest ties to St. Thomas, 5% to St. John.
- **Most are working.** A total of 93% are working
- **Most have family still on the islands.** A total of 81% have family in the Territory.

WOULD YOU CONSIDER MOVING BACK?



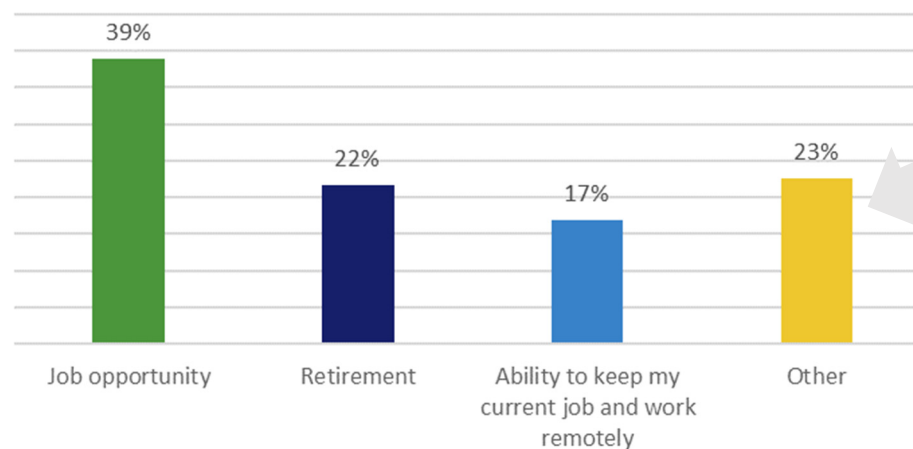
8 out of 10

people would consider moving back

(responded yes or maybe)

WHAT WOULD IT TAKE TO MOVE BACK?

What would it take to move back?



Top responses from the “other” category include affordable housing, better healthcare, lower cost of living, additional job opportunities, and less crime.

BUSINESS OWNERS OF THE DIASPORA

A total of 28% of all respondents operate a business, with 85% starting this business after moving from USVI. In this segment it was important to understand whether there is potential in having them move back to the Territory, and would be necessary to do so. As a result, further analysis was conducted.

Business Owners Who Would Consider Moving Back

Ninety percent (90%) of people who started a business off-island would consider moving back. Those that own a business and would consider operating a business in the U.S. Virgin Islands:

- **They are younger and more educated.** Thirty-five (35%) are less than 40 years old, and another 35% are aged 40-49. 39% have a master's degree and another 34% have a bachelor's degree.
- **They have been gone a while, but that does not preclude their interest.** Forty-one percent 41% have been gone from the islands 11-25 years, 24% have been gone more than 25 years, 23% have been gone 5-10 years, and 11% less than 5 years.
- **Job and remote working opportunities will be necessary, among other community development improvements.** In order to move back, 33% would need a job (or business) opportunity, 23% would need to be able to keep their current job and work remotely, 17% would need to reach retirement age, and 27% cite another reason including affordable housing, better

government support and business opportunities, and infrastructure improvements (electricity, internet, roads, etc.).

Business Owners Who Would Not Consider Moving Back

For those that own a business but would not consider operating a business in the U.S. Virgin Islands:

- **Cost of living and crime are main reasons for not moving back.** Thirty-seven percent (37%) tout the high cost of living in the Territory as a reason why moving back is not a possibility; 22% cite crime.
- **They would need to reach retirement before moving back.** Thirty-six (36%) would need to reach retirement age to be in a place to move back. We can infer that the business they operate would not be easily moved to the Territory. This could be due to labor, infrastructure, customer base, etc.
- **They visit family slightly less frequently than those who would consider operating a business.** Sixty-four (64%) only visit once or twice per year and 18% every few years. For those who would consider operating a business, 47% visit once or twice a year and 39% visit every few years.
- **Like those who would consider moving back, community improvements are paramount.** Those who would not consider moving or operating a subsidiary in the Territory believe the top economic

development priorities are to 1) build modern healthcare facilities, 2) build a modern and resilient energy system to provide reliable and less expensive electricity, and 3) create a crime prevention initiative.

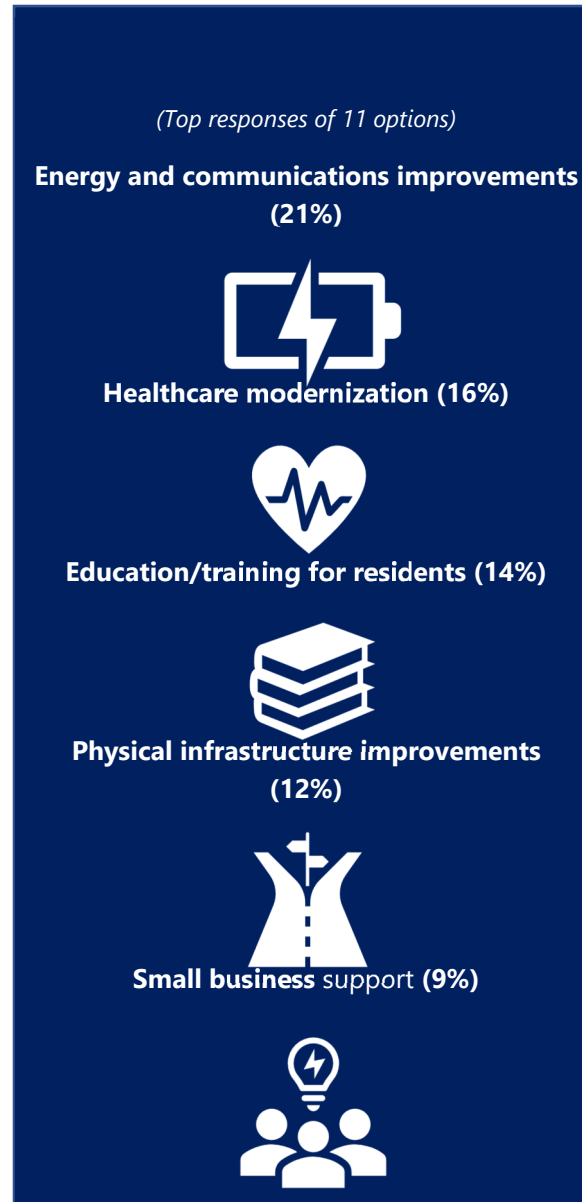
- **They believe internal investments will bring the greatest impacts.** The projects they feel would have the greatest economic impact include energy and communications improvements, healthcare modernization, and education and training for residents. (Note: these are the same top three types of projects for those who would consider operating a business or subsidiary from USVI).



HIGHLY EDUCATED

It would be advantageous to draw those back to the Territory who have a high level of education because they have a higher earning potential and are more likely to start a business. Here we examine the portion of the diaspora that has a bachelor's degree or higher. Overall, 55% of this population would consider moving back, 16% would not, and 30% might consider it.

- **Many would need a job opportunity.** Thirty-seven percent (37%) would need a job opportunity, 20% would need to retire, and 17% would need to be able to work remotely. Twenty-five percent (25%) provided other reasons including affordable housing, better healthcare, lower cost of living, decrease in crime, improved infrastructure, and more local business opportunities.
- **A variety of jobs are needed.** For jobs needed among those with a bachelor's degree or higher, respondents cite several different occupations including Information Technology, Computer Programming and Data Science, Accounting, Advertising/Marketing, and Human Resources.
- **Key to improving the economy is investment.** Respondents feel projects around energy and communications, healthcare modernization, education and training for residents, and physical infrastructure improvements will have a positive impact on the economy.



FUTURE DEVELOPMENT

The diaspora envisions a future that is clean, safe, and friendly. While the external vision of the Territories is a romantic one of paradise with beautiful beaches, easy living, and natural beauty, it is clear the diaspora sees another reality. While they do appreciate these aspects of the Territory, they also see the crime, lack of investment, and high cost of living as impediments to future development.

Economic Priorities for Impact

For projects that have the most economic impact, ranked highest were those that improve energy and communications, modernized healthcare, train and educate residents, improve physical infrastructure, and provide small business support.

It is clear the diaspora is interested in investment into community systems throughout the Territory. The economic priorities ranked highest included 1) building a modern and resilient energy system to provide reliable and less expensive electricity, 2) creating a crime prevention initiative, and 3) building modern healthcare facilities.

Those who visit regularly feel projects around energy and communications, healthcare modernization, education and training for residents, and physical infrastructure improvements will bring the most positive impact to the economy.

The diaspora believes the best jobs for economic opportunity are in the following sectors: Agriculture, Arts & Culture, Technology-based Manufacturing, Health and Social Services, and Accommodation & Hospitality.

CRITICAL ANALYSIS

Among the most striking phrases from the ex-pats engaged in the early stages of Vision 2040 were two words, “It’s home.” They stuck out not because they came from the current residents of the Territory. Rather, they came from the diaspora, people who grew up in the U.S. Virgin Islands but moved away, mostly to the mainland U.S.

Through town hall meetings, one-on-one interviews, and a specialized diaspora survey that drew more than 700 respondents, U.S. Virgin Islanders who left 10, 20, or even 30 years ago consistently referred to the islands as “home.”

An overwhelming majority of the diaspora say that under the right conditions, they would consider returning “home” to live and work.

This represents future investment and economic activity. Viewed in this way, former residents can be considered for targeted marketing and recruitment.

Over the next 20 years former residents could be one of the keys to future prosperity and help stem the population loss and declining economic base.

For the most part the respondents were representative, based on population: 55% whose closest ties were to St. Croix, 44% to St. Thomas, and 4% to St. John. The overwhelming majority—95%—currently live in the United States, with the largest contingents in Florida, Georgia, Texas, and the Washington, D.C. area. (There are large numbers of

Among those who left two decades ago or more, the pursuit of higher education was cited as the biggest reason – what might be called a “pull” factor. Those who left more recently cited a “push” factor – the hurricanes, affordability, and the lack of suitable employment opportunities, among others.

USVI ex-pats in and around New York City but they were not among the top respondents to the survey).

Nearly two-thirds of these former residents left the territory more than a decade ago. This makes their continued allegiance to the USVI—and their reference to it as “home”—quite remarkable.

Sharp differences emerged among those who left and the reasons they cite for doing so. Among those who left two decades ago or more, the pursuit of higher education was cited as the biggest reason—what might be called a “pull” factor.” Those who left more recently cited a “push” factor—the hurricanes, affordability, and the lack of suitable employment opportunities, among others.

Here are a handful of the key takeaways from the diaspora engagement:

- **More than 80% of the surveyed diaspora would consider moving back.** That is an unusually high statistic; however, there are strong caveats to that sentiment. And it

should be noted that respondents were self-selecting: i.e., the former residents with the greatest attachment to the U.S. Virgin Islands were the ones most likely to participate in the survey in the first place.

- **Among those who would consider a return, there are significant obstacles to overcome.** Nearly 40% would need an employment opportunity; or, for those who own their own enterprises, the ability to transfer it or operate it from the U.S. Virgin Islands. But beyond professional concerns, there were the predictable quality of life issues:
 - Cost and reliability of energy
 - Healthcare
 - Education
 - Infrastructure
 - Crime
 - Overall cost of living
 - Perceived corruption and nepotism in the Territorial government.

EXPAT SUMMARY

Expats cite a multitude of community development issues that need to be addressed across the Islands.

Basic issues like crime and illegal guns were mentioned as a baseline to address, in addition to beautification efforts, infrastructure upgrades (roads, airport, interisland transportation, power) and more than any other aspect mentioned, education.

The diaspora would like to see more investment in the youth: not only K-12 but mentorships, internships, and other ways to upskill. In addition,

they want to see additional recreational opportunities, particularly for the youth. Access to adequate healthcare was also mentioned, as was housing (especially for seniors).

The overall sentiment is that too much focus is being spent on drawing tourism to the U.S. Virgin Islands and not enough resources are being directed to those who live and work on the Islands.

There are also strong views concerning a job market that does not have wages and benefits commensurate with the cost of living. Further, a large segment of the diaspora has issues with what

they view as nepotism and several mentioned corrupt governmental practices. Many mentioned the difficulty of getting a job without knowing the “right” person.

Finally, to many of the diaspora it seems the government does not care, as seen through a lack of public investment, and this is creating, in their opinion, a negative sense of community pride and lack of confidence.



Photo Source: U.S. Virgin Islands Department of Tourism

Interview Themes

Stakeholder engagement for Vision 2040 included 60 one-on-one interviews, three focus group sessions, and five working group meetings around specific industry sectors. The following is a summary of themes resulting from these discussions.

Strengths & Assets

- **Quality of place & life** – There are many attributes of the Territory and its people that will attract new residents and businesses.
- **Post-secondary education** – UVI is training the workforce of the future with programs in process technology, hospitality, green technology, a new school of agriculture, marine science, data science, and is working to create a medical school, as well as expanding its successful Research & Technology Park.
- **Broadband infrastructure** – There is a very robust telecom system serving the Territory with additional improvement in the works. Any future economy will require this and the U.S. Virgin Islands can capitalize on it in multiple ways.
- **Alternative energy** – Multiple forms of alternative energy are possible including solar, wind, wave, tidal, biomass, waste-to-energy and others that will reduce the Territory's reliance on oil and propane, reducing the energy component of the cost of doing business.
- **Location** – The Territory is well-located for small-scale shipping, logistics, and nearshoring



Photo Source: U.S. Virgin Islands Department of Tourism

uses, with exemption from the Jones Act an added benefit. Additional port capacity would be necessary to capitalize on expanding opportunities for larger scale transshipments.

- **St. Croix South Shore Trade Zone** – This newly created trade zone is the largest area in the USVI available for industrial and commercial development.

Weaknesses, Issues, and Challenges

- **Lack of economic diversification** – The Territory is too dependent on tourism and government as

the sources of most employment. A long-term, structural change in the economy is necessary.

- **Costs** – The costs of living and doing business will continue to discourage people and businesses from moving to the USVI. Electric costs are a particular concern.
- **Fiscal situation** – The Territorial Government, GERS and WAPA will continue to negatively impact the economy until made financially stable.
- **Business climate** – Government bureaucracy, regulations and procedures impede business creation and operations. Navigating the business licensing and permitting system is difficult and expensive. Elements of the tax code such as the gross receipts tax and excise tax hurt businesses

and make the USVI unattractive as a business location.

- **Labor force** – In an already small workforce (see Volume 3), the brain drain of young and educated Virgin Islanders is causing an adult workforce lacking skills needed by many types of businesses.
- **Lack of an image** – Many people outside the Territory have limited knowledge of the U.S. Virgin Islands; in particular, why someone might want to live or have a business in the Territory.
- **Short-term thinking** – The Territory, especially government, has historically been too reliant on short-term fixes rather than long-term solutions, which is an impediment to major, but necessary structural transformation.
- **Quality of place** – In particular, inadequate medical services, infrastructure, and housing opportunities.
- **Climate change** – How will the Territory cope with and adapt to more hurricanes, rising sea level, increasing temperature, and other impacts of climate change?

Opportunities

- **Economic diversification** – Many possible types of businesses that can succeed in the Territory were identified and can be created or recruited.
- **Competitiveness** – Improve and promote the USVI “product” so that it is considered a good location for business in ways comparable to or better than those used by Barbados, Trinidad, and Puerto Rico.

- **Education** – Focus the USVI K-12 educational system to prepare youth for a lifetime of economic independence and prosperity.
- **World-class R&D Center** – Position the Territory as a world-class research and development center of excellence for emerging technologies and businesses related to Vision 2040 target sectors and others identified in the future.
- **Incentives** – Improve the USVI’s incentive system to assure incentives are a strategic investment of mutual benefit to the business and Territory. Ensure that incentives are equally available to offshore businesses being recruited and homegrown businesses.
- **Retrieving the diaspora** – Aggressively work to encourage and incentivize the return of U.S. Virgin Islanders living abroad to live, establish businesses, and bring their knowledge and skill sets to the U.S. Virgin Islands economy.



Photo Source: U.S. Virgin Islands Department of Tourism

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5

ECONOMIC OPPORTUNITIES





VOLUME 5

ECONOMIC OPPORTUNITIES

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DOING BUSINESS IN THE VIRGIN ISLANDS

Business Climate and the Government

In attracting investment, business climate is always cited as a very important issue.

There are many variations on the definition of business climate but a simple one (drawn from several online definitions and Camoin 310's experience with thousands of businesses in many places) is:

Business climate is the economic and professional environment surrounding an industry or group of business enterprises that is strongly influenced by the government and political attitude toward businesses, taxes, regulations and procedures impacting the establishment and operations of businesses, the financial stability of the government, support for labor organizations, impacts on operating costs from government and quasi-government entities, and other aspects.

While some aspects of business climate have numbers – tax rates, permit fees, electric rates – many other measures are more a matter of “feel.”

Does a business feel welcome, wanted, and fairly treated in the location?

The first ninety days of this project involved an extensive public engagement. The outreach included dozens of in-depth interviews with key figures, multiple virtual town hall meetings and surveys that generated more than 2,000 responses from constituencies on all three islands as well as former Virgin Island residents now living on the mainland and elsewhere in the world (the USVI Diaspora).

This effort yielded many important nuggets of feedback and recommendations, many of which are incorporated in this report.

One question in the survey of Virgin Islands businesses stands out above all the rest. It occurred when the nearly 500 respondents (nearly one-quarter of all licensed businesses operating in the Territory) were asked if they would recommend the Territory as a place to establish a business. Forty-eight percent of respondents chose to answer the question and by a wide margin (3 out of 4) answered that they would be unlikely to recommend the USVI as a place to do business.

They were asked to use a five-star rating system to judge their likelihood of recommending the Territory as a place to do business (with 5 stars interpreted as an unqualified “yes”). Only 25% chose 4- or 5-stars (26% if numbers are rounded up), indicating that they would recommend it.

Thirty-eight percent (38%) of respondents gave it a one or two-star rating; on the whole they would not

recommend the USVI as a place to do business. Thirty-seven percent (37%) gave it a 3-star ranking which indicates, at the very least, some significant reservations and at the most positive spin, a less than enthusiastic endorsement.

75% of businesses surveyed would have issues recommending the USVI as a place to do business and 87% do not believe the business climate is sufficient.

Businesses were also asked to rank (1-5) the business climate. Only 13% gave the Territory a 4 or 5-star ranking. Eighty-seven percent (87%) gave the business climate 3 stars or less.

In summary, 75% of businesses surveyed would have issues recommending the USVI as a place to do business, and 87% do not believe the business climate is sufficient. If in 5, 10 or 20 years that sentiment remains anywhere near the level of today, prospects for prosperity will have long since been extinguished.

For new business development there is no more important a constituency to hear from than the businesses that are already there. Executives contemplating an investment in the Territory will be discouraged by what they hear from existing businesses. In most cases, this will happen before economic developers or USVI champions have a

chance to meet with them. This will occur whether the local businesses speak in code as some did with their survey responses (“well, the place isn’t for everyone”) or much more bluntly (“I regret my investment and strongly suggest that you not make the same mistake”).

Every three years since 1996, the economic development marketing firm Development Counsellors International has conducted a survey of corporate executives and site selection consultants throughout the United States and beyond. Among the survey questions is one relating to “sources of information about business climate” – i.e., when a company considers a place for expansion or relocation, what in their research most influences their decision?

Dialogue with industry peers has been found to be a top source of information about business climate.

Almost without exception “*dialogue with industry peers*” has been the number one answer.

Similarly, since the early 2000s, several business journals, such as Forbes, CNBC, U.S. News & World Reports, Inc. Magazine, the Kauffman Foundation, among others, conduct annual rankings for states on various measures important for conducting business. Included in these rankings are indicators for business climate.

The Vision 2040 business survey data, which was corroborated and amplified in interviews, painted a picture of a business climate in trouble. Topping the list of why this is the case is the licensing process which is viewed by most as needlessly complex and confusing. One interviewee called it “peculiar.” Another described it as a difficult trial and error process of navigating a bureaucratic maze. Yet another person said the process was about knowing the “right people.” Several talked about the need to hire an attorney or other professional to guide them through the process—which they indicated is an unnecessary expense and an indicator of a poor business climate.

The World Bank reported in 2019 that the U.S. Virgin Islands ranked at the top of the list of places in the Caribbean and Central America for length of days needed to start a business. In the USVI, eight (8) different departments have a role in approving business licenses: Department of Licensing and Consumer Affairs, Lieutenant Governor’s Office, Bureau of Internal Revenue, Police Department, Department of Parks and Natural Resources, Fire Service, Department of Health, and Office of Boards and Commissions.

This complex dynamic shows up in other areas. Many respondents to the Diaspora survey mentioned the difficulty of getting a job without knowing the “right” person. The general perception is that government does not care, as seen through a lack of public investment in correcting the problems, and this is creating a negative sense of community pride and lack of confidence.

The survey, interview, and group responses as part of Vision 2040 suggest a business community that is both unhappy and fragile. With continued sentiment like this, the Virgin Islands will discourage new investment and existing business investment will be at risk. For these reasons, changing this situation must rise to the top of the Territorial government’s agenda. Recommendations on how to address this situation can be found in Volume 6 of this plan.

Days needed to start a business, selected countries, 2019

Haiti	97
Suriname	66
US Virgin Islands	42-56
Belize	48.2
Costa Rica	23
Antigua and Barbuda	19
St. Kitts and Nevis	18.5
Guyana	18
Dominican Republic	16.5
Barbados	16
Dominica	12
Grenada	12
Bahamas, The	11.5
St. Lucia	11
Trinidad and Tobago	10.5
St. Vincent and the Grenadines	10
Puerto Rico	5.5
Jamaica	3

Source: The World Bank

THE GOVERNMENT'S ROLE IN THE TERRITORY'S ECONOMIC DEVELOPMENT SYSTEM

Under the purview of the Territorial Government – the Governor, the Departments, Commissions and other agencies, and Legislature – there are four main organizations that have the most impact on economic development in the Territory – USVIEDA, UVI, RTPark, and WAPA. Nearly a dozen others have a direct or indirect interface with businesses and influence how business owners and executives perceive the business climate.

USVIEDA

The Territory's primary Economic Development Organization (EDO) is the United States Virgin Islands Economic Development Authority, a semi-autonomous government organization responsible for the promotion and enhancement of economic development in the U.S. Virgin Islands. It acts as an umbrella authority that integrates and unifies the functions of its component agencies under one executive board in order to maximize efficiency and enhance economic development in the Territory. The component units of USVIEDA are:

- Economic Development Commission;
- Virgin Islands Economic Park Development Corporation (formerly the Industrial Park Development Corporation);
- Economic Development Bank (formerly the Government Development Bank and the Small Business development Agency); and
- Enterprise Zone Commission.

The Business Survey conducted as part of Vision 2040 included a question on use and rating the programs and services of USVIEDA. A very small number answered this question (between 7 and 27 depending on the program) – too small a number to be able to develop a clear picture of how businesses feel about USVIEDA. This raises several questions:

- Is the USVIEDA offering the best portfolio of programs and services?
- Is the USVIEDA effectively marketing its programs and services?
- Is the USVIEDA developing relationships with the Territory's business community?
- Should the USVIEDA concentrate more on a business retention and expansion effort?

The USVIEDA has a portfolio of incentives intended to attract and support businesses. Incentives are evaluated later in this report.

The University of the Virgin Islands (UVI)

Colleges and universities are always – or should be – an important part of a place's economic development delivery system. Founded in 1962, UVI is a public, co-ed, land-grant HBCU (Historically Black College and University) with approximately 2,500 students enrolled on two campuses (St. Thomas and St. Croix) in 47 undergraduate and graduate degree programs. Most of these are in fields that will be in high demand in the future.

UVI is tasked with carrying out a great deal of important research and other work that supports economic development. As Vision 2040 was being

prepared, UVI was working on the five-year update of the Territory's Comprehensive Economic Development Strategy (CEDS) that will be submitted to the U.S. Economic Development Administration (USEDA) for approval, as well as a Tourism Master Plan to guide the Territory's future tourism efforts.

Approval of the CEDS by the U.S. EDA will have important benefits besides providing the direction for the USVI's economic development efforts over the next five years. Once approved, the Territory can apply to USED A to be recognized as an Economic Development District (EDD). (For more information on EDDs, see <https://www.eda.gov/edd/>.) Depending on funding availability, this may provide additional program funds for the Territory as well as put proposed projects higher on the priority list for other federal funding.

Another possibility that UVI should explore is obtaining recognition by USED A as a University Center. The EDA's website (see <https://www.eda.gov/programs/university-centers/>) provides the following description:

Institutions of higher education have extensive resources, including specialized research, outreach, technology transfer, and commercialization capabilities, as well as recognized faculty expertise and sophisticated laboratories. The EDA-supported University Center (UC) program is specifically designed to marshal the resources located within colleges and universities to support regional economic development strategies in regions of chronic and acute distress.

The RTPark

Established by Territorial law and operating in partnership with UVI, the Research and Technology Park (the RTPark) describes itself as “a rapidly growing economic development program specializing in technology and knowledge-based business attraction in the United States Virgin Islands (USVI).” It is a partnership between the private sector, the government of the U.S. Virgin Islands and the University of the Virgin Islands (UVI).

The RTPark’s mission is “to establish the USVI as the premier business destination of choice for firms in knowledge and technology-intensive sectors.”

The RTPark has been very successful, currently working with nearly 70 client companies at its St. Croix and St. Thomas locations. It has a current proposal to develop the Virgin Islands Tech Village in Estate on a 26-acre site across from the UVI St. Croix campus, including 12,000 square feet of office space, to support agricultural development in the USVI.

WAPA

The Virgin Islands Water and Power Authority, established by the Legislature in 1964, is an autonomous agency of the Virgin Islands Government which produces and distributes electricity and drinking water to residential and commercial customers in the Territory. As both electricity and water are necessities for all businesses, WAPA has a direct impact on business operations.



Tech Village Proposal by RTPark on St. Croix

While water was not cited by stakeholders as a major negative for the Territory’s economic development program, electric service most certainly was, scoring only 1.7 out of 5 (where 5 was Very Good and 1 was Poor) in interviews. Even where a numerical score was not provided, interviewees consistently noted the cost and unreliability of electric service as a major, territorial-wide problem.

Similar comments were provided in the survey and online meetings of the USVI Diaspora. Some mainland U.S. interviewees stated that they would return to live in the USVI but high electricity costs and/or unstable electric reliability would make conducting their business in the Territory extremely challenging.

The topic of electric infrastructure is analyzed in more detail elsewhere in this Vision 2040 report, but

it is important to note here, it is one of the greatest drawbacks to demonstrating a good business climate in the Territory.

Interviewees consistently noted the cost and unreliability of electric service as a major, territorial-wide problem.



U.S. Virgin Islands Government House, St. Thomas

THE IMPACTS OF THE TERRITORIAL GOVERNMENT ON ITS ECONOMIC DEVELOPMENT POTENTIAL

Throughout the interviewing process, multiple people summed up their evaluation of the Territorial Government’s impact on the USVI’s economic development potential as a perfect example of Walt Kelly’s famous Pogo cartoon: We have met the enemy, and he is us.

A synthesis of many interviews provides the following summation:

Many interviewees believe the major problem is the government itself. It is, in their opinions, too big and costly with a byzantine licensing and permitting process. While this is a very complex situation, simply stated, the dynamics of the problem have been integrated into the life and culture of the Territory over several decades.

Vision 2040 participants are well aware of a critical lack of good paying, private sector jobs in the USVI. Some people consider government service to be a noble calling while others see it for themselves as a job of last resort. The lack of private sector jobs has made the USVI government the largest employment sector (24% of total jobs in 2017 – followed by Accommodation and Food Services at 17%) with one of the highest average annual wages (\$53,625 in 2017). As of December 2020, it also represented more advertised job openings than any other sector.

The lack of private sector jobs has made the USVI government the largest employment sector.

With government viewed by many as the employer of first resort, stakeholders report that many young people aspire to getting a government job. Those seeking alternative careers see limited prospects in the Territory, leave for education, secure a job while away, and do not return. The brain-drain becomes the Diaspora.

Many of those who remain in the Territory may not focus their education towards meeting the skills of a private sector job – but even if they do, there are not enough jobs for each group of high school and UVI graduates.

The high levels of government employment devotes a large share of the Territorial budget to employee

wages and benefits. The Proposed FY 2021 Budget totals \$742,779,823. Of this, \$388,158,185 are for Personnel Services and Fringe Benefits, which represents 52.3% of the total budget. Assuming an approximate Territorial population of 96,000 (the Proposed 2021 Budget shows a 2018 population of 96,211), this equates to a per capita budget load of \$4,043 for personnel costs. Based on a possible maximum Territorial Government employment of 5,598, this equates to a per employee budget cost of \$64,715 for personnel services. This does not include the more than \$20 million budgeted for the Legislature including the salary of senators and their staff. (Total budget and personnel costs taken from the Fiscal Year 2021 Proposed Budget in Brief.)

There are three major resulting issues.

First, the Territory has insufficient capital to invest in needed areas. If this situation continues, it will be a large impediment to the implementation of Vision 2040.

Second, as the cost of government continues to increase and the number of taxpayers continues to decline, either taxes will have to be raised, or new fees need to be put in place.

Third, the Government Employees Retirement System (GERS) currently has an unfunded pension liability of \$5.3 billion and a funding ratio of 11.3%. The standard funding ratio for a healthy pension fund is 80%. The fund will be insolvent within a matter of a few short years. Even if pension amounts are only reduced, this will still cause a decline in disposable income to many residents and a

concomitant reduction in purchases from the Territory's businesses.

According to one interviewee "The U.S. [mainland] government is mostly behind the scenes while the private sector underwrites many civic improvements. In the USVI, government is the key thing in life from the time people get up in the morning - and it sucks up all the oxygen." This person added, "Folks in government need to recognize they are the problem."

Every Administration and Legislature works on improvements in the functioning of the government while at the same time meeting the needs and some of the desires of their constituents. Much more aggressive and bold action must be taken to improve how government functions in the Territory.

What should the aspirational goal be 20 years from now? Simply put, it would be to *reverse the numbers*. Instead of 75 percent of the Territory's businesses saying they would have reservations recommending the U.S. Virgin Islands as a place to invest, get on a trajectory so that by 2040 three-quarters or more say they would not have reservations about the business climate. Instead of government being the major employer, the private sector must be grown significantly so that the government's share of employment is reduced.

"Everything in the Territory is political. Too much ego and agenda. It's all about relationships and who you know. We need to work in unison."

-Stakeholder Interview

"The U.S. [mainland] government is mostly behind the scenes while the private sector underwrites many civic improvements. In the USVI, government is the key thing in life from the time people get up in the morning - and it sucks up all the oxygen."

- Business Owner

Business Survey Results

Of the 488 respondents, 39% have a business on St. Thomas, 36% on St. Croix, 13% on St. John, and 7% on the U.S. Mainland. Eighty-three percent (83%) of respondents' businesses are headquartered in the Territory, and 76% are a stand-alone business. Ninety-eight percent (98%) of businesses are neither a franchisee nor franchisor.

For years in operation, 32% of the businesses have been in existence over 20 years. Twenty-eight (28%) have been in business 1-5 years, 14% 6-10 years, 13% 11-15 years, 9% 16-20 years, and 4% less than 1 year. 88% of business are first generation owned. Forty-one (41%) of businesses are home-based, 40% are in a leased building, and 15% are in a building that the business owns.

Eighty-one percent (81%) of respondents are the founder of their company, and 98% are privately owned (versus publicly traded). Seventy-two (72%) of businesses do not plan to go public in the next five years, and 10% do plan to go public (36 businesses total).

As for funding sources, these come from private equity (22%), employees or managers (19%), and 33% from other sources including family or the individual respondent or no additional investment. Twenty-one percent (21%) answered "Don't know."

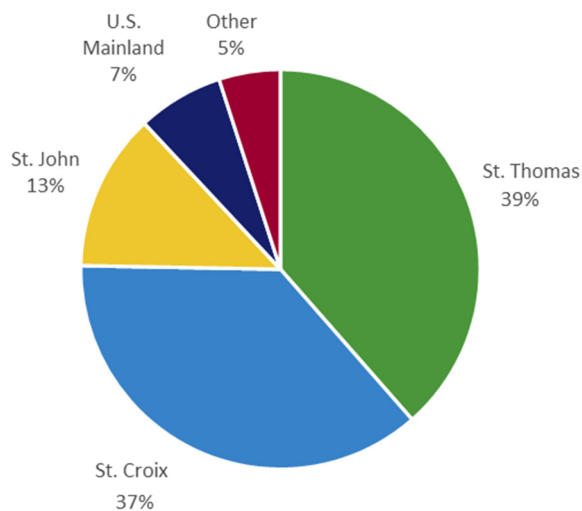
The most represented industries from respondents include Professional Services (33%); Financial, Insurance or Real Estate (12%); and Retail (11%). Twenty percent (20%) chose "Other;" top responses included Hospitality & Accommodations,

Construction, Food & Beverage, Tourism, and Transportation Services.

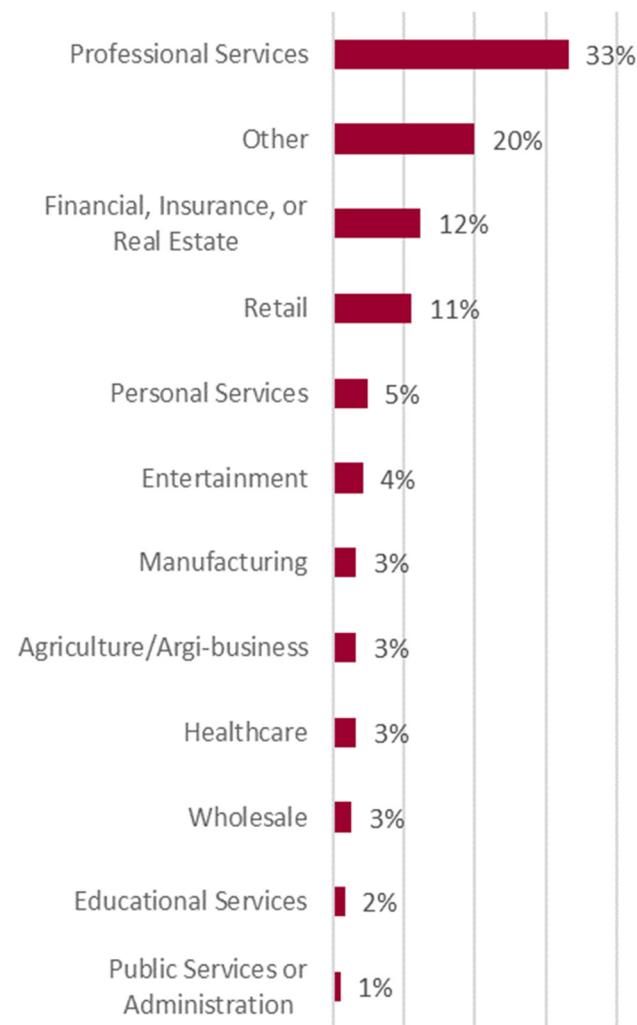
Most survey respondents were the founder of their company (81%).

While 32% of businesses have been in business more than 20 years, 28% have been in existence only 1-5 years.

SURVEY RESPONDENTS BY BUSINESS LOCATION



WHAT INDUSTRY DOES YOUR BUSINESS REPRESENT?



CHALLENGES

Respondents were asked to rank 19 challenges from 1 (not a challenge) to 5 (a severe challenge). Top challenges include energy costs, overall cost of doing business, unexpected changes in economic conditions or industry demand, and taxes. Managing a brand, entering new export markets, and having enough parking were of least concern to respondents.

Financial challenges for businesses include increasing cost of utilities, cost of real estate, and the increasing total cost of labor. Many respondents cited challenges working with the government such as slow response, licensing issues, working with the BIR, and the gross receipts tax.

Financial issues over the past five years.

(1=Not Difficult, 5=Extremely Difficult)

2.8	Managing cash-flow
2.1	Understanding your true total cost of product/service per unit
2.1	Making pricing decisions
2.8	Financing new equipment and/or facilities
2.5	Attracting external sources of growth capital
2.8	Boosting profit margins on existing products/services
2.9	Dealing with the increasing total cost of labor
3.7	Dealing with the increasing cost of utilities
3.2	Cost of real estate

Twenty-three percent (23%) of respondents do not have an issue finding qualified employees. Nineteen percent (19%) have a hard time finding technical or credentialed workers, 17% have a hard time finding entry level employees, 15% have a hard time finding mid-skill production workers, and 14% have a hard time finding supervisors or lower-level managers.

CHALLENGES WE ASKED BUSINESSES TO RATE

(1=Not a Challenge, 5=A Severe Challenge)

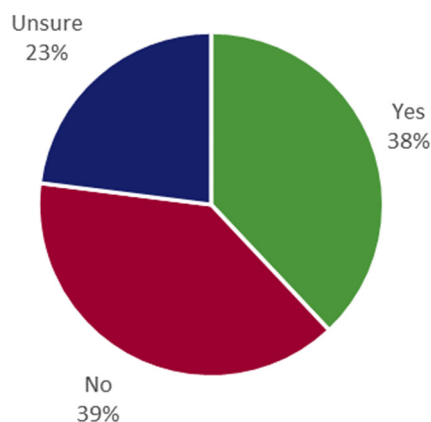
2.6	Acquiring new customers
2.7	Developing new high-margin products or services
3.8	Energy costs
2.2	Entering new export markets
2.5	Entering new US domestic or Caribbean markets
2.3	Having enough parking spaces at your facility
2.3	Keeping up with changes in customer preferences or needs
3.1	Lack of business support programs and services
2.9	Maintaining high margins on your existing products or services
2.0	Managing your brand
3.0	Navigating legislative and/or regulatory barriers
2.7	Obtaining growth financing and capital
3.7	Overall cost of doing business
3.0	Recruiting the best workforce possible
2.3	Responding to new disruptive technologies in your industry
2.5	Retaining high-value customers
2.4	Retaining your best workers
3.5	Taxes
3.6	Unexpected changes in economic conditions or industry demand

Many businesses wrote in additional information that helped us understand growth challenges. Many cite Covid-19 restrictions, governmental regulations (specifically licensing and IRB), and high taxes, (specifically the gross receipts tax) as hindrances to growth. The cost of living, the need for educated/skilled workers, and obtaining capital were also cited.

EXPECTATIONS FOR GROWTH

Thirty-nine percent (39%) of businesses surveyed do not expect to hire more employees in the next year, but 38% do. Twenty-three percent (23%) are unsure at this time.

DO YOU EXPECT TO HIRE MORE EMPLOYEES IN THE NEXT YEAR?



What are the distinguishing characteristics of those businesses that are expected to grow?

- **Many are in the Professional Services industry.** Thirty percent (30%) of business that are expected to grow are in the Professional Services sector, 13% are in the Retail sector, 9% are in the Financial, Insurance or Real Estate sector, and 7% are in the Entertainment sector.
- **Most are located on St. Croix or St. Thomas.** Of the growing businesses, 40% are located on St. Croix, 43% on St. Thomas, 16% on St. John, and 1% on Water Island.

- **The largest employers are expected to grow most.** Seventy-five percent (75%) of businesses with more than 25 employees are expected to grow compared to 38% of those with 10-24 employees, 40% of those with 2-9 employees, and 29% with one or no employees.

Where do these growing companies think USVI should focus its efforts? Top responses were:

- Simplify and accelerate zoning, business permitting, regulatory compliance
- Improve the work ethic of workforce
- Increase the level of technical skills, accreditation, advanced degrees of local workforce
- Provide and/or support workforce development initiatives and training programs.

In addition, there are certain types of worker training programs growing companies feel will support future growth and profitability. These include programs that assist with customer service training, IT, accounting, and an overall better general education.

IMPORTING, EXPORTING, AND NON-EXPORTING BUSINESSES

Eighty-one percent (81%) of businesses surveyed do not export products out of the Territory, and 18% do. For those that export, 45% export to the U.S. Mainland and 40% to other Caribbean islands. Types of services and products exported include clothing, engineering services, other consulting services,

jewelry and other personal items, security services, and other gifts and souvenirs.

Fifty-one percent (51%) import products, supplies, or services from outside the USVI, predominantly the U.S. mainland (at 84%). Types of products that are imported include apparel, automobiles and related parts, construction materials and related lumber and tools, clothing, computers, jewelry, linens, office supplies, paper products, raw materials, souvenirs, and other equipment and supplies.

Exporters have the most positive responses to questions around business climate, 24% of whom score it favorably compared to 16% of importers and 10% of non-exporters.

Eighteen percent (18%) of all respondents export goods or services, of which 40% export to other Caribbean islands and 45% to U.S. mainland markets. Those that export to the U.S mainland are primarily from the Professional Services and Retail sectors. Those that export to other points in the Caribbean are in the Manufacturing, Wholesale, and Retail sectors. Top challenges are largely similar among importers, exporters, and non-exporting businesses. These include energy costs, overall cost of doing business, and unexpected changes in economic conditions or industry demand.

18% of businesses export products and services out of the Territory.

51% import products, predominantly from the U.S. mainland.

LONG-LASTING BUSINESSES

What are the differences between businesses that have been in operation a longer time versus businesses with a shorter lifespan?

- **Professional Services dominates, with an increasing tourism focus.** Businesses that have been in operation over six years are concentrated in the Professional Services, Financial, Insurance, or Real Estate, and Retail industries. Businesses that are less than six years old are dominated by the Professional Services, Retail, and Entertainment industries, illustrating a shift to more tourist and recreation economic dependency. This is also illustrated through write-in responses from younger businesses in the construction and hospitality industries.
- **Challenges are the same.** Highest ranked challenges did not change based on how long the company has been in business, nor where the business was located. These include energy costs, overall cost of doing business, unexpected changes in economic conditions or industry demand, and taxes.
- **Younger businesses think more favorably of the business climate.** Twenty percent (20%) of those less than 5 years in operation rated the climate favorably compared to just 8% of those over 20 years old.
- **Younger companies anticipate to grow more than older companies.** Fifty-two percent (52%) of companies less than 5 years old expect to hire more workers in the

next year, compared to 31% for companies in operation for over 20 years and 29% of companies 11-20 years old. Thirty-seven percent (37%) of companies 6-10 years old expect to hire more workers in the next year.

- **The older the business, the harder it is to find higher skilled labor.** When asked what positions are hard to fill, companies in operation 10 years or less most often chose “None” followed by entry level positions and mid-skill production workers. Companies in operation longer than 10 years find it more challenging to find technical or credentialed workers and to a lesser extent supervisors or lower-level managers.

BUSINESSES OUTSIDE THE TERRITORY

Of survey respondents, businesses headquartered outside the Territory have fewer workers than those that reside within the Territory. Eleven percent (11%) of businesses are not located in the Territory. Eighty-two percent (82%) of these businesses have one or no workers, and none of these businesses have over 9 workers. Forty-four percent (44%) of them have been in business for over 20 years, and 26% have been in operation for 11-20 years, 11% have been in operation 6-10 years, and 19% 1-5 years.

Top challenges are largely the same as the sum of the businesses (overall cost of business, energy costs, unexpected changes in economic conditions or industry demand, and taxes) although recruiting the best possible workforce was the secondly ranked challenge among these businesses.

WORKFORCE ISSUES

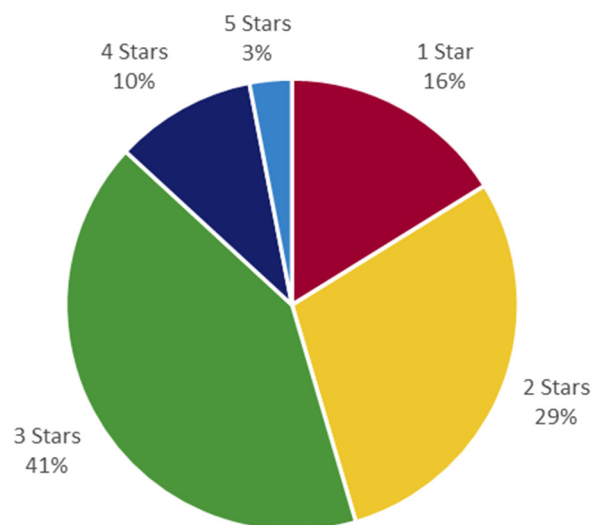
Who are the businesses that cite workforce issues and what do they have in common?

- **Workforce is distributed among the islands.** Forty-two percent (42%) of respondents indicate that recruiting the best workforce possible is a significant challenge. Of these, 38% are from St. Croix, 32% from St. Thomas, 13% from St. John, and 11% from the U.S. mainland.
- **The fewer the employees, the harder it is to find qualified workers.** Of the respondents where recruiting workforce is challenging, 68% of businesses have less than five employees, 14% have 5-9 employees, 10% have 10-24, and 8% have 25 and over.
- **Their industry competition is largely similar to the sum of respondents.** Industries most represented by having workforce issues include Professional Services, Retail, Financial, Insurance, or Real Estate, Construction, Entertainment, and Hospitality.

THE BUSINESS CLIMATE SEGMENTED

When asked to score the respondent's perception of the business climate in the Territory on a scale of 1 (lowest) to 5 stars (highest), 16% gave a score of 1, 29% gave a score of 2, 41% gave a score of 3, 10% gave a score of 4, and just 3% gave a score of 5.

HOW WOULD YOU RATE YOUR PERCEPTION OF THE BUSINESS CLIMATE IN THE U.S. VIRGIN ISLANDS?



These overall ratings, and other challenges presented to businesses are used to develop patterns and themes by certain distinguishing characteristics – by industry, by island, by those who have a more positive outlook, by those who have lost employees, and more.

By Industry | Those in the Financial, Insurance, or Real Estate sectors have the least favorable

perception of the business climate. Fifty-two percent (52%) of these respondents gave a low ranking (1 or 2 on a scale of 5) compared to 43% among all businesses. Comparatively, those businesses in the Personal Services Industry gave a ranking 30% of the time, Professional Services indicated a negative perception 28% of the time, and Retail only 14% of the time. Those in the Retail sector seem to have the most favorable perception of the business climate. Thirty-four percent (34%) of these businesses have a favorable perception compared to 13% of all businesses.

By Island | While the sample size was smaller (n=33), the business climate was ranked lower in St. John, with 52% of these respondents giving a negative ranking (1 or 2 on a scale of 5) compared to 42% for St. Croix businesses and 45% of St. Thomas businesses.

By Size | The larger the company, the less positive the business felt about the business climate. Forty percent (40%) of those with 1 or no employees gave a negative rating, compared to 47% of business with 2-9 employees and 52% of those with over 10 employees. Thirteen percent (13%) of those with 1 or no employees felt positively about the business climate, compared to 17% with 2-9 employees and 12% of those with over 10 employees.

Those who have lost employees | Twenty-four percent (24%) of businesses on St. Croix have lost employees in the last five years, compared to 29% of businesses on St. Thomas, and 34% of businesses on St. John. Nineteen percent (19%) of businesses that have lost employees in the last five years are in the

Professional Services sector, 12% in the Financial, Insurance, and Real Estate sectors, and 9% in the Retail sector.

The most difficult challenges for these businesses are the overall cost of doing business, unexpected changes in economic conditions or industry demand, and energy costs. On a scale of 1-5 with 5 being a severe challenge these were scored at 4.10, 4.10, and 3.96, respectively.

Those who have a positive outlook | Thirty-three (33) businesses, or 13%, gave the USVI a rating of 4 or 5 for business climate (out of 239 businesses.) These represent a spectrum of business sizes and lengths of time in operation. While there are complicated governmental regulations, many of these respondents feel there is untapped potential in the USVI with room for growth. To improve support to companies seeking growth, these were the top responses among these businesses:

- Increase the level of technical skills, accreditation, advanced degrees of local workforce.
- Simplify and accelerate zoning, business permitting, regulatory compliance.
- Provide easier access to economic development programs.
- Grow entrepreneurial support and innovation ecosystem programming.
- Provide and/or support workforce development initiatives and training programs.
- Improve the work ethic of the workforce.

GOVERNMENT PROGRAM SATISFACTION

Only 6% of respondents indicated working with a government agency in the past three years whereas 215 indicated they had not.

This is not a large enough sample to evaluate the quality or success of programs. It also does not address whether the satisfaction score was related to the quality of the experience applying for and receiving assistance, or the fit between the form of assistance and the business needs. More analysis and evaluation of programs may be warranted.

While this is a small sample, those that were contacted by the government to discuss challenges viewed the business climate more favorably, with 31% providing a positive rank compared to 12% who were not contacted.

USVIEDA

Most respondents have not participated in a service or program provided by U.S. Virgin Islands Economic Development Authority. For those that did, 49% were not satisfied with the program (1 or 2 stars)

they participated in (35) and 30% were satisfied (4 or 5 stars) (21). We asked respondents to rank their satisfaction with specific USVIEDA programs they may have participated in with a score of 1 (low) to 5 (high). The findings are shown in the chart below (“Satisfaction Rankings”).

Other Agencies and Departments

Seventy-one percent (71%) of respondents have worked with the Department of Licensing and Consumer Affairs (DLCA). Of these, 61% percent felt they had adequate information and tools to navigate the process. Suggestions for improvement include better coordination between agencies, faster response time (particularly with licenses), more qualified staff, and greater transparency with the process.

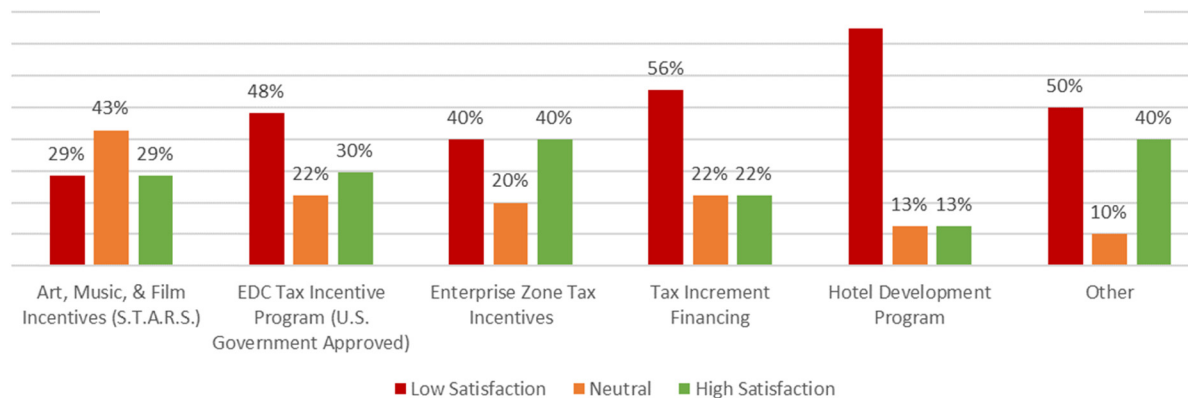
Thirty-six percent (36%) of respondents have worked with the Department of Labor. Of these, 55% percent felt they had adequate information and tools to navigate the process. Suggestions for improvement include more qualified help, faster

response time, and an overall less cumbersome process.

Fifty-seven percent (57%) of respondents have worked with the U.S. Virgin Islands Bureau of Internal Revenue (VIBIR). Of these, 46% percent felt they had adequate information and tools to navigate the process. Suggestions for improvement include more automation, better trained workers with better customer service, have an updated website with online submission, and a greater degree of responsiveness.

Respondents who were contacted by the government to discuss challenges viewed the business climate more favorably.

SATISFACTION RANKINGS BY USVIEDA PROGRAM



Business Relocations

An analysis of inter-island business relocations between 2009 and 2019 reveals that St. Croix was a net importer of establishments and jobs, gaining 29 establishments and an associated 207 jobs that relocated from St. Thomas and St. John.

St. John was also a net importer, gaining 15 establishments and 64 jobs as a result of inter-island relocations.

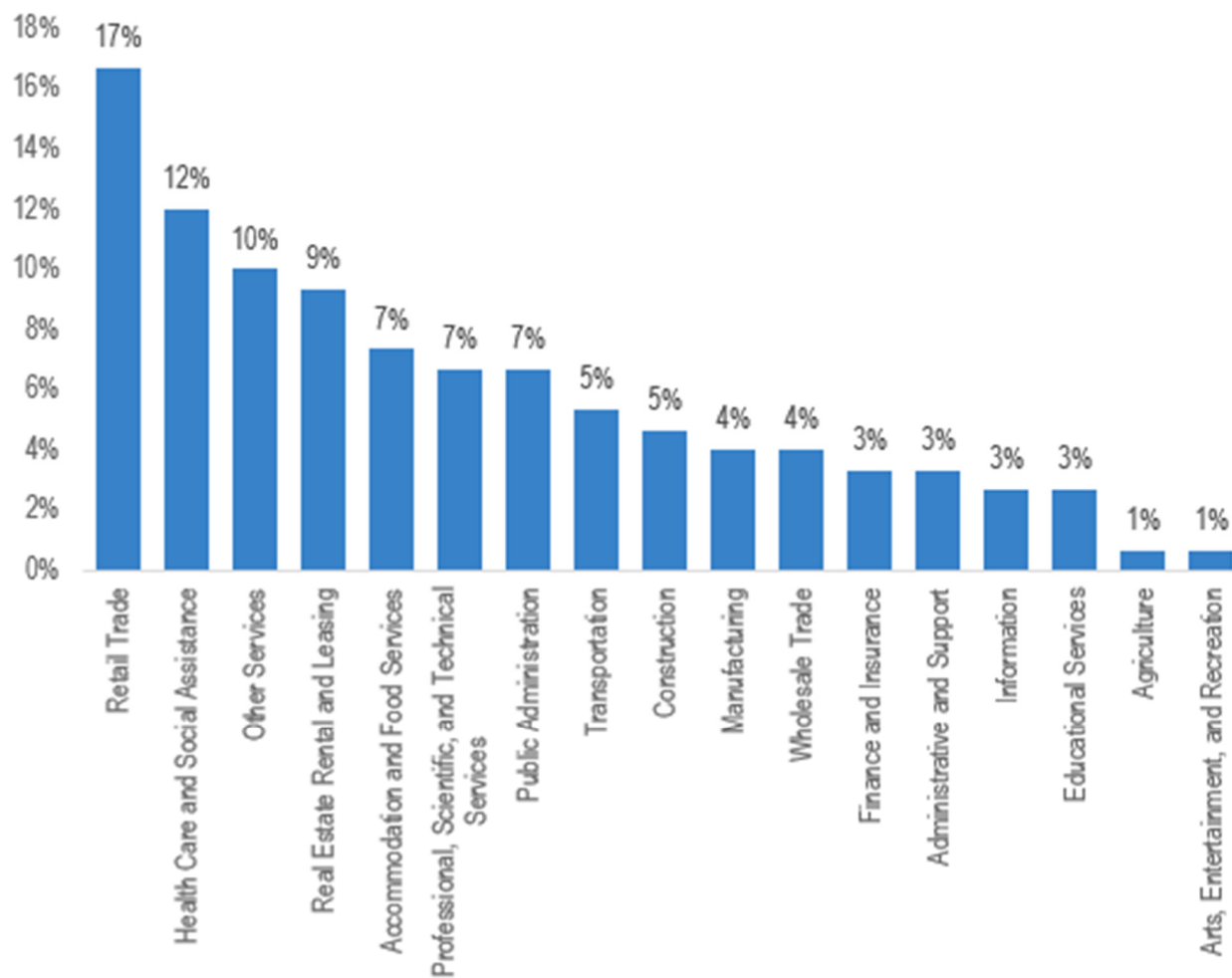
St. Thomas was a net exporter of establishments and jobs, losing 44 establishments and 271 jobs to the other islands.

The largest number of business relocations were in the Retail Trade sector at 17%. This was followed by Health Care and Social Assistance (12%) and Other Services (10%).

“There is a strong perception of competition between St. Thomas and St. Croix. They need to be partners.”

-Stakeholder Interview

Percent of Business Relocations by Sector, 2009-2019

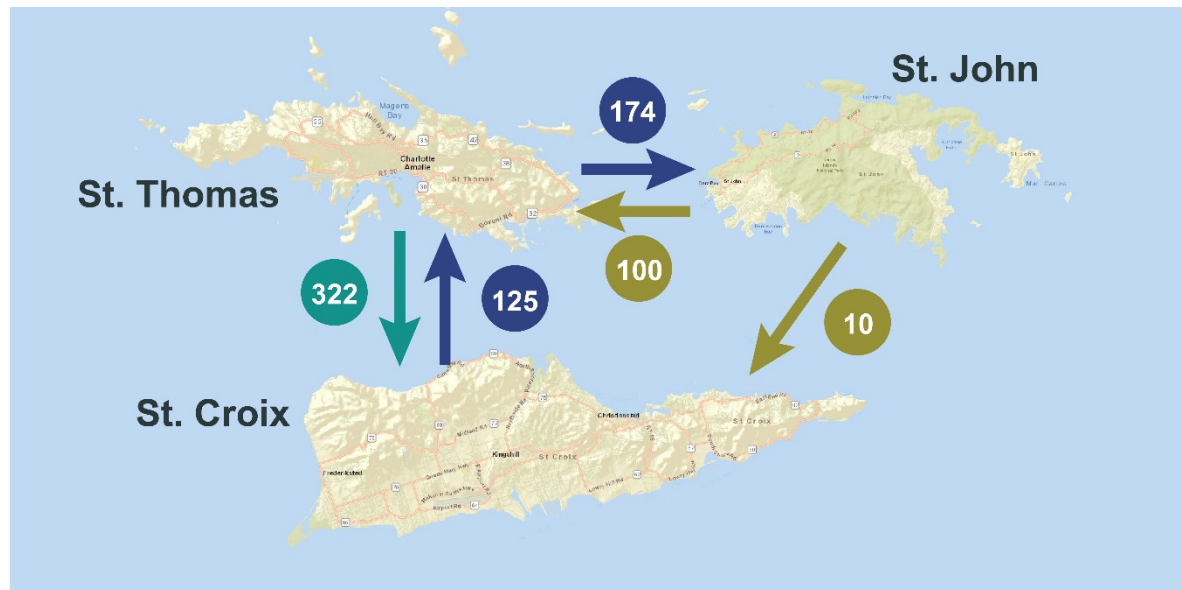


Source: InfoGroup

RELOCATIONS BY ESTABLISHMENTS (2009-2019)



RELOCATIONS BY EMPLOYMENT (JOBS) (2009-2019)



St. Croix has been a net importer of jobs and establishments from other islands in the Territory.

St. Thomas lost the greatest number of jobs to other islands in the Territory from 2009 through 2019.

Global Trade and Investment

GLOBAL INVESTMENT TRENDS

Globally, leading up to 2020 a majority of companies planned to invest in projects in their home country or a foreign country. While Covid-19 resulted in the postponement of some projects, primarily larger manufacturing and corporate headquarters projects, companies are taking an optimistic view of the future and are expecting to make only limited changes to planned investment, despite continued uncertainty.¹

Unsurprisingly, the pandemic's impact on investment decisions has varied between industries. Travel related investment projects have been stalled or cancelled while the life sciences/pharmaceuticals, automotive, and information technology industries reported the least amount of disruption. Strategic drivers for future investments however are consistent across industries. Resilience and business continuity are at the forefront of company decision making, while access to markets and proximity to customers continue to be important considerations.

The focus on business continuity, resilience, and access to markets is affecting which countries are most likely to be considered for investment. The U.S. continues to be the top country for potential investment, given the large market opportunity associated with the U.S. economy and a mature

operating environment, which continue to be attractive to companies.

Concurrent with the Covid-19 disruption, companies are going through major transformation processes associated with digital technologies. Across all industries and functions, companies are planning to increase their use of digital technologies and automation over the next three years. The intensification of digital transformation is expected to be particularly significant in research and development, select manufacturing sectors, and shared service centers/back offices. Digital technologies and automation are expected to change the skills requirement for talent, and skills development will be required for workforces across all functions. It is also expected that digital technologies and automation will increase employment and headcount, and as a result labor costs will remain important location criteria. Digital technologies and automation will enhance the role of human capabilities and skills as a competitive advantage.

CARIBBEAN FOCUS

The decade ending in 2019 saw the highest ever foreign direct investment (FDI) inflows into Latin America and the Caribbean, which peaked in 2012. Since 2012, foreign investment inflows have declined steadily, a trend that is expected to be further exacerbated by the Covid-19 pandemic. Early

estimates indicate that global FDI may have fallen by 40% in 2020 and that it will decline further by between 5% and 10% in 2021. The outlook for the Caribbean in terms of FDI, which experienced sharp declines in GDP and exports in 2020, is likely to be even more negative. FDI is important to the region as a complement to domestic investment and a source of new capital. Within the Caribbean, conditions must be set not only to attract foreign capital, but also for it to become a source of increased productivity, innovation and technology, and for it to be channeled towards sustained, inclusive and sustainable economic growth.²

The Caribbean as a whole is a valuable economic partner to the U.S. In 2018, the U.S. realized a \$12.3 billion trade surplus on \$35.3 billion of trade with the Caribbean.³ Recognizing the mutual benefit of a strong relationship with Caribbean nations and territories, the U.S. has committed to work with its Caribbean partners to promote sustainable economic policies and job-creating, private sector-led growth through the utilization of trade preference programs and forums such as the U.S.-CARICOM Trade and Investment Council. Additional goals include supporting the growth and establishment of small- and medium- sized companies, promoting broadband development and implementation, and fostering sustainable tourism in the Caribbean.

¹ Dencik, Jacob, et. al. *Global Location Trends 2020 Special Edition: Location Strategy in a Post-COVID-19 World*. IBM.

² *Foreign Direct Investment in Latin America and the Caribbean*. United Nations Economic Commission for Latin America and the Caribbean, 2020.

³ *U.S. Strategy for Engagement in the Caribbean*. U.S. Department of State, Bureau of Western Hemisphere Affairs.

ASSESSMENT OF COMPETITIVE POSITION

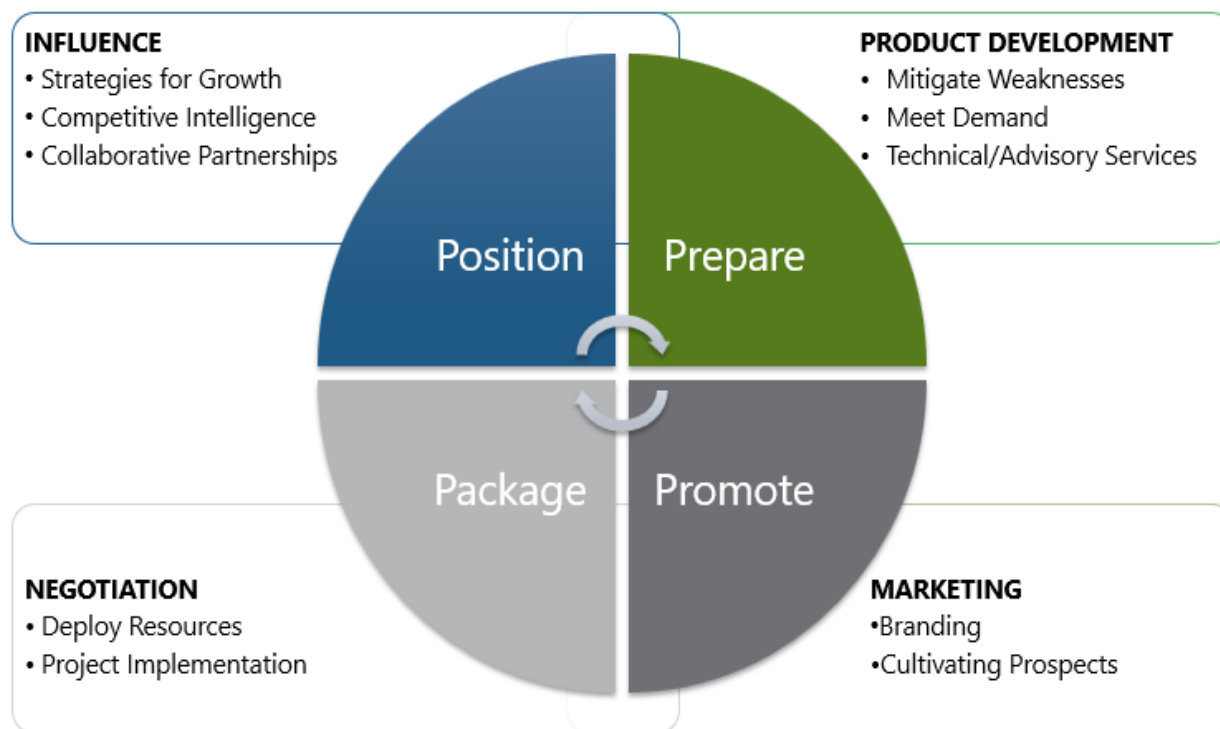
Management of Economic Resources (“Economic Dev. 101”)

ECONOMIC DEVELOPMENT ECOSYSTEM: A DECADE OF TRANSFORMATION

Nationally, economic development has undergone a transformational shift from the traditional model to an integral model, demanding EDOs to be *center-of-it-all* leaders in their communities and able to strategize and integrate resources and assume roles for effective collaboration. Those that are not managing this transition are coming under increased stakeholder, public, and funder criticism and scrutiny.

Nearly twenty years ago, EDOs were primarily focused on incentives, marketing, and sites. Economic developers today work to retain and create jobs; stabilize, diversify, and grow the economy and tax base; and create wealth and equity all while bringing multiple stakeholders together to address critical issues.

There are several roles that an EDO can fill to best serve a community outlined in the graphic below. In the position role, the EDO works as a leader to **influence** the economic agenda, conduct competitive intelligence and strategies for growth,



and ensure that multiple stakeholders come together to deal with difficult challenges and achieve common goals. The second role is the preparation of the overall **product development**. This role works to mitigate market weaknesses and facilitate market demand through upgrading infrastructure, establishing business support programs, providing technical assistance, etc. The third role is to **promote** the community through marketing, brand development, and cultivating prospects in targeted industries and global markets. Finally, the community must be able to **package** (or

close) the deal. In this role, the EDO works to implement a project and/or provide financing or incentives. In some cases, a community has several EDOs that work under an economic development strategy to fulfill each role. For communities with multiple entities, it is crucial that each coordinate and collaborate with one another as to not duplicate efforts.

The USVIEDA is charged with handling several economic development functions roles for the territory. It focuses largely on providing technical assistance and financial supports for enterprising

individuals and small businesses, tax incentive administration, project development and execution. Accordingly, the USVIEDA's roles and responsibilities fall primarily in the preparing product and packaging product quadrants shown above. The USVIEDA also has strong marketing capacity to promote programs and services, as well as providing key news and information to USVI businesses.

Economic Development Functions

The following section provides an overview of currently best practice roles and responsibilities assumed by economic development organizations around the world. This is presented to provide context for recommendations for improvements to USVIEDA and other economic development groups that will help advance Vision 2040.

As economies grow and change, economic developers serve to help communities and businesses stay ahead of sector changes such as automation, competition, unanticipated events, and shifting business culture. Understanding the dynamics of business change and taking early, proactive, business-friendly steps, help companies and communities to grow.

Recent research conducted by the International Economic Development Council (IEDC) identified the following functions that were common to high performing EDOs:

- 1. Business Retention & Expansion ("BR&E")** – BR&E is one of the two most traditional and common efforts EDOs undertake to strengthen economies (the

Typical EDO Functions



Source: Camoin 310

other being business attraction, detailed below.) A BR&E program requires periodic meetings with local businesses to understand their needs, along with any barriers or issues that may impede growth, such as infrastructure, workforce, permitting, financing, etc. Many EDOs use a formal Customer Relationship Management ("CRM") tool to record data, convert it to useful business and industry information, analyze it over time, and feed intelligence into the organization's marketing and attraction programs. The BR&E programs also typically focus on key competitive target industries (see 3. Targeted Industries & Clusters below).

- 2. Business Attraction** – Business attraction entails marketing and promotion of the community and sites to outside business and development interests and requires a strategy that identifies targeted industries

and geographies in which a region knows it can compete as a location for new investment. Economic development attractions efforts are typically targeted to businesses that are within, or a part of, an existing supply chain or industry and that have been identified as competitive relative to other regions. Investments in attraction efforts typically involve conversations and connections with outside business leaders via phone, in-person meetings, industry tradeshow attendance and/or developing relationships with site selectors specializing in their target industries. These efforts must be sustained over time to build name and brand recognition.

- 3. Targeted Industries & Clusters** – In today's environment, EDOs must determine their competitive advantages and why certain industries and sectors are stronger and perform better within their region relative to

others. (See below section on “How Businesses Select Locations” for insight on the site selection process.) Successful EDOs focus investments and capacity on strengthening those advantages and developing programs and initiatives that support businesses within a targeted cluster. The majority of EDOs focus on strengthening existing industries and have analyzed economic and employment data to identify their targets. These targets become the foundation of all economic development functions deployed. In other words, their entrepreneurship, innovation, workforce, attraction, BR&E, and advocacy efforts are done with their target industries in mind. Over time, industry intelligence is gained to support programming and resource allocation. The most advanced EDOs are now beginning to utilize this information to develop artificial intelligence (AI) models that help them understand which of their businesses are most at risk and why, and which outside companies may be ready to expand and would find their location attractive.

4. **Entrepreneurship & Innovation** – With small businesses responsible for the majority of new job creation within a region, many EDOs offer financing, training, and other technical assistance and services to start-ups and existing entrepreneurs. Supporting start-up and entrepreneurship through programs offering access to capital

are also common activities. Many EDOs establish and manage local loan programs designed to participate in higher risk lending with local banks and/or Federal programs. However, the more advanced EDOs are now supporting entrepreneurial innovation through research and development partnerships, product commercialization (i.e. patent expertise), peer networking, and locally supported venture funding. *Shark Tank*-like approaches to vetting new products and business ideas have become popular and has become a method for introducing entrepreneurs with those in the community interested in deploying capital for personal, financial, and community benefit. Some of these roles are shared between the USVIEDA, RT Park, UVI, and the SBDC.

5. **Workforce** – For the past decade or more, workforce issues have been the single-greatest barrier to growth for large and small companies. Economic development organizations have been working with state and local workforce officials, community colleges, Workforce Investment Boards (“WIBs”) and others to identify existing and future skill gaps and to develop training programs and career pathways to build a pipeline of labor to meet local business needs. Again, these programs typically focus on the established target industries, require the sharing of labor data and other information gathered through a formal

BR&E program and have a clear delineation of roles and responsibilities for identifying and addressing business and industry labor needs.

6. **Downtown, Infrastructure & Sites** – Owning and developing property, business parks, or shovel-ready industrial sites; streamlining the permitting process; leading a downtown redevelopment effort; completing an economic development strategy; or becoming involved in addressing a workforce housing shortage are among the types of efforts and roles that comprise the agenda of many economic development organizations. Available commercial and industrial sites that allow for local businesses to expand, ensuring infrastructure capacity is available to meet future needs, and creating a place in which employers can attract labor have become leadership roles for EDOs.
7. **Advocacy** – EDO’s work to actively promote economic development within their community. This includes advocating for local businesses, entrepreneurs, institutions, community-based organizations, and residents. Effective EDOs serve as the voice for these entities, working on behalf of their concerns and challenges and helping them to have an opportunity to achieve their short and long-term economic development goals. Where a strong chamber of commerce exists, EDOs will oftentimes coordinate and collaborate on

critical issues and work cooperatively to enhance advocacy capabilities. Those organizations that are funded primarily with municipal contributions often find providing advocacy difficult, while those funded largely by private sector contributions are less concerned about the political implications of their efforts.

Economic Development Organization (EDO) Qualities & Characteristics

In addition to the above functions, there are several successful traits that an EDO should display to maximize their impact. According to IEDC research, and confirmed by Camoin 310's work experience, high-performing EDOs share these ten successful traits:

1. **Leadership & Capacity** – This entails establishing a sound board governance structure, attracting strong business leadership that can work in partnership with public leaders, and an experienced EDO staff with the financial resources needed to execute a strategy.
2. **Strategic Planning** – Developing a strategy based on consensus, sound information, proven practices, and competitive advantage.
3. **Responsiveness & Adaptability** – EDOs must offer the economic development functions that allow them to pivot and react quickly to change. An experienced EDO with economic resiliency resources and a CRM with current business information allow for

quick communication and information dissemination are just two examples of how an organization can be prepared to react quickly.

EDOs must offer the economic development functions that allow them to pivot and react quickly to change.

4. **Customer-Driven** – Ongoing communication and ability to react to businesses, stakeholders, or funders' needs supports a customer driven focus, meets expectations, and eliminates the need to expend time and resources to quell dissatisfaction.
5. **Funding Efficiency** – Identifying and leveraging financial resources and utilizing that funding for results-oriented initiatives ensures support and provides future resources for new programs and initiatives.
6. **Measure Results & Adjust** – Reporting results regularly to funders, business leaders, elected officials, and other stakeholders ensures ongoing support. More critical, however, is the use of metrics to assess performance, and adjust initiatives to ensure resources are being allocated effectively.

7. **Creative Risk Taking** – Revitalizing economies for many communities requires the development of transformational projects. Inherent in these types of projects is increased risk. Being creative and applying the appropriate analysis to determine an appropriate level of risk is especially critical.
8. **Trust & Respect** – Responsiveness and follow through contribute to building trust and respect needed for an EDO to play a vital leadership role.
9. **Strong Alliances & Networks** – Sharing resources, partnering on initiatives, and maintaining a broad network of business and elected leaders at the national, state/territory and regional level are critical to resolving business issues and executing strategic initiatives.
10. **Effective Communication** – Informing partners, funders, and stakeholders and business leaders through a variety of communication tools about organizational efforts, calls to action, and needs and accomplishments builds confidence, trust, that advances community momentum and brand.

How Businesses Choose Locations

The following section is provided to help residents and decision makers throughout the USVI better understand how corporate site selection decisions are made. This provides needed context for considering improvements to the business climate.

While there is a great deal of variation in the site selection process, there are also common themes that shape most decisions on where to locate. These themes play across both site searches by executives of the businesses as well as by site selection consultants. They also apply to the recruitment of new companies, start-ups, and the retention and expansion of the businesses you already have.

The process essentially has two phases:

1. A Process of Elimination
2. A Process of Comparison

Process of Elimination

There are thousands of places looking to attract businesses and the jobs and tax revenues they provide. Businesses can't spend the time looking at thousands of possibilities, so at the beginning of their site search, they eliminate the majority of places. It can be as simple as accessing a new market in Asia and deciding the Caribbean is too far away – or it can be based on a comparative workforce analysis, cost analysis, transportation analysis, or many other things.

Site location consultants have their own proprietary databases while companies doing their own search rely on publicly available data, usually from

government sources, or procure data from companies who specialize in providing it. After a first look at the critical data, both groups will then turn to the websites of EDOs (Economic Development Organizations) in the regions they are initially willing to consider. This puts a premium on EDOs having really good websites with a lot of information and making it easy to find both the website and information within it.

And if they can't find what they are looking for in a very short time, EDOs are eliminated from consideration. They will not have talked to your EDO and never will, at least for the current project.

The end of this Phase is the identification of a small number of "survivors" – perhaps a half dozen – that warrant a more detailed look.

Process of Comparison

The finalist communities are stacked up side-by-side and compared on a variety of factors. The importance of each will differ by industry sector and often by individual companies within the same sector. The factors evaluated usually fit into the following categories:

- Access to Markets
- Labor Force
- Available Sites and Buildings
- Business Climate
- Transportation Infrastructure
- Utility and Telecom Infrastructure
- Education and Training
- Taxes
- Available Parts, Suppliers, Services

- Quality of Life and Place
- Public Facilities and Services
- Available Capital
- Available Incentives
- EDO Assistance Programs

It is essential to recognize that your place is your product. That product must be as competitive as you can make it. It makes no sense to spend a lot of money marketing an inferior product, although name recognition marketing can be useful.

Before the common use of computers, EDOs maintained detailed "Fact Books" that covered the topics listed above in great detail. This is what EDOs provided prospects to inform them about their product. Today, companies and site selection consultants expect to find this information on the EDO's website.

A lot of work goes into this process and the timeframe for doing it has been compressed significantly. Many years ago, it was not uncommon for a site selection project to take 18 to 24 months; now, according to one site selection consultant interviewed as part of this project:

- The typical site selection study (e.g., light to medium mfg., back office, warehouse) takes 3-4 months to complete.
- For heavy/process industries the decision pathway is often 5-6 months as utility/site infrastructure and environmental review can be time consuming.

- The 5-6 months would also apply for distribution facilities if part of the analysis embraced a warehouse network optimization analysis.
- For the typical light industry/back office allow another 6-8 weeks to wrap up incentives and real estate. Then we would be looking at 2-4 months for building retrofit or 6-8 months for new construction.
- Heavier industry would probably be 8-10 weeks for incentives/real estate and 5-7 months for retrofit or 10-12 months for new construction.

WHERE DO INCENTIVES FIT IN?

They are generally not the most important factor, but they can play a major role. During the initial collection and analysis of information about places, incentives are relatively unimportant because things like labor availability and cost, transportation, utility and telecommunications infrastructure and business climate take precedent. However, at the very end of the process, available incentives can become more important, often as the tiebreaker among otherwise equal competitors as a way to reduce operating costs in one location versus another.

This emphasizes the importance of having the most competitive product because the availability of incentives rarely is enough to overcome significant competitive disadvantages.

Certainly, incentives can be a way to mitigate the deficiencies that add cost and subtract from the bottom line, but most places are suspicious about companies that make location decisions based largely on incentives. The bottom line here is that incentives, when used properly, can be a strategic investment by the EDO that reasonably benefits the recipient but more importantly meets the goals of the EDO. Those goals should be developed through

Incentives, when used properly, can be a strategic investment by the EDO that reasonably benefits the recipient but more importantly meets the goals of the EDO.



good strategic planning and quantified so that performance can be measured.

INCENTIVES IN THE U.S. VIRGIN ISLANDS

Publicly funded financial support is intended to induce private investment in businesses that would otherwise not be started, locate, or successfully grow in a community.

Well-designed, tailored incentives support business location and growth decisions, addressing challenges and helping to level the playing field.

Tax exemptions remain an important tool to reduce the costs of doing business, but do not address all challenges. As economies evolve, business needs have encouraged the creation of additional direct public support such as loans and grants, and indirect support in the form of workforce training, infrastructure, and community development initiatives to create an environment where businesses, workers, and residents can thrive. This approach creates a tailored assistance package.

The guiding principles summarized at right provide a background for the evaluation of public financial incentives currently available in the USVI.

This section includes:

- **A basic inventory of current assistance**
- **Industry targets and use patterns**
- **Incentive performance**
- **Key takeaways**

USVI GUIDING PRINCIPLES FOR USE OF INCENTIVES

Responsibility: Achieve a balance of community goals and fiscal obligations and the needs of a new or growing business;

Effectiveness: Award assistance based on demonstrated individual financial need, and tailor each package to fit the business's actual challenges, whether mitigating a high corporate tax burden during growth years, making a real estate investment feasible, or accessing capital; and

Performance: Establishing success measures for the awarding organization as well as the receiving business. For example, establishing metrics for jobs and capital investment, following up and keeping a record throughout the term of the incentives, and using business expansion and retention techniques to evaluate ongoing fit with business needs. Performance also includes how the awarding organization seeks and reviews information, makes transparent and consistent decisions, and communicates its goals.

Inventory of Incentives

USVIEDA provides assistance for qualifying businesses throughout the Territory which includes:

- Tax incentives/exemptions for income, gross receipts, excise, customs, and real property;
- Capital formation assistance such as loans through the Economic Development Bank, often in partnership with the U.S. Small Business Administration;
- Programs for business start-ups and acceleration, farmer/fisher support, technical assistance, and commercial leasing;
- Targeted programs for hotel, music and film industries directly from the Economic Development Authority; and
- Administration of district-specific incentives and export assistance for local manufacturers through the Enterprise Zone Commission.

The Research and Technology Park (RTPark) uses a membership model whereby businesses apply for incentives and support programs such as:

- ExporTech export assistance and strategy development;
- Workforce development and avenues to access the talent pool, including partnering with the University of the Virgin Islands;
- "Virtual" coworking space and innovation programs.

U.S. Federal incentive programs such as designated Opportunity Zones and New Market Tax Credits are available as a third layer of potential assistance.

An Inventory of Existing Incentives is included later in this section. It identifies each incentive, the type of assistance offered, the organization administering the program, and targeted business and eligibility constraints. It is intended to provide an overview of available assistance, not to be a guide for businesses seeking incentives.

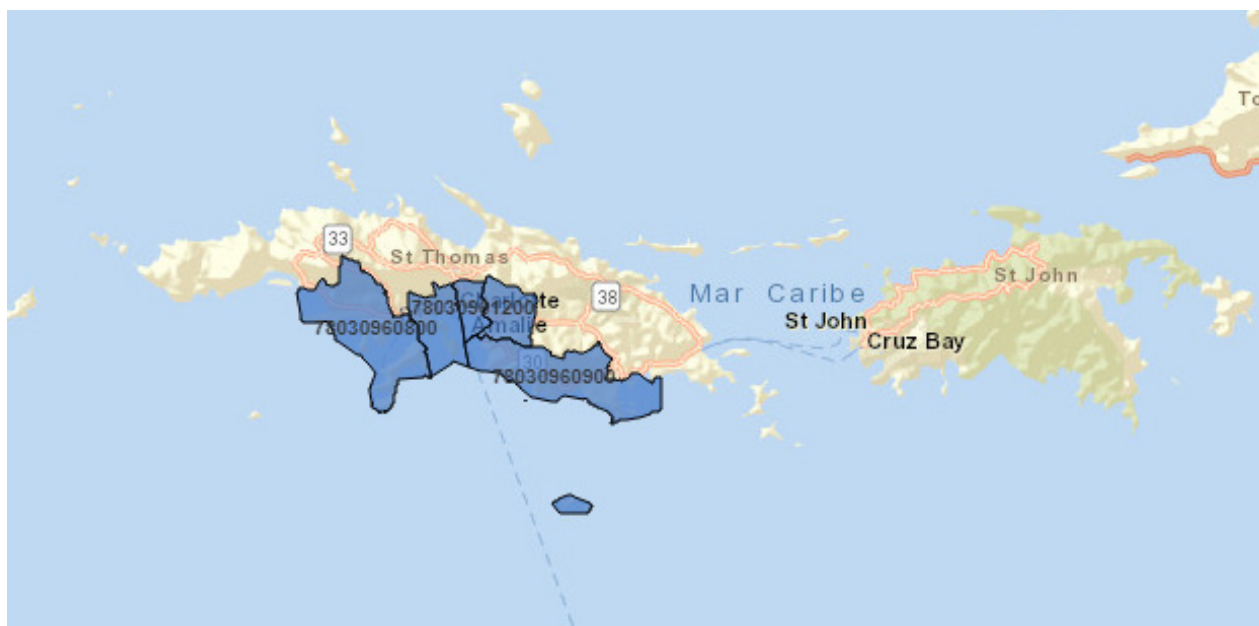
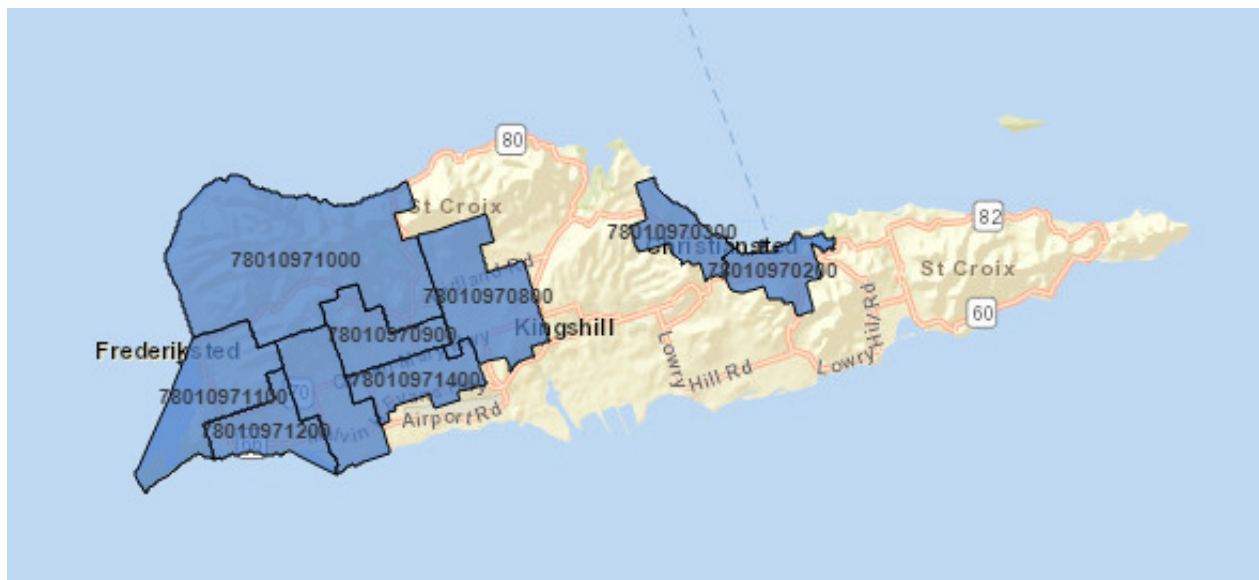
Primary providers of financial incentives are:

U.S. Virgin Islands Economic Development Authority (USVIEDA), acting directly and overseeing:

- Economic Development Commission (EDC) with an Applications Division and a Compliance Division
- Economic Development Bank (EDB), which also incorporates the Small Business Development Agency (SBDA) and the Small Business Incubator Program
- Enterprise Zone Commission (EzC)
- Virgin Islands Economic Development Park Corporation (EDPC)

Research and Technology Park (RTPark), which independently administers some of the same tax abatements as USVIEDA for its participating businesses, as well as additional business services for partners such as the University.

FEDERAL OPPORTUNITY ZONES IN THE U.S. VIRGIN ISLANDS



U.S. Small Business Administration (SBA) is not listed as a direct provider of financial incentives. It partners with USVIEDA and assists applicants for several programs. There are SBA supported Small Business Development Centers (VISBDC) in St. Thomas and a new location in Christiansted, St. Croix.

United States Treasury Community Development Financial Institutions Fund, which administers the New Markets Tax Credit program and other programs to help businesses access capital. It should be noted that this program also administers the network of Community Development Financial Institutions (CDFIs), which are private institutions with a mission to provide access to financial products and services for residents and businesses in low-income communities. CDFIs are authorized in every U.S. state, Guam, and Puerto Rico, but not the USVI.

There are more than one hundred CDFIs authorized to work nationally. However, no CDFI assistance has been awarded in the USVI since 1999, when Virgin Island Capital Resources, a Venture Capital Fund, was awarded \$770,000.

Having no VI-based financial institution authorized as a CDFI is a significant gap in the USVI's portfolio of financial assistance to business.

Opportunity Zones (OZs) are designated census tracts where capital investment is rewarded with capital gains tax reductions. There are 9 on St. Croix and 5 on St. Thomas. The U.S. Internal Revenue Service (IRS) issued regulations about eligible

investments, timeframes, and amount of taxes that can be reduced.

The last three columns of the table "Inventory of Existing Incentives" measure each incentive against the goals of USVIEDA and are frequently adopted as high-level goals by economic development organizations large and small: attract investment, create revenues for the community, and create jobs.

For each incentive, the table notes whether it achieves the goal directly, or indirectly through contributing to community economic growth and individual earnings. For example, the Micro-Credit Loan Program administered by the EDB *directly* supports the goal of attracting investment, *indirectly* creates revenues for the community when the business and its employees pay taxes and does not have a stated minimum number of jobs.

Overall, tax incentives promote the goals indirectly except where there is a requirement for creation of jobs. While loan programs directly support the investment goal, the others are often achieved indirectly. This difference is critical for understanding the effectiveness of incentives and matching them to business needs. Tax exemptions /abatements are not good at encouraging business start-ups, while loans can trigger investment but don't mitigate the costs of doing business over time.

A potential applicant must first navigate separate sources of information to find incentives, then identify programs for which the business may be eligible, and finally work through an application process unique to the administering organization or program.

INVENTORY OF EXISTING INCENTIVES

Program Name	Type of Incentive	Program Administrator*	Target Businesses	Eligibility Constraints	Attract Investment Directly or Indirectly through Growth	Create Revenues for Community Directly or Indirectly through Growth	Create Jobs with Meaningful Salaries (Jobs Requirement)
Sustainable Tourism through Arts-based Revenue Stream Production (S.T.A.R.S.)	Tax abatement - reductions in income and gross receipts; refundable tax credits; hotel tax waiver during production	USVI EDA	Film, video, media, motion picture, and television industries and related	Minimum spend on business activity	Indirect	Direct	USVI Resident Requirements; Tax Credits increase with more hires
Property Tax Incentive	Tax abatement - real property tax reduced up to 100% reduction	USVI EDC, RTPark	Business that owns real property; eligible activities established are very broad	USVI business or personal length of residency, corporate structure and business licensing	Indirect	Indirect	Jobs minimum for USVI residents
Gross Receipts Tax Incentive	Tax abatement - gross receipts taxes reduced up to 100% reduction	USVI EDC, RTPark	Existing business with income; eligible activities established are very broad	USVI business or personal length of residency, corporate structure and business licensing	Indirect	Indirect	Jobs minimum for USVI residents
Excise Tax Incentive	Tax abatement - excise taxes reduced up to 100% reduction	USVI EDC, RTPark	Existing business with income; eligible activities established are very broad	USVI business or personal length of residency, corporate structure and business licensing	Indirect	Indirect	Jobs minimum for USVI residents
Customs Duties Incentive	Tax abatement - customs reduction from estimated 6% to 1%	USVI EDC, RTPark	Existing business with income; eligible activities established are very broad	USVI business or personal length of residency, corporate structure and business licensing	Indirect	Indirect	Jobs minimum for USVI residents
Corporate Income Tax Incentive or Personal Income Tax Incentive	Tax abatement - business income tax reduced up to 90%	USVI EDC, RTPark	Existing business with income; eligible activities established are very broad	USVI business or personal length of residency, corporate structure and business licensing	Indirect	Indirect	Jobs minimum for USVI residents
Withholding Tax Incentive	Eliminates or reduces taxes and interest - benefit value varies	USVI EDC, RTPark	Especially benefits intellectual property such as software	USVI business or personal length of residency, corporate structure and business licensing	Indirect	Indirect	None stated
Hotel Development Program	Other - trust fund for community development	USVI EDC	Hotels/ neighborhood around hotel	Targets must be met for employment	Indirect	Direct	USVI Resident Requirements
Tax Increment Financing	Other - funding for infrastructure and community development	USVI EDA	District-based: no special targets but district must be established	Requires legislative process to adopt and USVI to issue bonds	Indirect	Direct and Indirect	None stated
USVI State Trade Expansion Program (STEP)	Other - foreign trade assistance	USVI EDC	Exporters	Designated a small business by US SBA	Indirect	Indirect	None stated
Enterprise Zone Benefits	Capital formation - tax credit can be monetized	USVI EDC	District based: businesses in designated enterprise zone and rehabilitating a property	Meet one or more strategic objectives of the EDC	Indirect	Indirect	Jobs minimum for USVI residents
EDA Loan Fund	Capital formation - loan	USVI EDB	Dislocated worker establishing or expanding a business	Must provide denial letter from local commercial bank	Direct	Indirect	None stated

INVENTORY OF EXISTING INCENTIVES (CONTINUED)

Program Name	Type of Incentive	Program Administrator*	Target Businesses	Eligibility Constraints	Attract Investment Directly or Indirectly through Growth	Create Revenues for Community Directly or Indirectly through Growth	Create Jobs with Meaningful Salaries (Jobs Requirement)
Farmers and Fisherman Loan Program	Capital formation - loan	USVI EDB	Commercial farmers and fishermen	Can apply after 3 years of activity	Direct	Indirect	None stated
Micro-Credit Loan Program	Capital formation - loan	USVI EDB	Startup or early stage	Must provide denial letter from local commercial bank	Direct	Indirect	None stated
Development Loan Program	Capital formation - loan	USVI EDB	No special targets	Must provide denial letter from local commercial bank	Direct	Indirect	None stated
Frederiksted Loan Program	Capital formation - loan	USVI EDB	District based: businesses in Frederiksted only	Business in Frederiksted; must provide denial letter from local commercial bank	Direct	Indirect	None stated
Intermediary Relending Program	Capital formation - loan	USVI EDB	District based: community development projects, new or expanding businesses, businesses saving or creating jobs	Business in District of St. Thomas/St. John; must provide denial letter from local commercial bank	Direct	Direct and Indirect	None stated
Post Disaster Relief Revolving Loan Fund	Capital formation - loan	USVI EDB	District based: businesses affected by tropical storms Otto and/or Tomas in 2010	Must be displaced St. Croix worker or small business; must provide denial letter from local commercial bank	Direct	Indirect	None stated
State Small Business Credit Initiative	Capital formation - credit support for loan from a financial institution	USVI EDB, Loan terms from participating banks	Startup or growing business	USVI business or personal length of residency, corporate structure and business licensing	Direct	Indirect	None stated
RTPark Enhancements	Supporting services to promote exports, reach workforce and talent, support innovation and low-cost workspaces	RTPark, Partners	Various	Membership in RTPark	Indirect through providing support for growth	Indirect through providing support for growth	Indirect through providing support for growth
Opportunity Zones	Tax Deferral and Reduction	None - IRS regulations and review	None specific but project must recognize capital gains to achieve maximum benefit	District based: existing business more difficult to assist; projects with higher capital gains benefit most	Direct	Indirect	None stated
New Market Tax Credits	Capital formation. Federal tax credit can be monetized.	US Treasury CDFI Fund	None specific	Must have a Community Development Entity (CDE) to compete for funds and distribute	Direct	Indirect	None stated

*All incentives administered by the RTPark require the applicant be a member or program participant of the RTPark. Incentives such as income tax reduction are offered by USVI EDC to businesses not located in the RTPark.

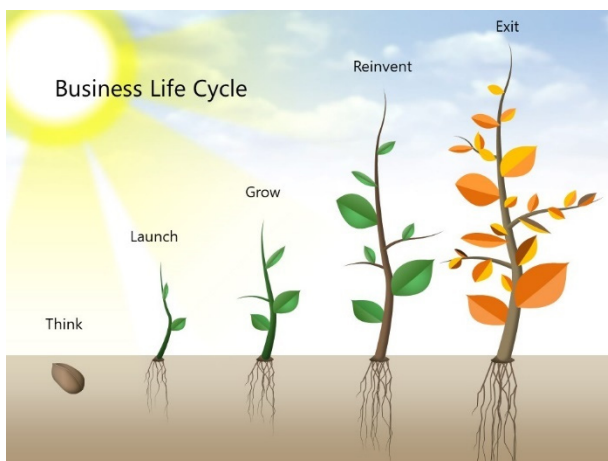
INDUSTRY TARGETS AND USE PATTERNS

Conceptual Framework

Building on the idea that incentives work directly and indirectly depending on their design, the next step to evaluating their effectiveness is to understand what problems they are intended to solve. Matching incentives to the business lifecycle shows when an incentive is most valuable to a business, and reveals gaps where assistance may be needed but is not available.

A conceptual framework enables understanding of what effectiveness means, so that direct feedback and performance measures can be more useful.

The image below is a rendering of the business life cycle, using terms from the Virgin Islands Small Business Development Center. While the “Think” stage is not typically targeted with financial incentives, awareness of financial and technical support can make a difference in whether an idea makes it to the next stage. This means that marketing efforts around incentives should also



reach within the community to inspire potential entrepreneurs by showing that support can be available during and after launch.

The programs catalogued in the table *Inventory of Existing Incentives* fall under three general categories: Access to Capital/Capital Formation, Tax Incentive/Exemption, and Other, which includes industry-based supports such as the Hotel and S.T.A.R.S. programs, and Enterprise and Opportunity Zones.

The figure at right lists the five business life cycle stages and the types of challenges faced during each, that can be mitigated by public incentives or business support programs. Where a direct incentive is offered in the USVI, whether through USVIEDA, RTPark, or U.S. Federal programs, that challenge is highlighted in **bold**.

Access to Capital/Capital Formation – publicly funded loan programs are available, but in small amounts. Availability of private capital is a major gap, with limited involvement of commercial banks, no CDFI, and low direct private investment such as angel investors or venture capital. Note that this is the first need for the **Launch** stage. Private capital often seeks co-funding, where a public entity or bank is also providing support. Businesses must get past launch to grow and add jobs.

Industry-Based Support – Film, Hotel, and Export incentives are important at launch because they help with planning and can reduce early costs to help the business become viable and enter the growth stage. They remain important through the **Grow** stage.

Think

- Awareness and Acceptance of Available Support

Launch

- **Access to Capital/ Capital Formation** (loans, grants, investors)
- **Location-Based Incentives** (Enterprise or Opportunity Zones)
- Industry-Based Support (**Film, Hotel, Exports**)
- **Real Property Tax Exemption**
- Mentoring through organized connection program

Grow

- Talent Acquisition and Development
- Cost Mitigation and Control Including **Tax Exemption**
- Industry-Based Support (**Film, Hotel, Exports**)
- Continued **Access to Capital**, Especially Refinancing
- Continued Mentoring

Reinvent

- Talent Retention and Replenishment
- Continued Cost Control and **Targeted Tax Exemption**

Exit

- Sale of Business

Tax Exemptions – A business must have revenue in order to have a tax liability. A real property tax exemption is valuable at **Launch** and **Grow** stages to stabilize costs when revenues are volatile. If this is phased out over time, the community benefits fiscally, while the business still succeeds.

Gross receipts, excise, customs, and income tax abatements are activity-based incentives. A business must have enough activity to have a tax liability, so launch-stage businesses obtain less benefit than those in **Grow** and **Reinvent**. The tax liability must also be large enough to warrant the effort to complete application, approval, and compliance requirements.

Quantitative Measures of Use

USVIEDA has a transparent application process and publishes information about the businesses receiving assistance. The most recent *Annual Report* is 2017. Key metrics around the use of incentives include:

- **EDC Applications are Declining.** Thirteen (13) were received in 2017. This is well below the 24 received in 2009 and 58 in 2004, from the 2009 *Annual Report*.
- **EDB Loan Transactions are Declining.** \$875,000 were closed through 9/30/17 compared with \$1,625,762 in 2016⁴ and \$1,571,500 in 2009⁵. The EDB wrote that efforts included more restructuring and modification to reduce delinquencies from 77% in 2016 to 47% in 2017⁶.
- **EDC Tax Exemptions are Fairly Evenly Accessed by Industry Sector.** The table below summarizes the use pattern for 2020. This is active recipients, not new applications.

As noted in the table of programs, business registration or personal residency requirements must be met to access tax incentives through USVIEDA. Businesses with the resources to navigate the registration requirements have an advantage. For individual entrepreneurs, the chief hurdle is length of residency measured in years (5 years if your family is from the Territory and 10 years

2020 Beneficiaries of USVI EDC Tax Incentives

Category	Targeted Industry Sectors	% of Awards
I	Rum Production, Milk/Dairy Production, Watch & Jewelry Manufacturing & Assembly	0%
II	Product Assembly, Manufacturing, Repair and Maintenance and/or Export Operations, Marine Industry, etc.	37%
III	Facilities, Tourism and Communications Developments, etc.	34%
IV	Designated Service Businesses	29%

Source: USVIEDA, accessed 12/2/20

otherwise), and the amount of time each year spent in residence.

Additional resources and expertise are needed to manage the community development requirements. Local workforce and local sourcing minimums, formal training programs, and charitable donations are fixed costs to a business. Fixed costs are challenging during launch or after a disruption such as a recession or hurricane. Tailored requirements and EDC program waivers for demonstrated hard times may mitigate the costs and remove the concern that incentives could be withdrawn when most needed.

An interview with the RTPark revealed that there are currently 69 program participants, all of whom originate from outside of the USVI.

Qualitative Measures of Use

Interviews conducted as part of the research clearly showed that navigating the incentives system is

extremely difficult for individuals and small businesses.

USVIEDA publishes a list of professional advisors to help navigate residency, taxes, local sourcing, and compliance requirements. This adds to the cost of applying. Larger businesses can better absorb this cost or retain in-house expertise. Sectors such as investment advisors are more likely to have inherent expertise with tax and regulatory environments.

Another qualitative aspect is the source of the business or investment. Capital from outside the USVI is strongly desired and encouraged, as this brings economic activity in addition to what is already occurring in local communities.

The practice of economic development has been increasingly recognizing that “outside” businesses pay attention to investment by the community itself, both public and private. Incoming businesses need suppliers, experienced workers, amenities such as dining and shopping, and other activities that can only be generated locally.

A qualitative measure of use is how well incentives are meeting the needs of the locally grown businesses that incoming firms depend upon. Declining applications can be counted, but not the reasons, or the sectors that are not applying. The small-business track within the EDC program can be valuable for launching and growing a local business, as can the SBDC, but asking for insight from existing businesses and residents who are not accessing

⁴ Source: 2017 USVIEDA Annual Report

⁵ Source: 2009 USVIEDA Annual Report

⁶ Source: 2017 USVIEDA Annual Report

these resources is essential to understanding their performance.

KEY TAKEAWAYS

Range of Assistance

Tax exemptions, district-based assistance, and limited capital access or capital formation programs are available. The gaps in the range of assistance offered are in capital formation, where a lack of local commercial banks and organized avenues for private investors is especially burdensome for small business and startups. Capital formation is the highest priority for strengthening offerings.

Navigating the System

The USVIEDA and local business owners acknowledge (as part of the research phase for Vision 2040) that there are challenges with navigating a system with multiple programs, eligibility requirements, and application materials to be submitted. Larger businesses and sophisticated sectors are less affected. Efforts are being initiated to provide more assistance to entrepreneurs and very small business, in addition to available professional facilitators. Additional resources to boost these efforts and reduce the resources – time as well as money – to participate would be beneficial. RTPark processes are less transparent, but a core goal of the organization is to be a one-stop resources for incentives and other supports.

Tax incentives that are offered by both USVIEDC and RTPark use different processes; legislation requires USVIEDA to hold a public hearing, which lengthens the timeline.

Performance Measures

The USVIEDA's Compliance Division solicits annual information from recipients and monitors performance of contracted activities. Annual reports are created and published for covering all USVIEDA activities. Periodically, the USVIEDA authorizes detailed impact analyses to provide insight into the economic benefits that projects deliver to the community. Using this information for continuous improvement should become a goal.

Matching Incentives to Business Needs

The stated goals of the USVIEDA are to promote growth, development, and diversification of the economy, develop human and economic resources, preserve jobs for residents, and promote capital formation. These are overly broad for targeting assistance where it is needed most. An implementation strategy, building on the conceptual framework here, should tie each program to a specific outcome and identify how existing and potential activity promotes those outcomes.

Matching is easiest when business needs are well understood, and efforts to improve entrepreneurship support and business retention and expansion efforts can provide insight.

Interest in using USVIEDA incentive programs has declined over the past decade, despite generous levels of financial and tax benefits. This suggests that potential users are not finding them to be a good fit. A robust evaluation of service and utility is needed. In the meantime, improved outreach to increase use, coupled with ongoing customer evaluation tools, should be implemented.

Infrastructure Assets

POWER/ELECTRICITY

Every resident and business needs electricity. Energy availability and costs nearly always ranks in the top 10 site selection factors in Area Development Magazine’s annual survey of corporate executives and site selection consultants. In particular, electric costs and reliability are critical variables.

This is an Achilles heel for the Territory’s economic future. Online research will quickly reveal the USVI’s uncompetitive posture. The Water and Power Authority’s (WAPA) rates and service failures are a constant topic of complaint by residents and business executives. While tourists – who may be business executives who could establish a company in the USVI – may not see actual electric bills, they do see power failures.

Dissatisfaction by business executives carries the risk of scaring away prospective companies. According to Development Counsellors International, which has been publishing Winning Strategies in Economic Development Marketing every three years since 1996, “Dialogue with Industry peers” is a primary source of information influencing business executive’s perceptions of an area’s business climate.

In 2017, an estimated 80 – 90%⁷ of the Territory’s power generation and transmission system were

Electric Rates by State and for WAPA as of October 2020 (Top 20 Highest States Shown)

State	Residential Rate (¢ per kWh)			Commercial Rates Rate (¢ per kWh)		
	Oct 2020	Oct 2019	% Change	Oct 2020	Oct 2019	% Change
Hawaii	29.0	30.8	-5.9	27.6	28.4	-2.8
Alaska	23.2	23.4	-1.1	19.8	20.0	-0.9
Connecticut	22.7	21.7	4.7	17.1	16.3	5.0
Rhode Island	22.4	21.8	2.8	15.7	15.4	1.4
Massachusetts	21.6	21.3	1.8	15.9	16.5	-3.7
California	20.8	14.9	39.5	18.4	17.8	3.6
Vermont	20.1	20.2	-0.4	16.5	16.3	1.2
New Hampshire	19.3	20.4	-5.4	15.5	16.0	-2.9
New York	19.3	18.6	3.8	15.4	14.6	5.1
Maine	16.9	18.3	-8.1	11.9	12.8	-6.7
Michigan	16.8	16.3	3.6	11.8	11.6	2.2
New Jersey	15.9	15.5	2.7	12.3	11.6	5.8
Wisconsin	14.8	14.8	0.1	10.7	10.5	2.3
Illinois	14.0	13.9	0.9	9.3	9.4	-1.2
Indiana	14.0	12.9	8.6	11.3	11.1	2.2
Delaware	13.9	13.9	0.3	9.3	10.1	-8.0
Pennsylvania	13.9	14.2	-2.0	8.5	8.6	-1.7
Maryland	13.9	14.1	-1.4	9.7	9.9	-1.6
Minnesota	13.6	13.2	3.6	10.4	10.1	3.5
New Mexico	13.4	12.9	3.4	10.5	9.8	6.7
U.S. Average	13.6	12.8	6.2	10.7	10.7	-0.1
USVI WAPA*						
	1st 250 kWh	38.36		All kWh	45.08	
	Over 250 kWh	41.2				

* USVI WAPA rates as of July 1, 2020

seriously damaged by Hurricanes Irma and Maria and most of WAPA’s efforts since then have been

devoted to repair, with an emphasis on modernizing the system as part of the repairs.

⁷ <https://www.everycrsreport.com/reports/IN11242>

Electric Costs

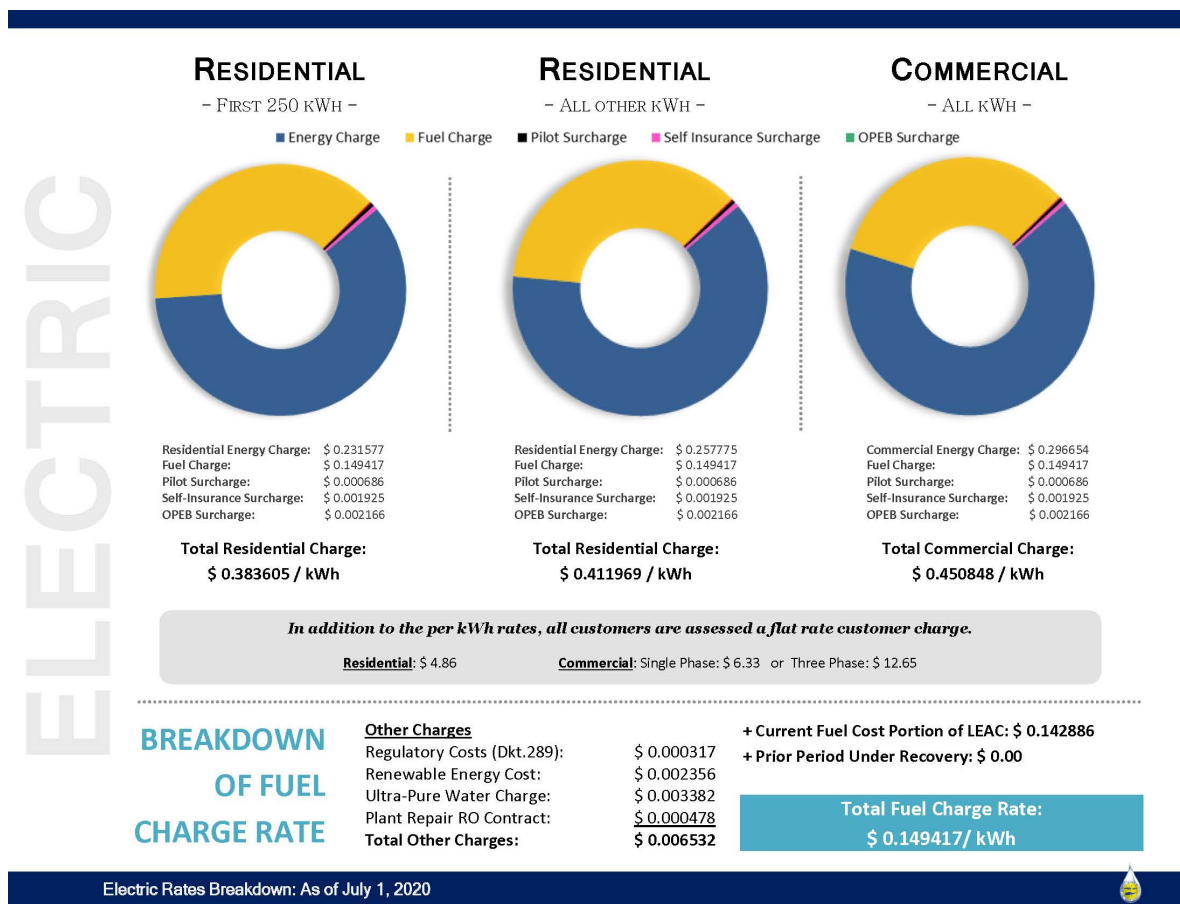
The table above provides comparative information on electric rates by highest-cost state⁸.

The data makes clear the significant competitive disadvantage WAPA's rates puts on the USVI as a business location.

- WAPA's residential rates are three times the U.S. average, which is a significant part of the Territory's cost of living – a topic of constant complaint by residents and the USVI diaspora.
- WAPA's commercial rates are four times the U.S. average, which will discourage most energy intensive businesses from considering the Territory as well as most companies concerned about cost of doing business.
- Unlike any of the U.S. states, WAPA's commercial rate is higher than its residential rates. Most electric utilities in the states have incentive rates to encourage business development, which benefits the utility by causing the sale of more electricity, and therefore provides more revenue. WAPA's rates penalize businesses, discouraging the sale of electricity and reducing revenue to WAPA.

June 2020 electric prices for businesses per kWh in US\$ in other Caribbean locations were: Dominican Republic – \$0.14; Barbados – \$0.19; Jamaica –

⁸ www.chooseenergy.com/electricity-rates-by-state/



\$0.24; Cayman Islands – \$0.27; and Aruba – \$0.27.⁹ The USVI's business rates are substantially higher than these islands, some of which are competitors for business attraction and development.

In March 2015, the National Renewable Energy Laboratory reported the 2015 electricity rates in the

⁹ https://www.globalpetrolprices.com/electricity_prices/

USVI, then at \$0.47 per kilowatt-hour (kWh), were higher than the Caribbean regional average of \$0.33/kWh. In other words, the USVI rate was 142% of the average Caribbean rate. Recent reductions in WAPA's rates and estimated increases in the average Caribbean rate since 2015 would mean the

USVI’s rate is likely to be about 120% of the average Caribbean rate.

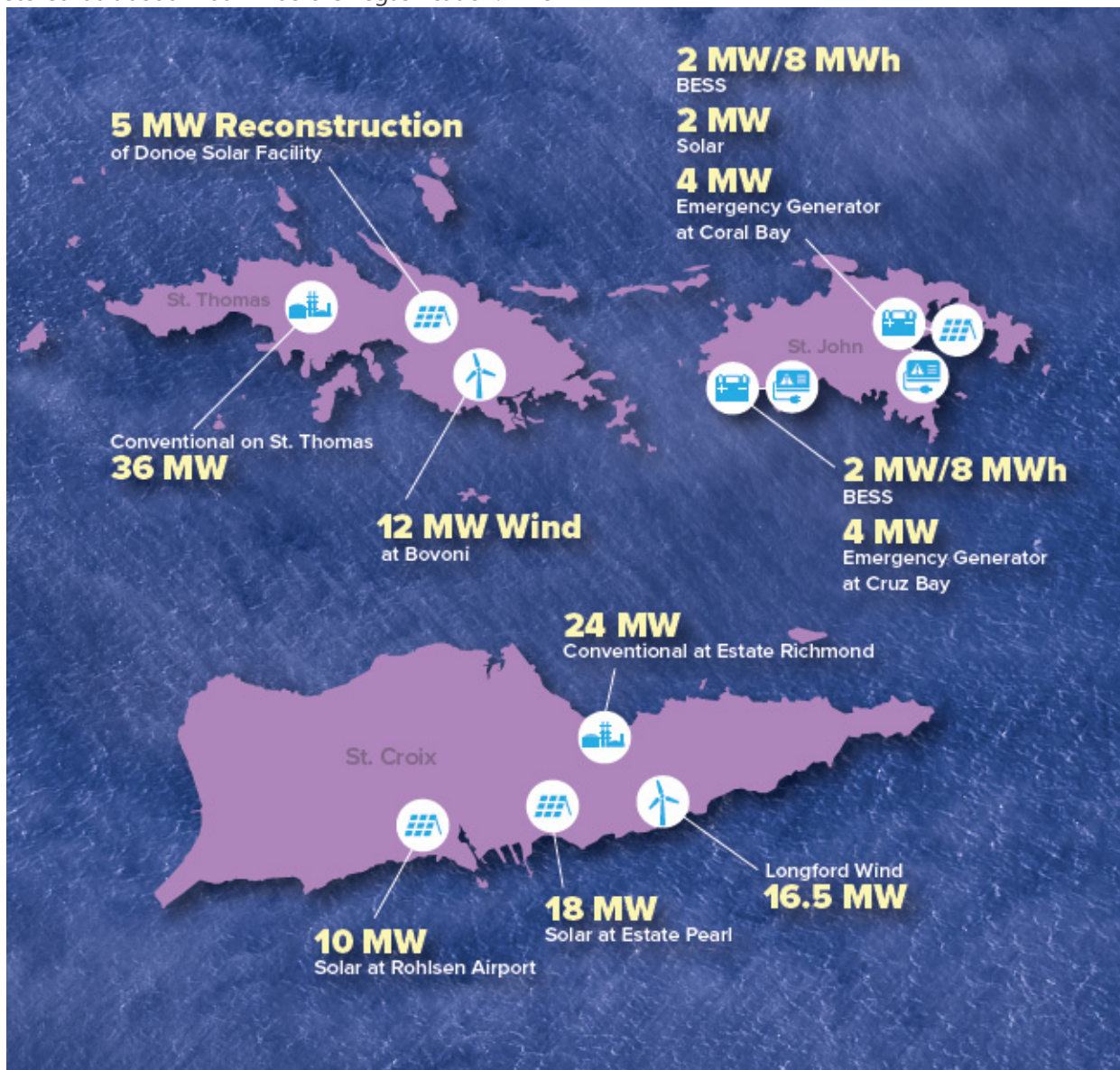
WAPA has had some success in reducing its rates by switching some generation from costly fuel oil to less expensive propane as well as developing two solar fields. WAPA’s Strategic Information Plan (June 2020) shows a continuation of these efforts with an addition of 50+ megawatts of solar voltaic and wind generation, coupled with modern battery energy storage systems (BESS). WAPA’s long-term goal is to provide 50% of energy needs from renewable sources. Unfortunately, there is no specified timeframe for this to happen, caused in large part by the use of federal funding through the Federal Emergency Management Agency (FEMA) to pay for those improvements. Rather than an overall and unified project and budget, each component must be separately and sequentially submitted for federal approval.

The draft VIWAPA IRP [Integrated Resource Plan] prepared by Black & Veatch and dated November 15, 2019 sets the goals of at least 25% of installed capacity (as a percent of peak demand) from renewable energy (RE) resources by 2020, 30% in 2025, and 50% by 2044. This document evaluates a number of improvements to the conventional power supply system but more importantly, multiple alternative energy possibilities. WAPA’s planned alternative energy improvements are shown in the graphic to the right.

WAPA has also considered replacing fuel oil and perhaps propane generation with liquefied natural gas (LNG), which can be a less expensive fuel but

requires expensive construction of a large, high pressure, cryogenic tank because the LNG must be stored at about -260° F before regasification. This

cost usually requires a long-term contract with the LNG provider in order to recover the capital costs.



Planned WAPA Alternative Energy Projects

Electric Reliability

As defined by the Institute of Electrical and Electronics Engineers (IEEE), the two primary methods of gauging the reliability of electric service and allowing comparison with other locations are System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI). The first (SAIFI) indicates how often the average customer experiences a sustained interruption over a predefined period of time, typically a year. The second indicates the total duration of interruptions for the average customer across the electric system during a predefined period of time such as a month or a year. It is commonly measured in minutes or hours of interruption.

The U.S. Energy Information Administration (USEIA) reported “Electric power for U.S. [mainland] customers was interrupted for an average of 7.8 hours (470 minutes) in 2017 [the most recent data available], nearly double the average total duration of interruptions experienced in 2016.” More major events such as hurricanes and winter storms occurred in 2017, and the total duration of interruptions caused by major events was longer. Excluding major events, the average duration of interruptions customers experienced was almost identical in 2016 and 2017, at about 2 hours in both years. In 2017, the average customer experienced 1.4 interruptions counting major events and 1.0 interruption excluding major events. The USEIA website does not provide comparable information for the USVI.

WAPA’s 2016 – 2021 Strategic plan sets the following goals, but does not say what timeframes these are for:

1. System Average Interruption Duration Index (SAIDI) is less than 180 minutes
2. System Average Interruption Frequency Index (SAIFI) is less than 2.5
3. Customer Average Interruption Duration Index (CAIDI) is less than 72 minutes

Current SAIDA, SAIFI and CAIDI numbers were not available from WAPA; these indices must be part of the Energy Plan that will be prepared in the future.

System outages (interruptions) not only hurt the customers but also WAPA because they reduce electric consumption (load hours) and therefore revenues. Therefore, reducing the frequency and duration of interruptions is advantageous for everyone. The draft VIWAPA IRP sets a target to improve loss of load hours from one day per year at the start of the study period (2020) to one day in ten years by the end of the period (2044).

WAPA Financial Status

On June 6, 2020, Fitch Ratings announced the following bond ratings for WAPA on Rating Watch Negative:

- **\$91.5 million electric system revenue bonds, 'CCC';**
- **\$86.4 million electric system subordinate revenue bonds, 'CCC';**
- **Issuer Default Rating (IDR), 'CCC'.**

On December 3, 2020, Fitch Ratings said it was keeping the V.I. Water and Power Authority on a negative CCC ratings watch, pointing to recent legislation creating a new commission with power over the Water and Power Authority, saying it could “increase the authority’s vulnerability to default” (St. Thomas Source, December 5, 2020).

The negative ratings watch means Fitch Ratings is considering downgrading WAPA’s bond rating even further. The ratings are an assessment of how likely WAPA and other borrowers are to default. A lower rating impacts whether WAPA can borrow and how much it will cost to borrow. It is also an outside assessment of the financial health of the institutions it rates and the factors that impact that health.

Fitch’s ratings guide says “CCC” indicates “default is a real possibility.” It is seven grades below the highest rating of “AAA.” Next down the ladder is “CC,” which Fitch says indicates “default of some kind appears probable.”

Current Trend Projections – 20 Years Out

If WAPA meets its published goal of 50% of installed capacity (as a percent of peak demand) from renewable energy (RE) resources by 2044, there should be a concomitant reduction in per kWh electric price. However, we have found no documented projections of what the reduction will be or the timing.

Obviously there will be capital costs in installing solar and wind farms and battery storage, and WAPA

must recover these costs. Until those costs are recovered, the impact of alternative energy generation on electric rates paid by residents and businesses will be minimized.

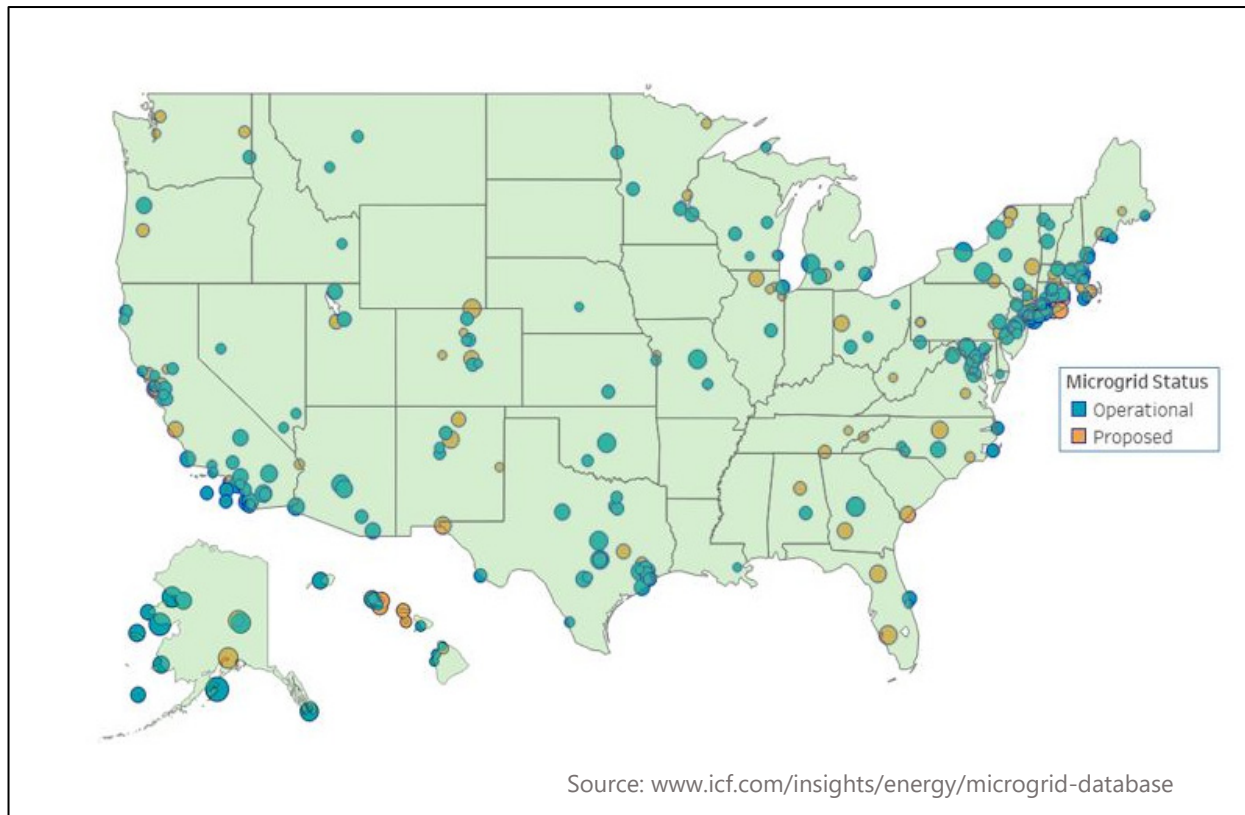
However, between 2021 and 2040, WAPA should be able to make some rate reductions (adjusted for inflation) and by 2040 WAPA should be able to reduce rates significantly.

Many sources predict that over the next decades, large transmission networks will be at least partially replaced with a network of microgrids associated with individual or clustered buildings. These microgrids will provide electricity to their own properties and where possible, feed into the larger utility company system to help serve other properties. Currently microgrids are primarily a back-up source of power of a small-scale replacement of power from a utility – for instance, roof-mounted solar panels or backyard, small scale wind turbine. However, this is as a growing trend with microgrids already operating or proposed in many locations (see adjacent figure). Improvements with microgrid technologies can provide benefits to the USVI.

Proposed 20-year managed goal – the need for and parameters of change

Vision 2040 sets an aspirational goal of having 75% of energy generation from renewable sources by 2040. This exceeds the goal of 50% set by WAPA, but WAPA’s goal has no specified timeframe due to dependence on FEMA funding for most improvements, although WAPA’s IRP sets the 50% goal for 2044.

OPERATING AND PROPOSED MICROGRIDS IN THE U.S. (OCTOBER 2018)



Therefore, it is believed that the Vision 2040 and WAPA goals are aligned and that the future for USVI energy production lies in alternative energy sources.

The National Renewable Energy Laboratory’s “Energy Transition Initiative: Island Snapshot U.S. Virgin Islands” March 2015 report showed the following:

- The USVI’s abundant solar resource (global horizontal irradiation of nearly 6 kWh/square meter-day) makes solar power economically

attractive, especially as costs continue to decrease.

- Wind speeds measured at a 60-meter hub height exceed 7 meters per second (m/s) on test sites on St. Croix and St. Thomas and indicate a large potential for wind electricity. The localized cost of energy from utility-scale wind projects ranges from \$0.08/kWh to \$0.14/kWh.
- St. Croix has moderate potential to generate 3 MW to 5 MW of energy from biomass because the majority of the island is covered with forest.

Landfill gas has an expected capacity of about the same. In addition to woody biomass utilization, a 7-MW anaerobic digester using king grass as a feedstock has signed a Power Purchase Agreement (PPA) with WAPA.

- Estimates for waste-to-energy (WTE) technology range from 8 MW to 33 MW. In 2009, WAPA signed a PPA for a 33-MW plant. That project was subsequently altered to 20 MW and removed pet coke from the feedstock. In 2012, the USVI Senate voted against the project.
- Additionally, the USVI has high ocean thermal potential as a result of a 40-kilometer, relatively deep ocean trench that separates the northern two main islands from the southern main island.

The future will bring additional forms of alternative energy, some now being explored and developed and some not known as yet. Around the world, places are experimenting with tidal and wave generation, fuel cells or other hydrogen technologies, geothermal and other technologies, as well as massive lithium ion or other forms of storage batteries. Small scale nuclear facilities are predicted, but this is probably not a good alternative for the USVI.

In the necessary effort to reduce reliance on fossil fuels, alternative energy holds the key for the future. The USVI has the critical need to capitalize on every possible form that makes sense, and the opportunity to position itself as a World Class Alternative Energy Research, Development and Application Center for the world and especially for island or other small geographic and population centers.

Currently the USVI has many good plans related to its electric power future, but little or no funding to bring the plans to fruition.

- Ratepayers cannot be expected to pay higher rates to support improvements that are supposed to reduce rates. That will only make the Territory less competitive than it already is.
- The Territorial Government is often lacking funds/capital with a less than ideal bond rating. Unless significant cuts are made in some areas of the budget, the Government will struggle to make a significant investment in improving WAPA's performance and costs.
- The current reliance on funding from FEMA has a decent chance of making progress – but on an extended schedule that is slower than anyone wants.

The 20-year gap between today's reality and the future's potential is money. To put a point on it, the draft VIWAPA IRP shows an Optimized Base Case Cumulative Present Worth Cost (CPWC) for improvements of \$841.2 million for St. Thomas and \$588.2 million for St. Croix.

Renewable and Alternate Energy

The future of Renewable Energy is ahead of us.

The reality is that while the topics of Renewable and Alternative Energy have been discussed for decades, we have just scratched the surface of identifying, developing and deploying these technologies.

First, here are some definitions:

Renewable Energy is generally considered to be carbon neutral, non-fossil fuel, useful “natural” energy that comes from replenishable sources on a human timescale such as sunlight, wind, waves, tides, rivers and geothermal sources. Sometimes biomass/biofuels are also included but there is debate about the carbon neutral status of biofuels.

Alternative Energy is often used synonymously with Renewable Energy, but can also include nuclear and hydrogen (for instance, fuel cells) processes.

Renewable energy is generally considered to be carbon neutral, non-fossil fuel, useful “natural” energy that comes from replenishable sources on a human timescale such as sunlight, wind, waves, tides, rivers and geothermal sources.

Investments in Renewable Energy

Foreign Direct Investment (FDI)

Investors have begun to increasingly take notice. A January 7, 2021 article in *fDi Intelligence* analyzed foreign investments between January and November 2020 and found:

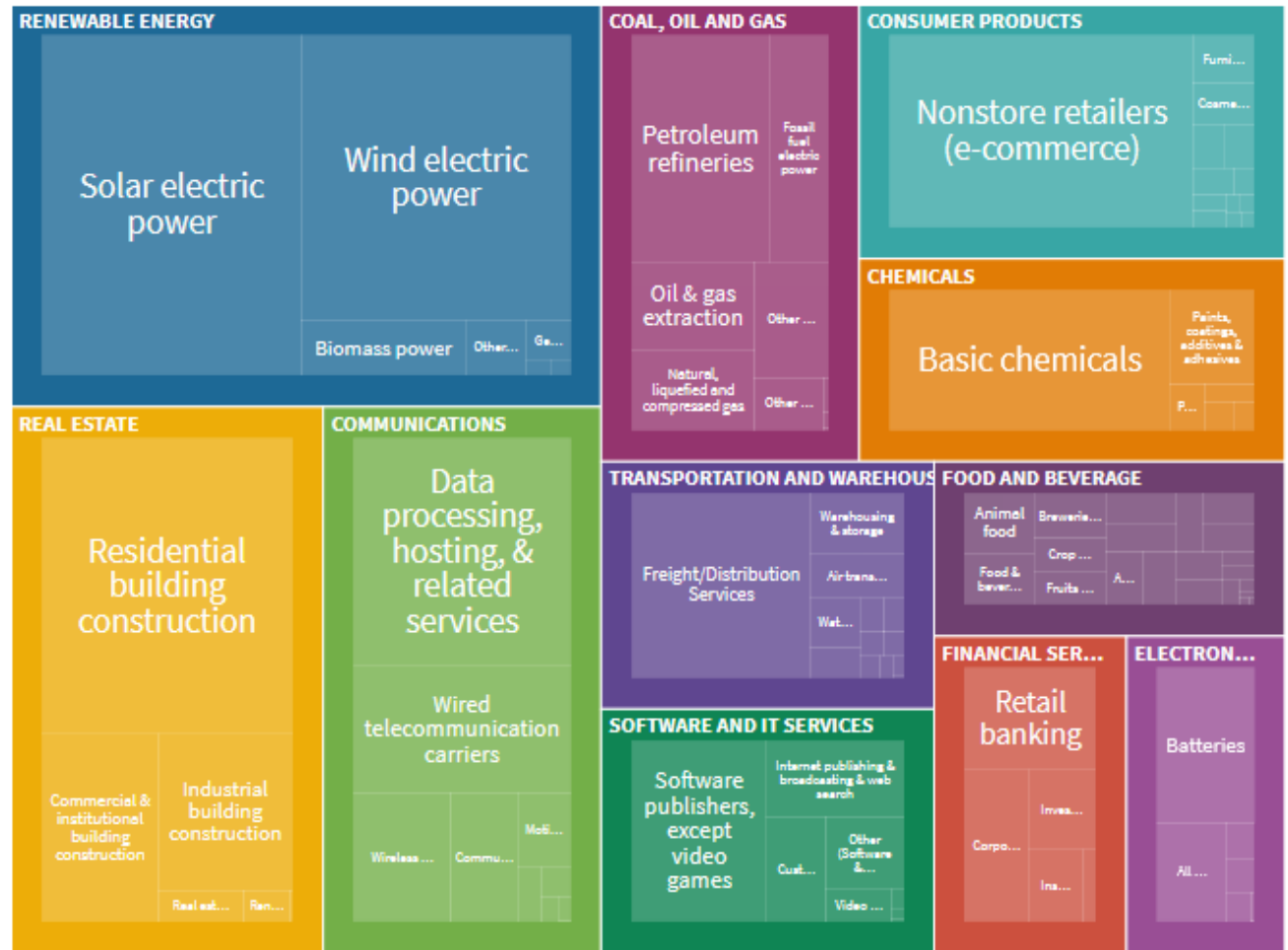
Covid-19 has deeply redrawn the global investment matrix, accelerating a momentous paradigm shift towards renewable energy and digital technologies, while wiping out capital expenditure in major sectors such as tourism and automotive, according to early 2020 data from investment monitor *fDi Markets*.

Foreign investors announced renewable energy projects worth a total \$91.5bn between January and November 2020, according to *fDi Markets* figures. That makes renewable energy the most coveted sector in 2020 (preliminarily as December 2020 data has not yet come through) — a crown that the oil and gas sector has relinquished only twice since 2003.

However, in 2020, the two sectors were not even close, as renewable energy gained twice as much foreign investment as the \$45.4bn that flowed into coal, oil and gas.

This article provided the following graphic that compares the size of the investments in the 11 top sectors as shown to the right.

GLOBAL FOREIGN DIRECT INVESTMENT IN 2020



Source: [fDi Markets](#) • *January to November

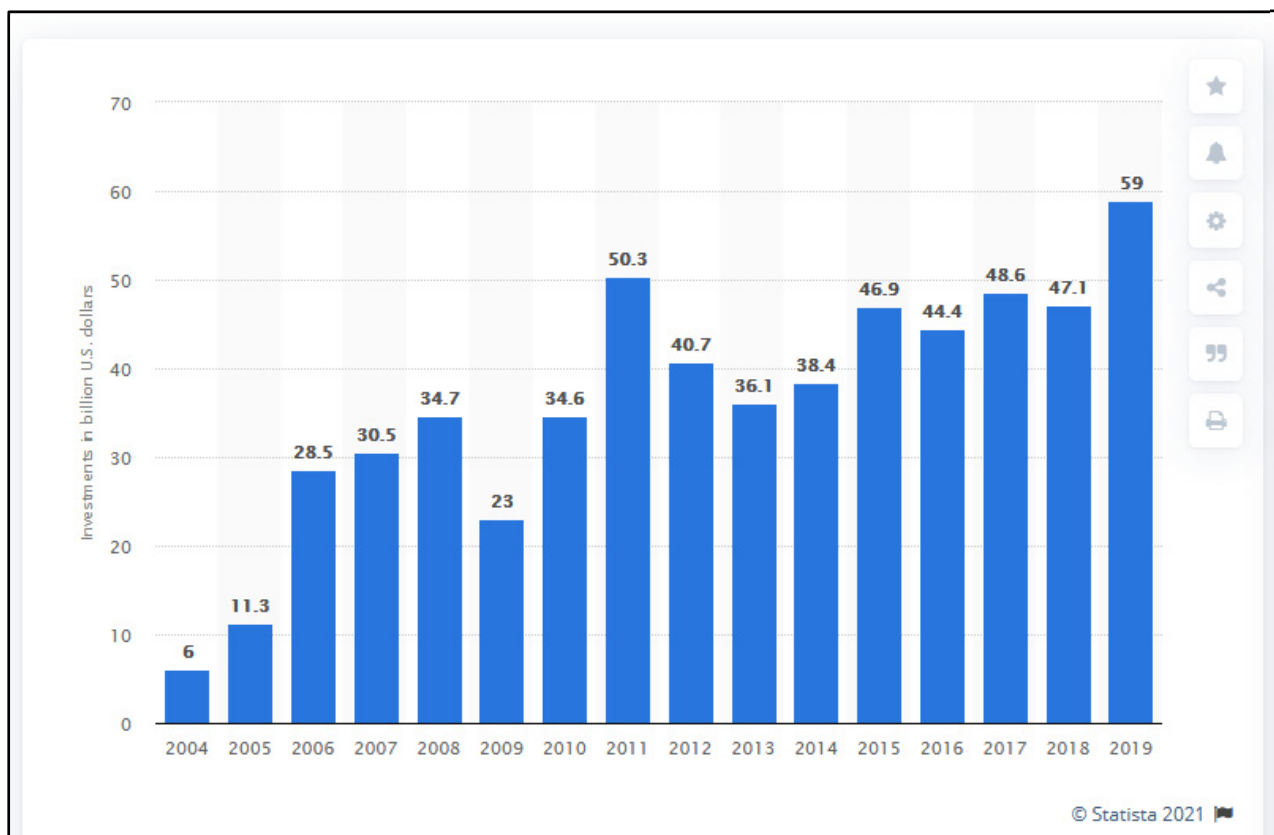


U.S. MAINLAND INVESTMENT

Domestic (that is, United States mainland) investment is also strong and growing. The adjacent figure comes from Statista tracks the growth in renewable energy investments from 2004 to 2019.

According to an August 24, 2020 article on the website from Green Tech Media titled, “Renewable Energy Remains One of America’s Most Attractive Investment Options,” “despite near-term concern about the headwinds posed by supply-chain disruptions and other pandemic-related delays, the long-term outlook for renewable energy growth in the U.S. remains bullish.” In ACORE’s new analysis, Expectations for Renewable Energy Finance in 2020-2023, both investors and developers reported confidence in the continued growth of the renewable energy sector over the next three years. The most engaged financial institutions — those investing more than \$500 million annually in renewable energy — responded with the highest level of conviction for the sector’s attractiveness and long-term health.

**VALUE OF INVESTMENTS IN RENEWABLE ENERGY IN THE U.S.
(2004 TO 2019, IN BILLION US\$)**



The January 21, 2021 *Bloomberg Green* newsletter provided the adjacent figure, showing the 15-year (2005 – 2019) trend in global investments in just solar and wind installations in terms of gigawatts (1 billion watts). This article went on to say "... big markets invested less in renewable energy last year, while small markets invested way more" and cited the United Kingdom, the Netherlands and Vietnam as examples.

Renewable Energy in the Biden Administration

Increased stimulus of the renewable energy sector under the new Biden Administration is expected and given his familiarity with the Territory, this should be good news.

On December 22, 2020 *Stroock* news reported:

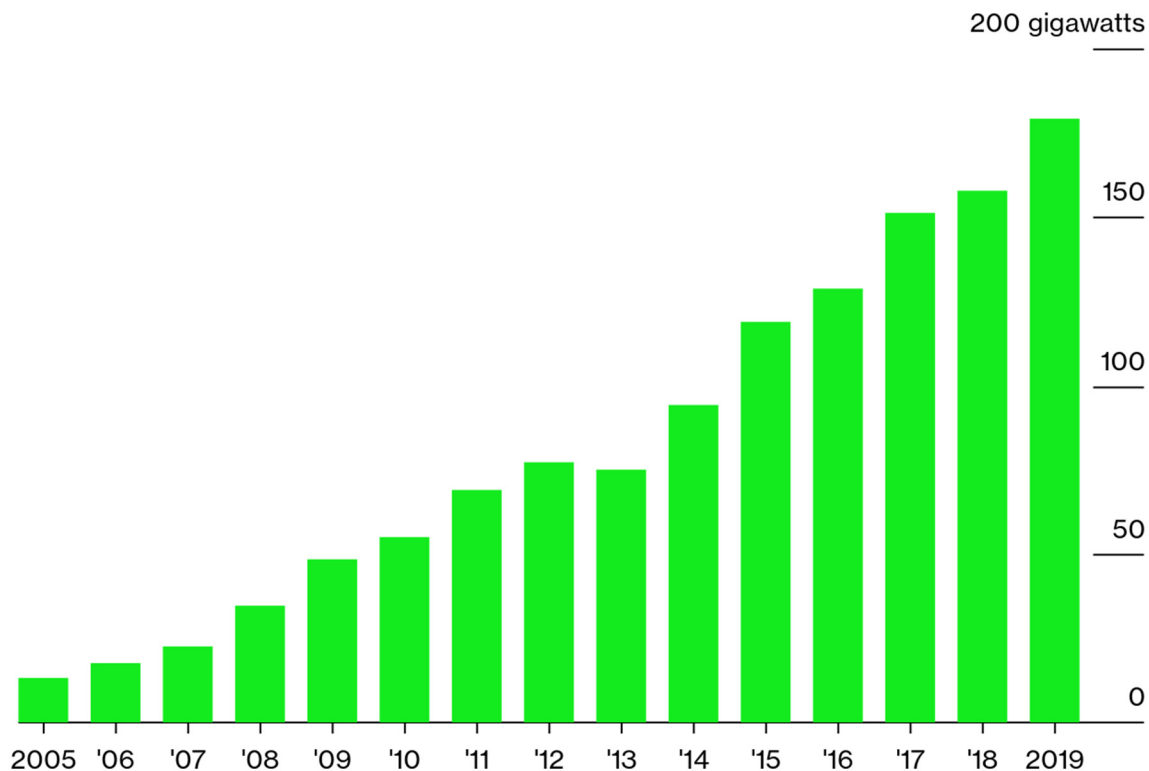
President-elect Joe Biden has proposed an ambitious agenda to transform energy policy in the United States, largely in favor of renewable energy and clean-energy technology. During the campaign, Biden announced a series of proposals, including his Plan for a Clean Energy Revolution and Environmental Justice, and a Plan to Build a Modern, Sustainable Infrastructure and an Equitable Clean Energy Future (together, the "Climate Plan") and intends to spend \$2 trillion over four years to address climate change, increase the use of clean energy, and strengthen infrastructure, among other objectives.

Areas Where President Biden Can Act Without Congressional Approval

- **Offshore Wind.** One of President Biden's goals is to double offshore wind by

A Fifteen-Year Growth Spurt

Annual installations of wind and solar, global



Source: BloombergNEF

Bloomberg Green

2030. The Biden administration is expected to consider the development of renewables on federal lands and waters to aid this effort and is expected to expedite approvals on offshore wind projects, many of which were stalled under the Trump administration.

- **Moving Away from Oil and Gas.** President Biden has pledged to require aggressive methane pollution limits for new and existing oil and gas operations. He also plans to ban new oil and gas permitting on public lands and waters. This ban is likely to

face legal and political challenges. However, some industry leaders are hoping to work with the new administration on the initiatives and may not make decisions about legal challenges until they better understand what the new administration is proposing.

- **Tariffs on Solar Panels.** In 2018, President Trump imposed four-year tariffs on imported solar panels, which adversely affected use within the solar industry. A solar industry trade group has asked Biden to remove the tariffs a year early.

Areas where Congressional Action is Necessary

- **Tax Credits for Renewable Energy.** It is expected that the Biden administration will propose a renewal, extension or expansion of existing and expired tax incentives for clean energy technology deployment in a stimulus bill. The Production Tax Credit (“PTC”) for wind and certain other renewable energy technologies is due to expire for projects with respect to which construction commences after the end of 2020. Similarly, the Investment Tax Credit (“ITC”), which is applicable to solar and certain other renewable energy projects, is scheduled to phase down from its original 30% to a permanent 10% of the cost of construction through 2022. Although the Climate Plan does not contain specifics

about these tax incentives, the PTC and ITC will likely be extended, considering how these credits have been crucial for the development of the renewable energy industry and the continued potential for growth. One additional open question is whether any extension of the ITC or PTC will have the additional benefit of such credit(s) being refundable (i.e., equivalent to cash), which could meaningfully transform financing structures for renewable energy investments. In addition, Congress has agreed on a broad package of legislation, the centerpiece of which is a bill to respond to the Covid-19 crisis. Included in this package is a tax bill with provisions to extend various renewable energy tax credits, including ITC and PTC, as well as appropriations funding for a variety of renewable energy programs.

- **Storage Technology.** President Biden has said he aims to build new battery storage and transmission infrastructure using American workers and American-made materials. Although the Biden campaign did not go into detail about how energy storage would specifically be addressed in the Climate Plan, incentivizing energy storage technology presumably would be an important component. Energy storage systems are being deployed in a variety of applications, helping renewable and conventional generation sources become

more efficient and cost competitive. However, the cost of such systems is often prohibitive, which limits their utilization. While there are currently limitations on using existing tax incentives for storage unless integrated with a renewable energy facility, the industry has been pushing for an expansion of the application of the ITC to stand-alone energy storage systems. It is expected that incentives to promote the utilization of storage systems and the development of storage technology will be an essential component of Biden’s energy policy.

How does the USVI capitalize on this?

As noted in the section on Electric Power Infrastructure, the National Renewable Energy Laboratory’s “Energy Transition Initiative: Island Snapshot U.S. Virgin Islands” March 2015 report showed the following:

- The USVI’s abundant solar resource (global horizontal irradiation of nearly 6 kWh/square meter-day) makes solar power economically attractive, especially as costs continue to decrease.
- Wind speeds measured at a 60-meter hub height exceed 7 meters per second (m/s) on test sites on St. Croix and St. Thomas and indicate a large potential for wind electricity. The localized cost of energy from utility-scale wind projects ranges from \$0.08/kWh to \$0.14/kWh.

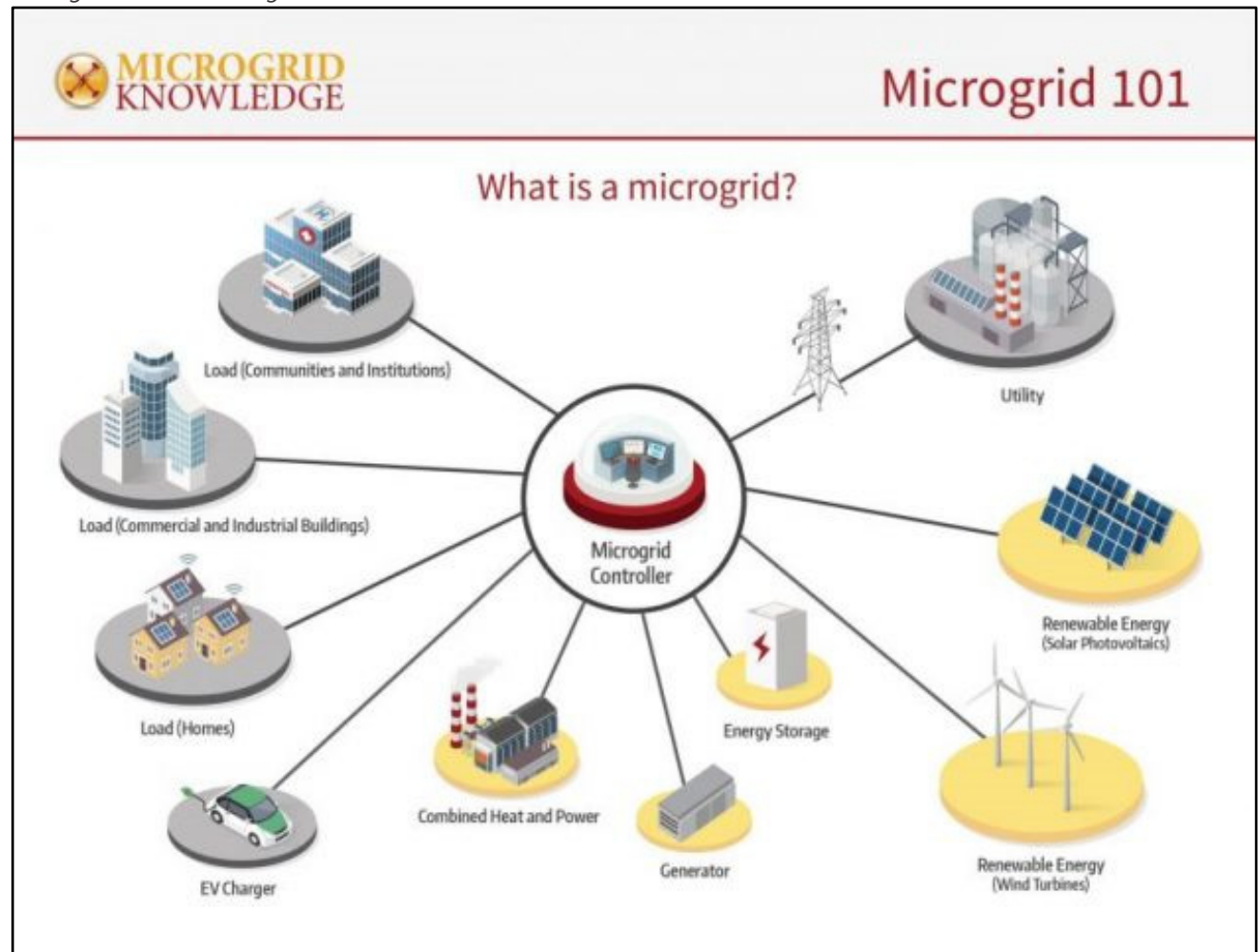
- St. Croix has moderate potential to generate 3 MW to 5 MW of energy from biomass because the majority of the island is covered with forest. Landfill gas has an expected capacity of about the same. In addition to woody biomass utilization, a 7-MW anaerobic digester using king grass as a feedstock has signed a Power Purchase Agreement (PPA) with WAPA.
- Estimates for waste-to-energy (WTE) technology range from 8 MW to 33 MW. In 2009, WAPA signed a PPA for a 33-MW plant. That project was subsequently altered to 20 MW and removed petroleum coke from the feedstock. In 2012, the USVI Senate voted against the project.
- Additionally, the USVI has high ocean thermal potential as a result of a 40-kilometer, relatively deep ocean trench that separates the northern two main islands from the southern main island.

The topic of microgrids is particularly interesting and is discussed in more detail in the above section on Electric Power Infrastructure. The website Microgrid Knowledge provides the following “Microgrid 101” information and the figure to the right:

In places like the U.S., where there is a highly sophisticated grid, it makes sense for the microgrid to stay connected (as long as the grid is behaving as it should). When everything is working right, the grid and the microgrid serve each other. If a microgrid power plant fails, it can turn to the main grid for

supply. Or if the main grid runs low on power supply – as it sometimes does on hot summer afternoons when we all are running our air conditioning – it can turn to the microgrid for some help. The microgrid gets paid for providing services to the grid (known as capacity, demand response and ancillary services), so the grid can serve as a source of revenue for the microgrid. Not all microgrids, however, are connected

to a main grid. Sometimes a grid connection is impossible, such as on an island . . . which has no grid infrastructure. These are known as remote microgrids. Sometimes a faraway place installs a wind or solar microgrid so that it can avoid using expensive and polluting diesel power generators.



For each element shown in the previous figure there is a need for equipment, maintenance and other elements that can be part of the USVI’s economic future.

The Business Opportunities

There is a big business development opportunity for the USVI that cuts across several phases:

1. Each of these methods, whether long-standing or newly emerging, will constantly be doing **research and development** (R&D) to create better technologies and products at lower cost. Creating an environment that encourages synergistic planning and research across multiple sectors will happen somewhere; why not the USVI? This may be a package of incentives designed to support businesses in this sector or may go beyond that to provide an “incubator/accelerator” such as the UVI’s RTPark or a larger environment somewhere else in the Territory.

2. Once a new product possibility is identified, the next step is usually **prototyping** - development of one or more examples to see what the concept really looks like, how it performs and can be improved, and how much it is likely to cost when brought to scale. USVIEDA or the Territorial Government can benefit financially from this.

As an example, Connecticut Innovations (CI - originally the Connecticut Product Development Corporation – see <https://ctinnovations.com>) is the state’s strategic venture capital arm that recovers its investments through royalties or other negotiated payback mechanisms. CI also has angel investor

programs providing tax credits to individuals who invest in qualified businesses or companies looking to incentivize angels to invest in those companies.

3. Full-fledged **production**. It is not always the case that a new product, having been developed in one location, must be moved somewhere else for production. Mid-size to larger operations that include research and development through production will benefit the USVI the most through high-wage employment and tax revenues. A current impediment to the development of this, or most every other target sector, is the lack of suitable places – particularly buildings – to put these businesses. This is addressed on pages 175-177.



INTERNET AND BROADBAND COMMUNICATIONS

The Territory is well-served with television and radio stations, telephone providers and newspapers. This part of the Vision 2040 report focuses on internet and broadband services that continually increase in importance as the means of communication.

What is the Difference Between Internet, Broadband and WiFi?

The terms internet, broadband and WiFi are frequently used synonymously, but as the following definitions from Home Network Solutions Berkshire show they are different pieces of the same puzzle:

What is the Internet?

The internet is an enormous network of computers, servers and other devices. The term World Wide Web (www.) describes it perfectly, it is a vast web of interconnected devices all over the world.

Although the internet is enormous and contains millions of machines, it is controlled with strict networking rules, which tell the machines how to behave and allow it to run efficiently.

Most web pages you visit are stored on large servers (huge computers with lots of storage) which are owned by companies such as Google or Amazon; this service is known as hosting. Although this is common practice, there are still a large number of individuals and companies who host their own websites on their own equipment.

Due to its vast size and complexity, the internet is notoriously difficult to regulate and control.

What is Broadband?

Broadband is the name of the technology which is used to connect you to the internet. It is called Broadband because the bandwidth used is wide, which allows multiple signals at once. This basically means it is quicker than a non-Broadband connection.

Broadband can use different methods of connection including Fiber Optic and Copper Cabling.

What is WiFi?

WiFi (or Wi-Fi) is a type of Wireless Connection. It allows devices, such as your phone, to connect to your router which then connects to the internet.

WiFi is almost like having an invisible cable connected from your device to your router.

Your router is the box which your internet provider gave you (or you purchased). It is actually a combination of a Modem, Router and Access Point but is commonly referred to as just a router.

WiFi is often the name given for an internet connection and it is common to hear people blame the WiFi for their internet connection not working, when in actual fact it isn't the WiFi at all, it is the internet connection from the router.

The U. S. Virgin Islands is perceived by much of the English-speaking Caribbean region as a bridge between the fully developed telecommunications technology arena of North America and the eastern Caribbean islands/countries.

Magen's Bay, St. Thomas, is the hub for the largest confluence of submarine cables in the region. Fiber service extends from this hub to North America, Puerto Rico, South America, and Europe. More cables come on line each year.


USVIEDA touts this infrastructure asset as shown below:

Consider Business
in the
U.S. Virgin Islands

2ND LARGEST FIBER OPTIC
BANDWIDTH
STRUCTURE
in the world.

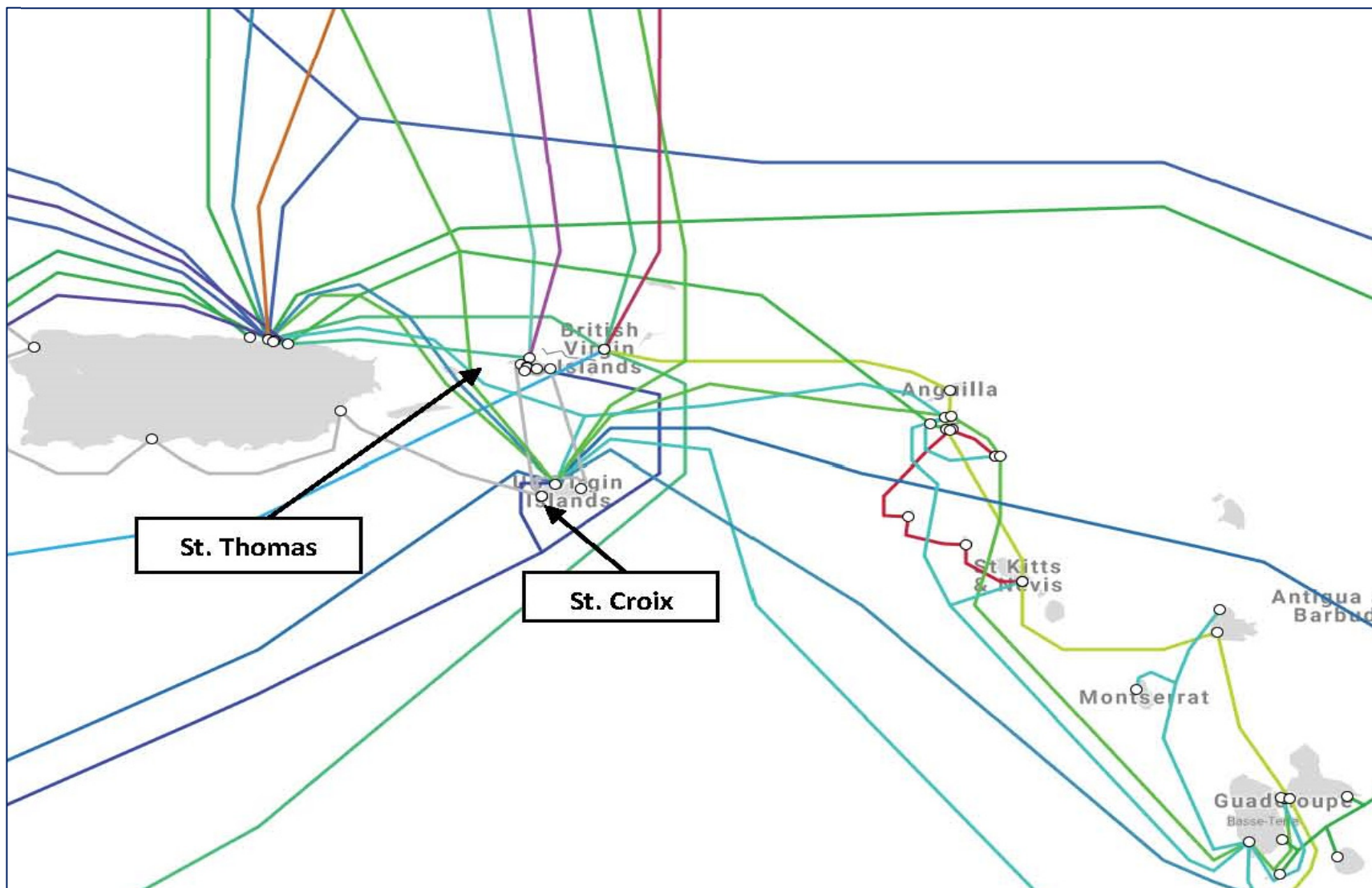
90% REDUCTION IN CORPORATE AND
PERSONAL INCOME TAXES.

100% EXEMPTION ON GROSS
RECEIPTS, EXCISE AND
BUSINESS PROPERTY TAXES.

 www.usvibiz.com

The figure to the next page shows the network of undersea communication cables coming into both St. Thomas and St. Croix.

U.S. VIRGIN ISLANDS SUBMARINE FIBER OPTIC CABLE NETWORK



Source: www.submarinecablemap.com

ST. THOMAS – ST. CROIX SUBMARINE TELECOMMUNICATIONS CABLE SYSTEM



Source: www.fiberatlantic.com

A major portion of cable network to the USVI is the Mid-Atlantic Crossing (MAC) cable system built by Global Crossing which was ready for service in June 2000. MAC is a 4,600 mile (7,500 km) submarine cable consisting of two optical fiber pairs, with an initial design capacity of 1.3 terabytes per second (TBps) – an extremely fast data transmission speed.

The MAC cable lands at:

- Brookhaven Cable Landing Station, NY;
- Hollywood, FL; and
- St. Croix, U.S. Virgin Islands.

The MAC cable system, a global linkage, is now part of CenturyLink's network assets, as well as Pan-American Crossing (PAC), South American Crossing (SAC), and Atlantic Crossing 1 (AC-1), AC-2/Yellow, Hawaii Island Fiber Network (HIFN), and others.

USVI Operations

viNGN



The St. Thomas-St. Croix fiber optic submarine telecommunications cable system became ready for service in mid-2013. The system has a length of 114 miles (183 km) and is owned and/or operated by Virgin Islands Next Generation Networks (viNGN).

viNGN is a 100% fiber optic, broadband network that was established in 2010 as a subsidiary of the Virgin Islands Public Finance Authority with a charter to provide wholesale, broadband, middle-mile service to local internet service providers (ISPs) and to promote local economic growth, innovation and global competitiveness.

The viNGN website states: "The viNGN municipal infrastructure provides world class open access, high speed, all-fiber optic broadband connectivity. With speeds up to 10 Gbps, viNGN has made the Virgin Islands the only fully interconnected jurisdiction of all 50 states and 6 territories and leads the Technological Revolution. viNGN is committed to the continued broadband infrastructure, economic, and community development of the U.S. Virgin Islands."

The following cable landing stations (CLS) are located in the USVI:

- Banana Bay, STT, VI, United States
- Brewer's Bay, STT, VI, United States
- Charlotte Amalie, STT, VI, United States
- Christiansted, STX, VI, United States
- Flamingo Bay, STT, VI, United States
- Frederiksted, STX, VI, United States
- Great Bay, STT, VI, United States

viNGN provides service through five wireless carriers: Liberty Latin (formerly AT&T), PR Wireless/Boost Mobile (formerly Sprint), Viya, Verizon, and T-Mobile. Three carriers—Liberty Latin, PR Wireless/Boost Mobile, and Viya—have physical assets in the Territory.

viNGN also provides wholesale internet access, a Wholesale Metro Ethernet, and collocation services for business use.

ATN Cable

In 2018 ATN Undersea Cable Corporation (ATN Cable) requested a license from the FCC to land and operate a non-common carrier submarine cable between St. Thomas and St. Croix. The submarine cable system is known as the VILink System and will

land in the towns of Nazareth on the east side of St. Thomas and Christiansted, St Croix.¹⁰

It will feature a non-repeated, linear segment composed of 24 fiber strands. In addition, it will have an initial deployment capacity of 10 gigabytes per second (Gbps) wavelengths on a single fiber pair, with a maximum design capacity of up to 100Gbps if upgraded in the future.

ATN in its application goes on to say that the VILink System will provide increased “capacity, redundancy, resiliency, and reliability for communications between St Thomas and St Croix.” The company believes that bandwidth demands in the region will “exponentially increase” as its citizens use more Internet-based data technologies and VILink will support these demands.

At present connectivity between the two islands is achieved largely by microwave technologies but according to ATN this system is unreliable “due to dish misalignment in high winds”. The new system will also improve reliability and redundancy by re-routing traffic through the U.S. mainland connection of the other island.

ATN Cable, a wholly owned subsidiary of ATN International, a communications and renewable energy investor, will be the sole owner and operator of the cable system. In its FCC application, the cable is described as a “non-common carrier fiber-optic submarine telecommunications cable” meaning that

ATN Cable will use it to deliver communications services to customers of The Virgin Islands Telephone Corporation (Viya), another ATN International subsidiary, but it may also sell remaining capacity on a wholesale basis to other carriers.

This application was granted by the FCC on July 19, 2019. Due to multiple business considerations, ATN is currently not working on this project.

The Potential and the Last Mile Problem

The USVI has the potential for having very good wireless communications for all residents and businesses, but right now that potential is not being fulfilled. The Territory has extraordinary capacity – available bandwidth – but is lacking in connecting that capacity to residential and business users. This is the proverbial “Last Mile” problem.

- Interviewees who rated a variety of topics only gave broadband services a 2.7 score on a scale where 5 was Very Good and 1 was poor.
- Other interviewees who did not score the topics still commented on the unreliability of internet service and high cost for unreliable service.

¹⁰ <https://www.capacitymedia.com/articles/3822955/atn-files-application-with-fcc-for-new-subsea-cable>

Simply stated, the USVI has a very robust submarine cable system connecting the USVI to the United States mainland, other Caribbean islands, South America and other places around the world. Similarly, there are strong connections between islands within the Territory, but the system is not capitalizing on this infrastructure because of the “Last Mile” problem – effectively connecting residential and business users to the available fiber optic infrastructure. This is a contributing factor to the USVI’s Internet Usage data as shown in the adjacent table – a usage rate 19% less than Puerto Rico’s.

Help on the Horizon

On November 16, 2020, the Federal Communications Commission’s Wireline Competition Bureau announced that up to \$84.5 million had been tentatively approved to help bring the U.S. Virgin Islands super-fast, one-gigabit-per-second broadband throughout the territory. Broadband VI, a local internet provider founded in 2002, was the winning applicant, but the process is not fully complete and is currently in the FCC “Quiet Period” – that is, Broadband VI is not able to provide many details about the project as this VI2040 report is being written. However, if implemented, this is intended to fix the Last Mile problem and significantly improve the Territory’s competitiveness for businesses that need reliable, high speed, broadband voice and data transmission capabilities, as well as improve the quality of life for its residents.

Internet Usage and Population Statistics for the Caribbean

Caribbean	Population (2019 Est)	% Pop. Carib.	Internet Usage March 2019	% Population (Penetration)	Users % Region	Facebook December 2017
Anguilla	15,174	0.0%	12,377	82%	0.1%	9,000
Antigua & Barbuda	104,909	0.2%	79,731	76%	0.4%	62,000
Aruba	106,053	0.2%	103,052	97%	0.5%	91,000
Bahamas	403,095	0.9%	342,631	85%	1.5%	220,000
Barbados	287,010	0.6%	234,659	82%	1.0%	160,000
Bonaire, St.Eustatius, Saba	25,971	0.1%	20,956	81%	0.1%	15,000
British Virgin Islands	32,206	0.1%	14,620	45%	0.1%	12,000
Cayman Islands	63,129	0.1%	54,630	87%	0.2%	48,000
Cuba	11,492,046	25.8%	5,642,595	49%	25.0%	4,180,000
Curacao	162,547	0.4%	151,274	93%	0.7%	120,000
Dominica	74,679	0.2%	51,992	70%	0.2%	39,000
Dominican Republic	10,996,774	24.7%	7,146,803	65%	31.7%	5,100,000
Grenada	108,825	0.2%	69,245	64%	0.3%	62,000
Guadeloupe	448,798	1.0%	240,000	54%	1.1%	220,000
Haiti	11,242,856	25.3%	2,000,000	18%	8.9%	1,800,000
Jamaica	2,906,339	6.5%	1,581,100	54%	7.0%	1,100,000
Martinique	385,320	0.9%	303,302	79%	1.3%	170,000
Montserrat	5,220	0.0%	3,000	58%	0.0%	2,600
Puerto Rico	3,654,978	8.2%	3,047,311	83%	13.5%	2,100,000
St. Barthélemy (FR)	7,160	0.0%	7,240	101%	0.0%	6,400
St. Kitts & Nevis	56,345	0.1%	45,476	81%	0.2%	35,000
Saint Lucia	180,454	0.4%	142,970	79%	0.6%	92,000
St. Martin (FR)	32,284	0.1%	16,100	50%	0.1%	15,000
St. Vincent & Grenadines	110,488	0.2%	76,984	70%	0.3%	61,000
Sint Maarten (NL)	40,939	0.1%	33,000	81%	0.1%	31,000
Trinidad & Tobago	1,375,443	3.1%	1,063,630	77%	4.7%	700,000
Turks & Caicos	36,461	0.1%	28,000	77%	0.1%	25,000
US Virgin Islands	104,909	0.2%	67,540	64%	0.3%	22,000
TOTAL CARIBBEAN	44,460,412	100%	22,580,218	51%	100.0%	16,498,000

NOTES: (1) The Caribbean Statistics were updated for Dec 31, 2019. (2) CLICK on each country name for detailed individual country and regional statistics. (3) The demographic (population) numbers are based mainly on data contained in Census Bureau. (4) Bermuda is included together with the North American countries according to the United Nations Statistical Division listings. (5) The most recent usage information comes mainly from the data published by Nielsen Online, ITU, Facebook, and other reliable sources. (6) Facebook subscriber data is for Dec 30, 2018. (7) Data may be cited, giving due credit and establishing an active link back to Internetworldstats.com. (7) For definitions and help, see the site surfing guide. Copyright © 2019, Miniwatts Marketing Group. All rights reserved.

AVAILABLE SITES FOR BUSINESS DEVELOPMENT

In order to have businesses, they must have places from which to operate. Very small businesses can operate from home-based spaces, but those with employees usually need a building devoted to their operations.

From an economic development perspective, "space" fits into several categories: retail, commercial (including offices and services), industrial and agriculture. Within those categories, both existing space (i.e., buildings) and sites for construction of buildings are both necessary.

Most businesses prefer existing buildings because they are more rapidly available and usually less costly to occupy than to take the time and cost of new construction.

Major Problem #1 – Lack of Real Estate Available for Business Development and Use

The commercial real estate market and availability is outlined in Volume 3: Nature of the Challenge. This research found that while there appears to be an adequate supply of available sites for retail and small office/service operations, there are fewer opportunities for larger commercial uses, industrial, and agricultural uses. Additional information on the existing industrial parks and developable land can be found in Volume 3, pages 84-87.

Bottom Line – the USVI is desperately in need of more available sites and buildings.

Major Problem #2 – Lack of Information about Available Real Estate for Business Development

As already stated, the availability of buildings and sites for business development and operations is a critical factor in business attraction, creation, retention and expansion. An equally important corollary is information about what is available.

Not only does the USVI have a very small inventory of buildings and sites for larger, non-retail/service uses, but it is very difficult to find that information. Business executives and site location consultants expect to readily find this information from the website of the EDO (Economic Development Organization) serving the area they are researching.

Site location consultants interviewed as part of this project reported that it is not easy to find information about existing and developable sites. Usually this would lead to the elimination of the location (EDO) being researched from consideration as consultants are unwilling to spend a great deal of time doing research.

The USVIEDA's website shows the two industrial parks the authority is responsible for or areas in Enterprise or Opportunity Zones, which are areas where benefits may be available, but does not represent available properties. There is a separate website developed by the USVIEDA, www.investusvirginislands.com which provides commercial properties and information for use by site selection and corporate real estate executives. It is a stand-alone site that needs to be linked to the USVIEDA website. The Department of Property and

Roadways of the U.S. Virgin Islands



St. Croix (south-side). Source: Vlnow.com

- Road access to points throughout the islands is readily available with a total of 80 roadways in the US Virgin Islands, of which
 - 43 are on STX
 - 31 are on STT
 - 6 are on STJ
- There are approximately 1,240 miles of paved highways and roadways, of which 750 miles are considered public and 490 miles are private.
- Many of these roads do not have painted striping and are in various conditions of repair.

Procurement has a website that provides listing of 189 available government-owned properties. It is not presented in a format used by the economic development profession.

A private stand-alone site provides very good information about incentives and development opportunities, www.investusfund.com

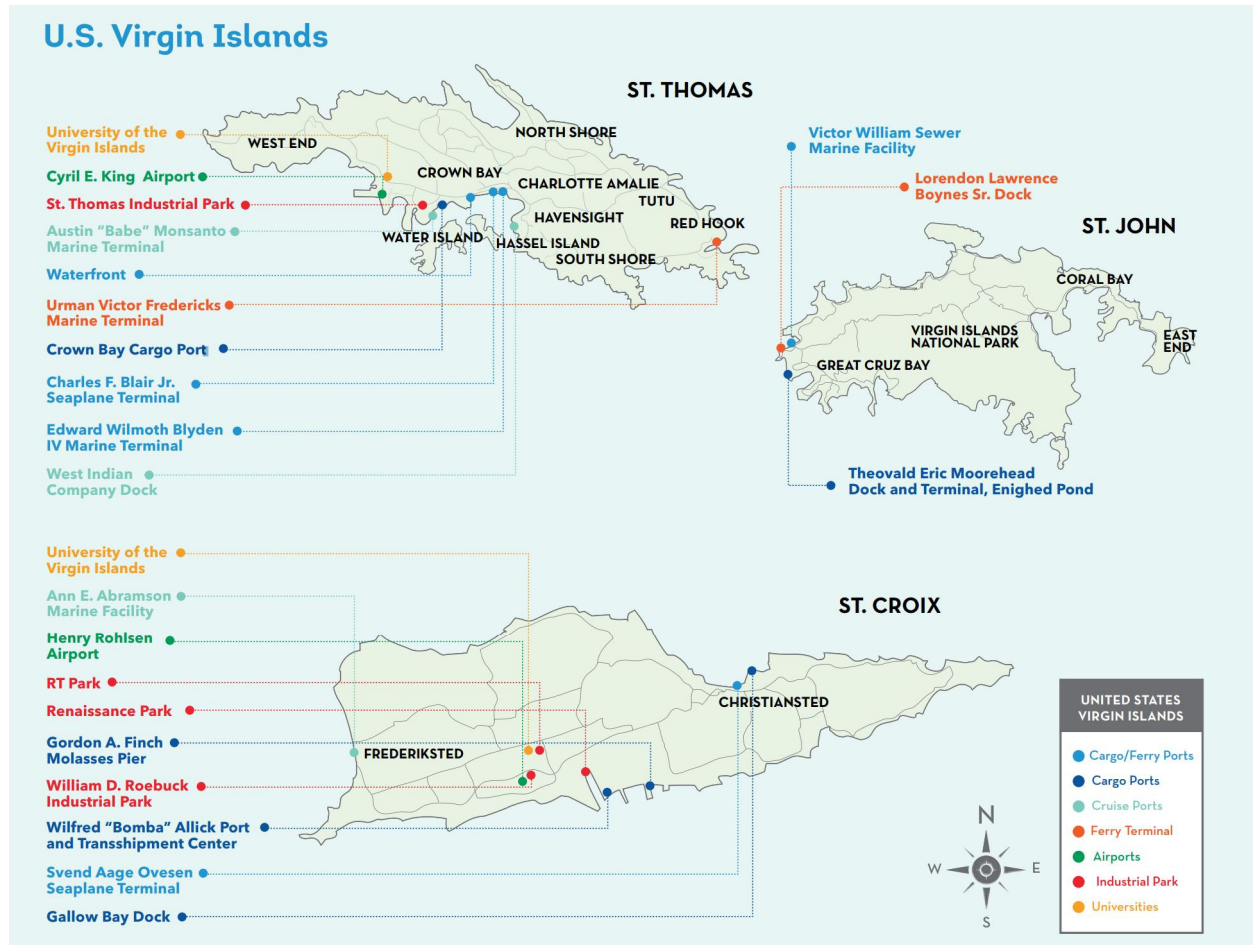
The USVIEDA site needs provide centralized, easy access to complete and current real estate information regarding all publicly controlled and privately owned available sites.

Bottom Line – the USVI is hurting its business development efforts because of uncoordinated, and in some cases inadequate information, about land and buildings that are available.

Opportunities for Development

Without the development of additional sites, availability of suitable buildings, and better marketing about what is available, the 20-year trend for economic development is downward. Limited available real estate and information about that real estate equals limited activity.

By 2040, working through the USVIEDA or any successor agency, the USVI should have an inventory of at least 20 available non-retail commercial buildings in the 10,000 to 40,000 square foot range. This does not mean the USVIEDA must be the developer of all the space – a healthy market demand will cause the private sector to develop more space.



Source: The U.S. Virgin Islands is Open for Business: Hotel and Resort Opportunities (Brochure, page 19)

These should be flex-space in design, suitable for multiple occupants and therefore subdividable. The USVI should also have an inventory of at least 300 acres of developable land with full utilities, good road access, and zoning that allows multiple uses.

The Territory's Form-based Zoning Code Overlay District will be useful in this regard.

Marketing of smaller properties, particularly retail and services, should be the responsibility of the USVI's real estate community.

At the present time, the gap between the current trend and the twenty-year goal is almost total – but there are improvement possibilities.

- Development of Renaissance Park on St. Croix can meet multiple development possibilities simultaneously and over an extended period.
- Development of some or all of the 261± acre Estate Betty’s Hope property south of Henry Rohlsen Airport owned by the Government of the USVI offers similar opportunities.
- Maintenance of an effective properties database and easy access to this database are absolute necessities as long as business executives and site selection consultants have this as a preferred research method.

ESTATE BETTY’S HOPE PROPERTY



SEA PORTS

Primary Cargo Ports

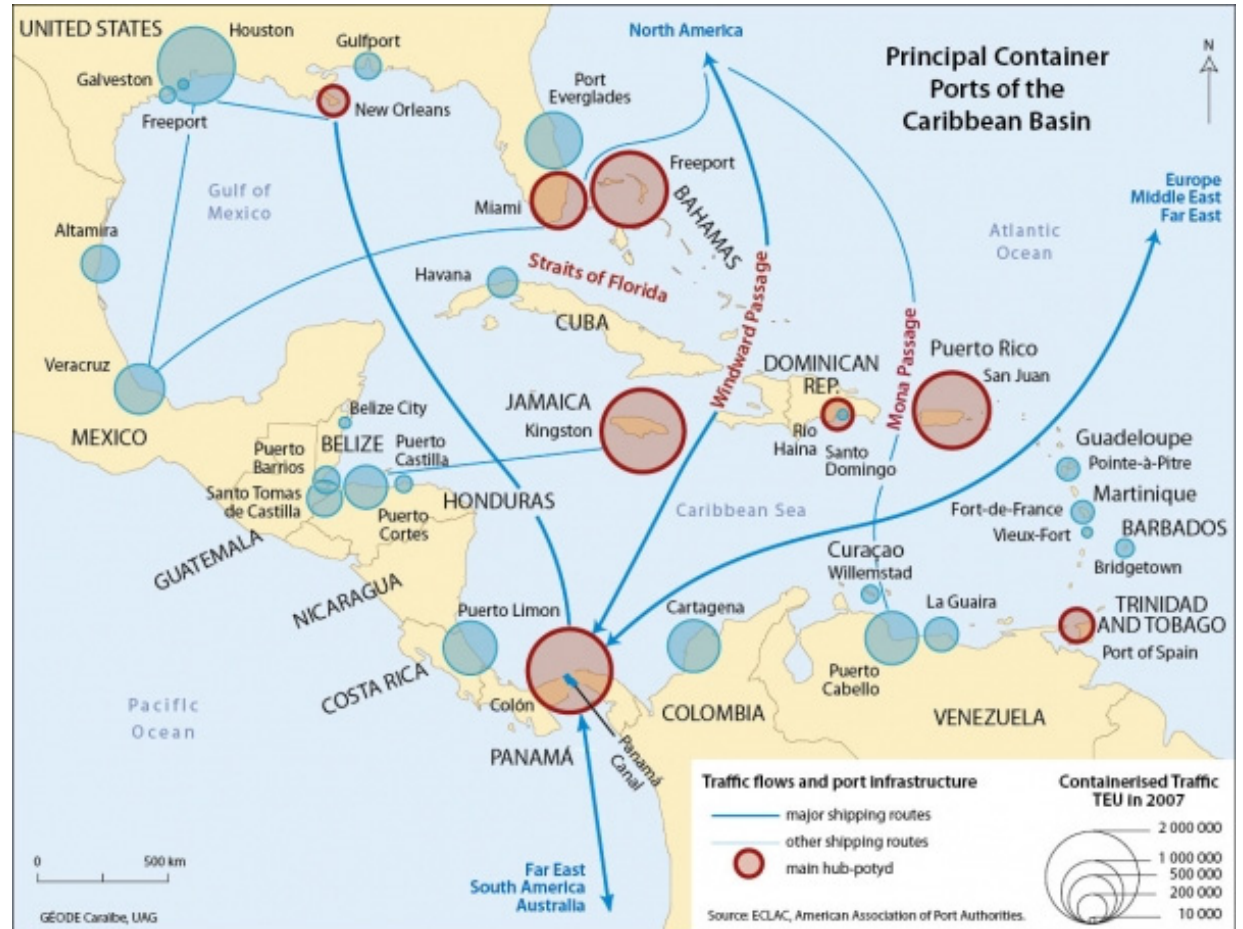
St. Thomas—Crown Bay Cargo Port



- 20 acres
- Bulkhead facility is 2,720 feet with 30-foot draft
- Containerized and general cargo: primarily food and goods
- Some transshipment to other islands: Eastern and Southern Caribbean
- Undergoing modernization of cargo handling
- Added marine and shipping traffic

St. Croix—Gordon A. Finch Molasses Pier

- 8 acres
- VI Port Authority shifting cargo from Gallows Bay to this pier
- Space for bulk cargo storage: liquid asphalt, cement blocks, and construction materials, as well as submarine cables
- Draft of 29 feet
- Roll on-Roll off capacity
- Berth docking for cable, molasses, aggregate vessels
- Molasses piped to nearby storage tanks



Cruise Ports

St. Thomas—Austin Babe Monsanto Marine, Crown Bay

- Former U.S. Naval Support

St. Thomas - West India Company Dock

St. Croix—A. Abramson Marine Facility, Fredericksted

- 29 and 36-foot draft

Ferry Ports/Light Cargo/Yachts

St. Thomas—Edward Wilmoth Blyden IV Marine Terminal, Charlotte Amalie

- Hub for seaplane and ferry service between USVI and BVI

St. Thomas—Waterfront, Charlotte Amalie

- 3200 ft. bulkhead space
- Luxury, small cruise, yachts

St. Thomas—Urman Victor Fredericks Marine Terminal, Red Hook

- Passengers to St. John and BVI
- Cars RO/RO and small cargo

St. Croix—Gallows Bay, Christiansted

- Mini-cruise and yachts
- Small cargo serving SX and Caribbean islands
- 400-foot dock w/ RO-RO and forklifts
- 13-foot draft

St. John—Loredon Lorene Boynes Dock, Cruz Bay

- Main port of entry to St. John
- Ferry to Red Hook and Charlotte Amalie

Ports of the Caribbean

Caribbean Nation/Island (Highlighting = islands with larger Port investments/potential)	Number by Size of Ports (TEUs/yr, Tons of Cargo Handled, Land Zone, Foreland-Offshore Zone of Influence)					Comments
	Very Small	Small	Medium	Large	Very Large	
Anguilla		1				
Antigua and Barbuda		1				
Aruba		1	2*			Port of Oranjestad, Port of San Nicolas
Bahamas	2	3	1*			Grand Bahama
Barbados		1				
British Virgin Islands		2*				Port Purcell, Port of Virgin Gorda
Cayman Islands	1	1				
Cuba	17	13	1	2*		Ports of Santiago and Havana
Dominica		2				
Dominican Republic	4	6	3*			Port of San Domingo, Caudedo, Port of Rio Itaina
Grenada		1				
Guadeloupe		1	1*			Port of Pointe-a-Pitre
Haiti	4	7				
Jamaica	8	6	1*			Kingston
Martinique		3				
Montserrat	2					
Netherlands Antilles (Curacao)	1	5*				Largest Ship Repair facility in the Caribbean is based in Curacao
Puerto Rico	9	9	3*			Roosevelt Roads Naval Station, Puerto Nuevo, Port of San Juan
Saint Kitts and Nevis		2				
Saint Lucia	1	3				
Saint Vincent and the Grenadines	1	4				
Trinidad & Tobago	2	8*				
Turks & Caicos		3				
U.S. Virgin Islands		5*	1**			* STT: Charlotte Amalie Harbor; STX: Port of Fredricksted, Port of Christiansted; STJ: Cruz Bay, Coral Bay. ** STX: Port Alucroix

Source: Worldportsource.com



**St. John—Victor Wm. Sewer Marine Facility
("The Creek")**

- Draft 10 feet
- Former small cargo use, now passenger ferry and charters

**St. John—Theovald Mooreheed Dock and
Terminal, Cruz Bay**

- Cargo at Enighed Pond
- 6 acres
- Draft 12 feet



Theovald Moreheed Dock and Terminal

Airports & Seaplanes

Airports

- Henry Rohlsen Airport, St. Croix
- Cyril E. King Airport, St. Thomas

Seaplane Terminals

- Charles F. Blair Seaplane Terminal, St. Thomas, Charlotte Amalie (adjacent to Blyden)
- Svend Aage Ovesen Jr. Seaplane Terminal, St. Croix, Christensted

Water & Wastewater

Wastewater

- WAPA service to approximately 40% of residents
- 60% is on-site; Most 50-60 years old
- 8 wastewater treatment plants, 30 pump stations, 402 miles of buried lines

Water

- WAPA long-term agreement with Seven Seas Water Corporation to provide drinking water through **seawater** reverse osmosis facilities on ST and SX
- Potable water to 13,000 customers

Quality of Place & Life

BUILT ENVIRONMENT & AMENITIES

St. Thomas is the most largely populated island, with the capital, Charlotte Amalie. St. Croix is the largest island, with two population centers, Christiansted and Frederiksted. The business districts of these three cities primarily serve tourists and visitors. St. John is 60% covered by a national park, and therefore has less population and less commerce.

According to interviews conducted with entrepreneur support organizations, downtown businesses in the three main cities close when tourists are not in town, and do not adequately serve the local population. These restaurants, bars, and shops miss out on local business and create a culture where USVI citizens do not go to main business districts for entertainment.

Zoning

An issue noted by stakeholders is that zoning in the USVI is restrictive, especially in light of recent, more flexible zoning trends in the United States mainland. Regulations specify land use regarding coverage and size of lots, including strict specifications of yards on front and sides. These strict specifications may be inhibitory for potential small- or large-scale real estate development.

Additionally, there may be a need for mixed-use zoning, or flex space for manufacturing. For entrepreneurs who are seeking to understand



Emancipation Park on St. Croix provides an example of a high-quality public space

where to open their businesses or build a new facility, the lack of transparency about the zoning code and lack of easy access to online maps is a barrier.

Buildings and Architecture

The U.S. Virgin Islands has a rich architectural history; however, many buildings have fallen into disrepair and suffer from neglect and disinvestment. These historic buildings and neighborhoods have tremendous potential to be better utilized to support economic development. Historic preservation is a key component of creating authentic places, which is critical in today (and tomorrow's) competitive tourism climate. Visitors



Example of the disrepair facing many buildings in the Territory.

are increasingly drawn to places that are “real” and not designed for the tourist.

Addressing the look and quality of the built environment beyond just properties of historical value is an important priority not only in supporting tourism, but also improving the quality of place which has a direct relationship with the desirability of places to live and work. Throughout the Territory there also remains visible signs of disaster legacy from past storms and a dedicated effort and more funding is needed to improve the quality and aesthetic of structures in the U.S. Virgin Islands.

Streets and Public Spaces

The public realm (public spaces such as streets, parks, plazas, etc.) is deficient in many places throughout the Territory and particularly the areas outside of popular tourism places.

The condition of public spaces is often lacking in upkeep and proper maintenance with sidewalks and roads falling into disrepair making for sometimes dangerous conditions for pedestrians and cyclists. Much of the road and sidewalk infrastructure has reached the end of its life cycle and is need of replacement.

Many communities throughout the territory also lack defined town centers and gathering places. Having strong centers is important in creating a strong sense of place and maintaining vibrant street life and activity.



An overgrown lot adjacent to a building in need of rehabilitation. Underutilized spaces such as these offer tremendous opportunity to enhance quality of place through pocket parks or community gardens.

Existing public spaces, such as parks, playgrounds, and plazas range in quality and appearance. Overall, there is a need for new and revitalized public parks and plazas to help foster a stronger sense and quality of place.

Cost of Living

The cost of living in the U.S. Virgin Islands is relatively high and poses a significant burden for local residents and poses a significant barrier to attracting new companies that would be challenged by providing livable wages and

attracting a talented workforce to relocate to the U.S. Virgin Islands.

Comparison data indicates that by some sources, U.S. Virgin Islands pay more than the U.S. population as a whole as follows¹¹:

- Nearly 30% more for restaurants,
- 92% more for groceries,
- 2.2. times more for transportation,
- 47.5% more for housing,
- 31.6% more for entertainment and sports
- 85.5% more for clothing

¹¹ My Life Elsewhere Cost of Living Comparison

Generally, cost of living ranges from 15% to 50% more in the U.S. Virgin Islands compared with the U.S. mainland. As discussed elsewhere in this report, electric utility costs are an especially large cost burden for residents and a significantly higher cost than utility prices elsewhere.

Higher prices are typical for Island communities due to the need to import goods and products. With little on-island manufacturing activity, most purchased goods are imported, including food products. Imported quantities are also relatively smaller than a state or island community with a greater population, resulting in higher prices.

Housing

There is great need for quality affordable housing in the U.S. Virgin Islands. A 2019 Comprehensive Housing Market Analysis for the U.S. Virgin Islands prepared by the U.S. Department of Housing and Urban Development (HUD) found that relatively low incomes, high construction costs, limited developable land, and strong demand by nonresidents have contributed to an ongoing affordability problem for residents of the territory.

According to the study, in 2017, “the median home price was approximately seven times higher than the median household income in the USVI, compared with five times higher for the nation. The ratio is likely to have increased significantly in the Territory during the past two years because home prices have risen since the hurricanes despite severely weakened economic conditions.

The HUD report also identified significant barriers to homeownership associated with financing with the high cost of homeowner’s insurance being the most significant of these. At the time of the study, the cost of homeowner’s insurance was approximately four times more expensive than for the U.S. mainland overall – before the hurricanes. Post-hurricane the report estimated that these insurance costs have increased by as much as 20%.

According to HUD, the rental market is very tight and renters in the U.S. Virgin Islands typically are more burdened than renters in the U.S. as a whole – spending a relatively larger share of their income on

rent. HUD reported that the median gross monthly rent in the Territory was approximately \$850, which represented 39 percent of the median monthly income for renter households. Anything above 30% is considered a cost-burden by HUD. Over three years from 2019 through 2022, it was forecasted that approximately 940 new rental units are needed in the U.S. Virgin Islands, or 313 per year.



The Whispering Hills subdivision was developed by VI Housing Finance Authority in 2015 to help facilitate affordable homeownership.

EDUCATION AND WORKFORCE

EDUCATION SYSTEM

Educational attainment in the Territory lags the United States mainland overall. In the USVI, over a quarter of adults do not carry a high school diploma or equivalent, more than double the rate of the U.S. as whole. The disparity between degree holders is similar; 17% of adults living in the Territory hold a bachelor's degree or higher, compared to 33% of all U.S. adults.

K-12 Education

The Virgin Islands Department of Education (VIDE) operates two public school districts covering the territory and serving about 10,700 K-12 students. Enrollment has declined by 5,000 students since 2010, one indication of the Territory's shrinking school-age population.

Per the VIDE 2019 Report Card, subject area proficiency rates among public school students are very low, with only 25% of students in grades 3-8 and 11% achieving proficiency in English Language Arts, and 10% proficient in Mathematics.

The territory is also home to a number of private and parochial schools. Higher income families tend to enroll their children in private schools rather than the public school system due to perceptions and concerns about education quality.

University of the Virgin Islands

The University of the Virgin Islands (UVI) is a long-established, fully accredited small public university with campuses on St. Croix and St. Thomas and an

Academic Center on St. John. The university offers associates, bachelor's and master's degrees in 30 programs through five colleges and schools namely, College of Liberal Arts and Social Sciences, College of Science and Mathematics, School of Business, School of Education, and School of Nursing.

UVI also has a number of research units engaged in various areas of research and development (R&D) in agriculture and aquaponics, marine and environmental science, green technology and water resources.

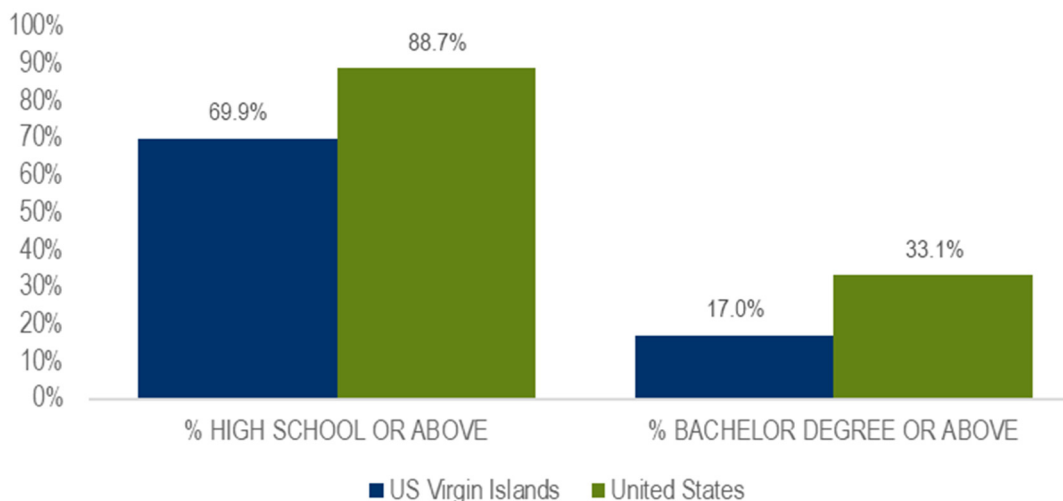
The university has a 98% acceptance rate, with 95% of students attending from within the Territory. Graduation rates are low, with just 32% of full-time, first-time bachelor-seeking students completing

their program within six years. The year-to-year retention rate is about 66%.

Beginning with the 2019-2020 academic year, any student who has graduated from a secondary school in the USVI (private, public, or parochial) may be eligible for free tuition to attend UVI. This represents a significant step toward expanding educational access to residents.

Raising the education levels of residents remains both a challenge and priority for the Territory. This is a critical factor for readying residents for the workforce and significantly impacts future growth and the competitiveness of the economy.

Educational Attainment (% of Adults), 2013



Source: US Virgin Islands: 2013 Virgin Islands Community Survey, Eastern Caribbean Center, University of the Virgin Islands; United States: Esri

WORKFORCE DEVELOPMENT

Department of Labor Commissioner (DOL), Gary Molloy, presented an overview of the workforce development system at a Revenue Estimating Conference held in December 2020. He noted that in October 2020, the total USVI labor force consisted of 44,917 individuals, of which 4,220 were unemployed, or 9.4%. The true number of unemployed in the territory of working age people would be a considerably higher percentage if it were to include those who have given up looking for work and are not included in official statistics.

DOL maintains a website, www.vidolview.org, to assist those looking for jobs. It is used for candidate search, applicants, referrals, and job postings. Recent data of in demand positions indicated that the largest category of available jobs posted were in public administration, representing 27%.

A comparison of in-demand positions with available positions clearly shows that there are not enough job openings to match demand. If all available positions that were posted were filled, it would satisfy only 14% of demand. DOL concludes that individuals will have to pursue jobs in other industries as a result. However, the current Workforce Investment Board WOIA 2020-2023 State Plan revolves around these same industry sectors.

Job Openings by Industry for all Sectors in Virgin Islands in October 2020 (Top 10 List)

Industry	Job Openings
Public Administration	265
Construction	84
Accommodation and Food Services	64
Retail Trade	58
Health Care and Social Assistance	57
Finance and Insurance	41
Education Services	39
Professional, Scientific, and Technical Services	33
Manufacturing	24
Administrative and Support and Waste Management and Remediation Services	18

Source: Online advertised jobs data

Job Availability for In Demand Industries

In Demand Industries	Job Seekers Aligned to Occupation Groups (as of Oct 20, 2020)	Jobs Available in Aligned Occupation Groups (as of Oct 20, 2020)	Percent of Total Jobs to Total Available Job Seekers
Administrative and Support Services	2,050	175	8%
Construction Trades	1,220	60	4%
Allied Health	377	41	11%
Information Technology	66	20	33%

Source: U.S. Virgin Islands Department of Labor.

DOL and its workforce providers offer employment training services and programs funded with CDBG, Dislocated Worker Grant, Customized Training, On-the-Job Training (OJT), and Apprenticeship resources. The charts below were developed for DOL to describe the workforce delivery system.

The framework for the system is in keeping with a national "Cradle to Careers" model that has been in place in many communities around the United States. It is focused on producing career readiness skills from an early age and is represented as follows:

The USVI faces both a supply and a demand problem for jobs. The number of available jobs does not meet the number of unemployed or underemployed residents. At the same time, many

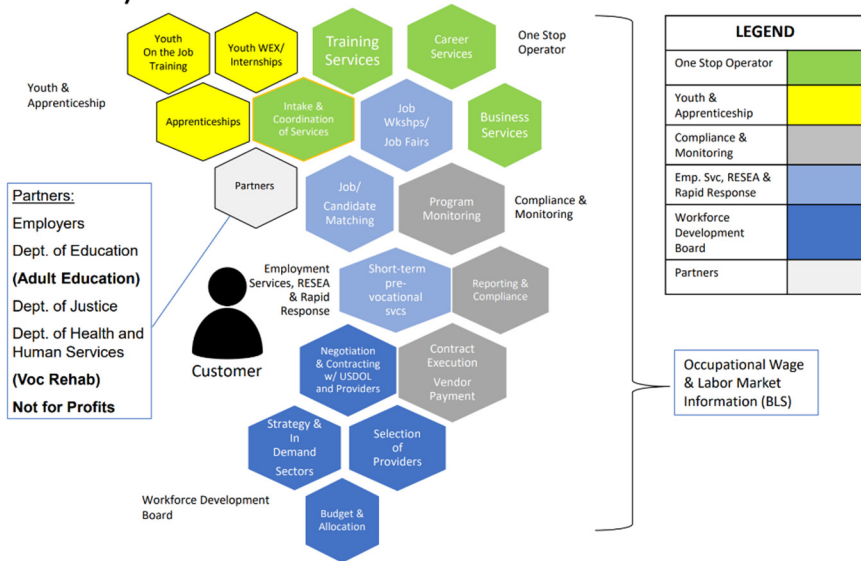
employers have found it difficult to hire the skilled workers they need.

High demand positions refer to select occupations for which business demand is most acute. In the United States mainland, these positions can range from those requiring the most advanced degree and experiences (biochemists), to lower skilled labor positions where workers either are not available or do not seek out such jobs (plumbers, farm workers, etc.) In the Virgin Islands, Diageo has need for valve and pipe experts that were in supply when the refinery was operating at full speed, but now the company is finding these workers hard to find. That is an example of a high demand position.

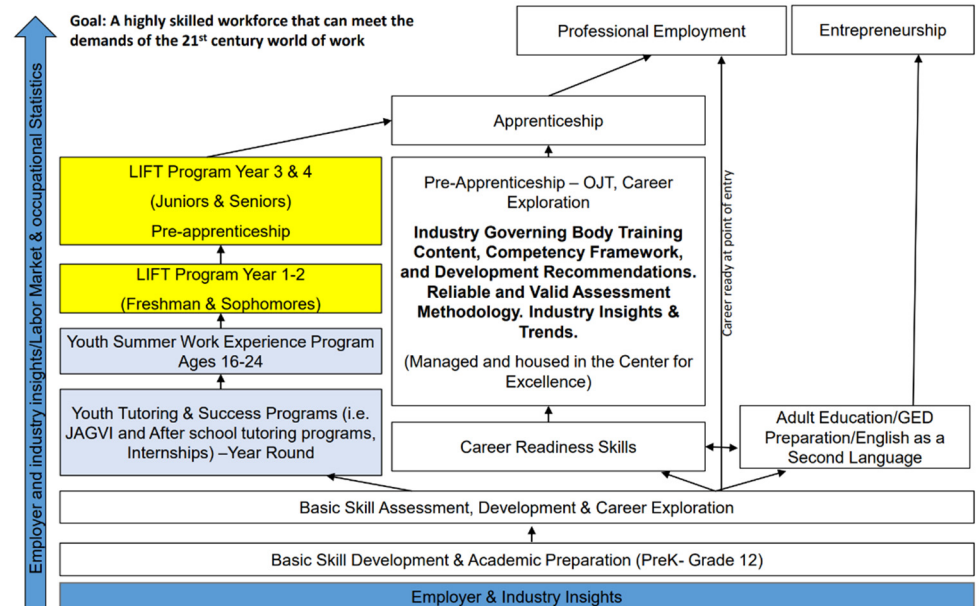
In-demand positions refer to remaining occupations for which the demand for skilled workers outpaces the supply. Many communities throughout the United States mainland are stuck in this position where good paying jobs cannot be filled because there simply are not enough skilled workers. An

The USVI faces both a supply and a demand problem for jobs. The number of jobs does not meet the number of unemployed or underemployed residents.

Workforce Development Services and Ecosystem



Workforce Development "Cradle to Careers" Continuum



acute example of this is in highly skilled cyber security professions.

Vision 2040 provides eight targeted industries. Nearly all of these industries will require levels of skills development that could result in a mismatch of supply and demand. Without proper training, workers will not be in position to fill these jobs. The educational and workforce development system must align itself now to meet these future demands, and in fact, help attract the businesses that need such talent.

The vast majority of jobs in the future will require some level of skills development beyond a high school degree but not necessarily a bachelor's degree. This has accounted for the popularity of industry-based credential and certification programs over the past decade. The U.S. Virgin Islands must consider certification programs based on the VISION 2040 targeted industries to increase skills of residents and chances for future employment. For many, this will be the fastest shortcut out of poverty.

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PUBLIC SAFETY

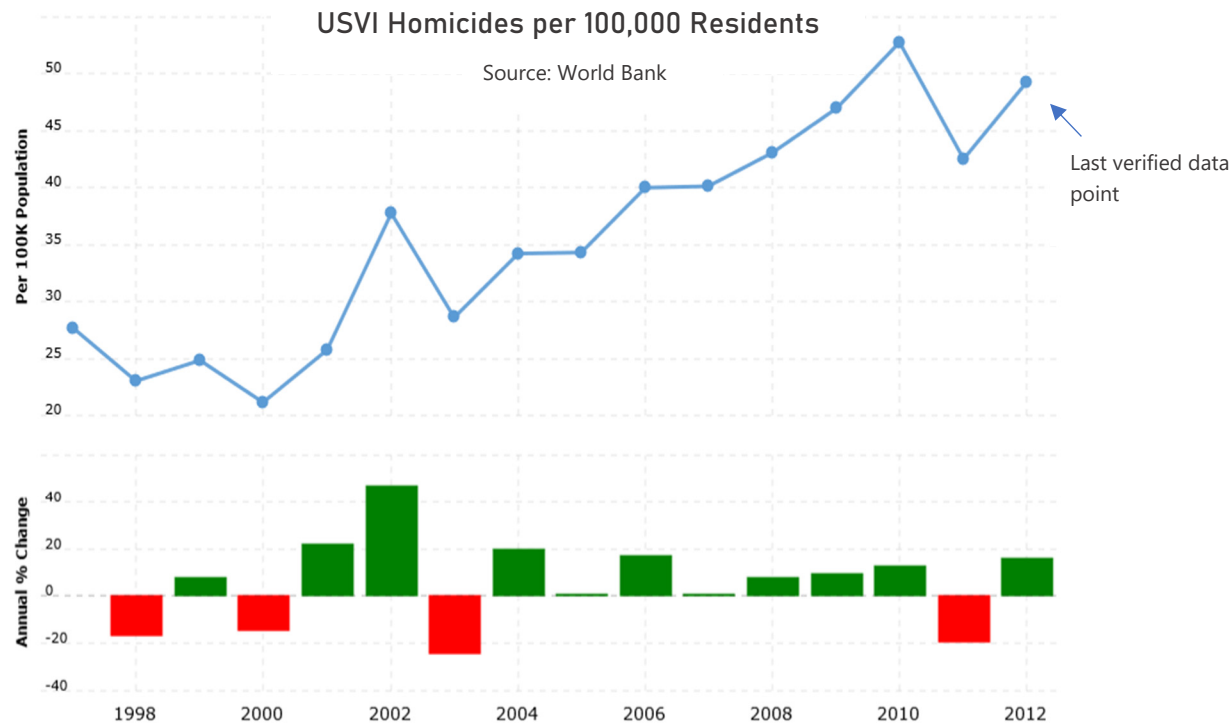
The implications of crime on economic development for the U.S. Virgin Islands is very much of concern to businesses, residents, and members of the diaspora thinking of returning. The topics of crime, crime rate, and crime prevention were cited frequently in the information collection methods cited in Volume 4. Of the 1,921 Vision 2040 surveys completed by residents, public safety was ranked 1.4 on a 4-point scale (with 4 being “Excellent”—residents feel safe.) The 1.4 measure is between “Poor” and “Fair”. Crime is a problem that requires immediate attention if the Territory is to realize the aspirational goals of Vision 2040.

Each year *Area Development* magazine, an economic development trade publication, conducts a survey of corporate executives and site selection consultants, asking them the rank nearly 30 factors related to choosing a location. Until 2015, when nine quality of life factors were merged into a single category, Low Crime Rate was ranked each year as the most important quality of life factor for corporate executives and was usually first or second for site selection consultants.

Compared with most of North America, crime, and especially violent crime, is high not just in the Virgin Islands but throughout the Caribbean and Central

America, which has the reputation for prevalent illegal guns and illegal drugs.

The United Nations Office on Drugs and Crime (UNODC) tracks statistics worldwide and publishes a Global Study on Homicide. The United Nations last updated information on crime statistics for the U.S. Virgin Islands was in 2012. At that time, intentional homicide rates reported by the UN showed that in 2012 the USVI ranked highest in the Caribbean for homicides per 100,000 residents and third in the Central America and Caribbean, just behind El Salvador and Honduras.



Similar Country Ranking	
Country Name	Per 100K Population
Virgin Islands (U.S.)	49.28
St. Kitts and Nevis	36.09
Bahamas	30.53
Puerto Rico	28.70
Trinidad and Tobago	28.26
Panama	16.89
Greenland	14.17
Antigua and Barbuda	11.06
Bermuda	9.50
Uruguay	7.90
Barbados	7.75
Lithuania	6.63
Argentina	6.34
St. Martin (French part)	5.40
Estonia	4.76
United States	4.73

Source: World Bank, 2013

The World Bank tracks crime statistics throughout the globe as well. As of 2020, it also could not report updated figures for the U.S. Virgin Islands for comparison with other locations. In 2013, the World Bank reported for 2012 that at 49.28 intentional homicides per 100,000 residents, the U.S. Virgin Islands ranked top of similar country rankings (see chart on prior page.)

No comparable data can be found from the U.S. Virgin Islands Police Department website nor could Vision 2040 researchers find such data from the USVI Bureau of Economic Research or the Virgin Islands Department of Health. The *2018 Annual Report of the U.S. Virgin Islands Judiciary and Court System* contains no crime statistics and a search of the Court System website for “crime statistics” found nothing.

The United States Attorney’s Office, District of the Virgin Islands, released a press release on October 13, 2020 headlined, “United States Attorney Shappert Announces USVI Efforts to Address Violent Crime: Project Guardian and Project Safe Neighborhoods.” The press release read:

“In September, the Federal Bureau of Investigation (FBI) released its 2019 edition of Crime in the United States, which showed that violent crime decreased nationwide for the third consecutive year,” Shappert said. “After decreases in both 2017 and 2018, the violent crime rate dropped an additional one percent during the year and the property crime rate decreased 4.5 percent. In 2019, there were an estimated 1,203,808 violent crimes and an estimated violent crime rate of 366.7 violent crimes per 100,000 inhabitants. This represents a one percent decrease from the prior year. The

FBI’s Uniform Crime Report (UCR) data indicates that the violent crime rate dropped 0.7 percent in 2017 and 3.5 percent in 2018 from the prior years.”

“In the U.S. Virgin Islands, however, violent, gun-related crime continues to threaten public safety.” Shappert noted that the U.S. Virgin Islands, with a population of roughly 103,000 people, has averaged 40 homicides a year during the past several years, and has already exceeded that number for 2020. “We are continuing to work closely with our federal and local partners to help turn this situation around. Some of what we do is known to the public, and some of what we do must remain confidential until prosecutions are initiated. We are encouraged by increased levels of coordination among law enforcement agencies and by intelligence information provided to us by citizens in our community.”

Eight years after the UNODC Homicide Report was issued, the numbers and ranking for the USVI remains disturbingly high.

On January 4, 2021, the Virgin Islands Daily News reported 49 homicides in the U.S. Virgin Islands, 27 on St. Croix, 20 on St. Thomas, and 2 on St. John. The article provides names, places, and circumstances for each of the deaths. A similar article published by The Source a week earlier provided consistent information, citing Police Department records. The Virgin Islands Free Press published articles with similar data, one in which Police Commissioner Trevor A. Velinor was quoted as saying “the statistical homicide numbers for the territory first reported by the Virgin Islands Free Press are factually accurate.”

Therefore, if the local count of 49 is compared with currently available 2020 UNODC reported figures for other locations, it would place the U.S. Virgin Islands again at the top of rankings for all Caribbean locations for homicides.

As part of the research conducted for Vision 2040, corporate site selection consultants and business executives reported to Camoin 310 that the lack of transparency with crime statistics for the U.S. Virgin Islands presents a problem. In the absence of such reliable data, executives considering the U.S. Virgin Islands as a place to do business, will reference last known official and third-party credible records (such as the UNODC noted above) in addition to local news reports to ascertain probable safety for themselves, their employees, and property/facility investments.

Most law-abiding Virgin Islanders who are not involved in the drug trade and other illegal activities are unlikely to be killed or need to worry about being killed. That is even more the case with tourists and other visitors.

The implications of crime on economic development for the U.S. Virgin Islands is very much of concern to businesses. It is a problem that needs immediate attention if the Territory is to come close to realizing the aspirational goals of Vision 2040.

But there are other crimes that concern residents, visitors, and would-be visitors, and with justification. Updated figures on non-homicidal crimes against people and property are difficult to obtain. Yet anecdotes, news reports and a drive around the islands indicate that crime is a significant concern. Many homes, condo complexes, and businesses are heavily fortified with gates, other hardware, and guard dogs.

Among the resident surveys, respondents on St. Croix rated crime third among the island's "negatives." St. Thomians ranked it fourth. On St. John, residents rated the lower incidence of crime on their island, presumably relative to St. Croix and St. Thomas, as the number one positive attribute of living there.

Among the diaspora (former Virgin Islanders now living elsewhere), more than 700 respondents to the Vision 2040 survey said that a "crime prevention initiative" should be the Territory's second highest priority, just behind a modern and resilient energy system and ahead of healthcare. This is significant given that 80 percent of these expats say they would consider returning to live, work and invest – under the right circumstances.



DIVERSIFYING THE ISLAND ECONOMY

Business Creation and Expansion

TRANSITIONING TO A KNOWLEDGE-BASED ECONOMY

We are two decades into what many have called the knowledge economy. Regions, states, and nations have positioned themselves to prosper in this new economy. The U.S. Virgin Islands has not yet made the transition and is far behind in developing an innovation ecosystem that adequately supports entrepreneurship and establishes the Territory as a healthy business climate to support fast growing businesses.

Traditional economic development was premised on building out industry clusters by recruiting firms, making public investments in infrastructure projects, and targeting investments to help existing businesses create more jobs. This is largely the approach that holds firm throughout the Territory.

Changes to the economic development profession across the globe began in the late twentieth century. It first took root among a small community, often linked with research universities, that concerned itself with advancing 'technology-based economic development.' Advocates focused on supporting research and commercialization of products from laboratories and technology-oriented firms into the marketplace, a complex process that involved

multiple steps and could take many years to produce results.

Today's economic development does not abandon traditional approaches, nor has it replaced them with tech-centric approaches; rather, it has now evolved into a blended approach with community-based practices to establish the next generation of economic development. The focus is integrated. It fosters business growth from within regions to ensure that businesses in all sectors succeed by scaling up operations to sustain growth. It does this through a complex ecosystem of education, research, collaborative partnerships, creative endeavors, transfers of information and knowledge, entrepreneurship, capital formation, and supportive systems to encourage new ventures.

Economic development flourishes in places where talent is abundant. An important factor in ensuring economic growth in a region is its quality of education, from pre-K through 12th grade education and post-secondary education that prepares graduates for the world of work. Employers are drawn to locations with schools that emphasize the core STEM subjects (science, technology, engineering, and math), higher level cognitive reasoning, and team-based problem solving. In such places, higher education and research institutions produce a well-educated local workforce, where creative thinking and innovations are celebrated and incubated, and where the economic development focus is on new start-ups, spin-offs, and support for high-growth firms. These are critical aspects of the business climate.

It is said that most jobs are created by small businesses. This is true. It is also true that most jobs are lost by small businesses. Communities that have healthy economic ecosystems create more jobs than they lose. Research conducted by the Institute for Exceptional Growth and numerous state studies (Pennsylvania, Maryland, Virginia, and others) has concluded that less than one percent of high growth firms are responsible for creating approximately two-thirds of all net new jobs. For this reason, regions must focus on building an environment conducive for firms to succeed and that sustains high growth businesses.

USVI ECOSYSTEM FOR INNOVATION AND GROWTH

Entrepreneurship and innovation can provide a pathway for higher earnings in a territory whose median household income is nearly half of the United States mainland. Entrepreneurship and innovation have both direct and indirect effects on income. Entrepreneurship offers the opportunity to make a higher income than working in the tourism, government, and service industries.

While there are supportive organizations in the Territory that encourage entrepreneurship, the ecosystem has not been fully fleshed out. Significant gaps in financing for riskier ventures are one major hurdle. Another hurdle is the burdensome regulatory process that causes small business registration to take longer and cost more than many would-be entrepreneurs can stomach. The USVIEDA, University of the Virgin Islands, the local Small Business Development Center, and the Research and

Technology Park, are beginning to add programming and capacity and building partnerships to provide a larger network to support small businesses.

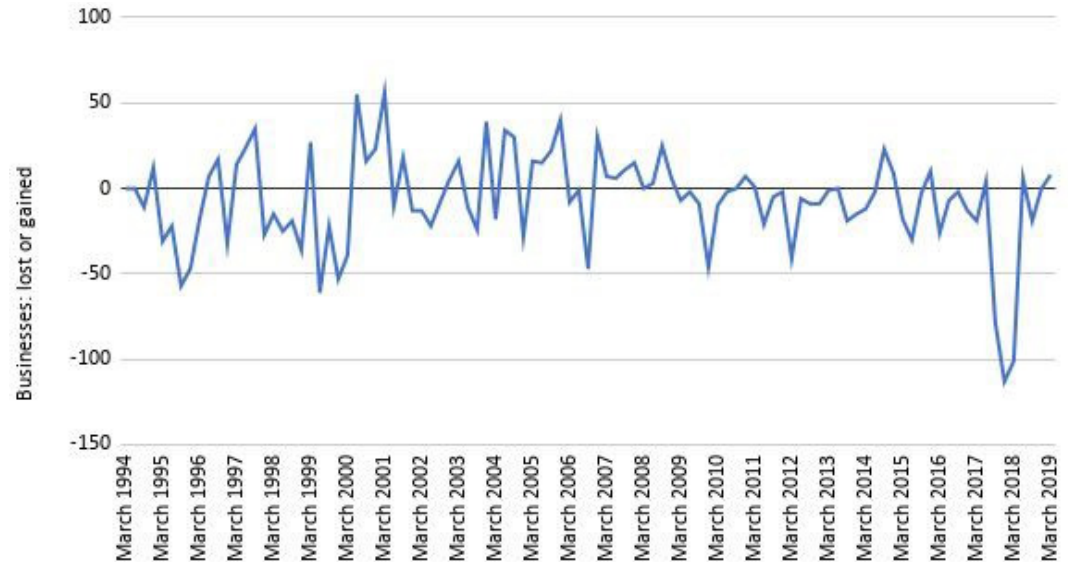
BUSINESS STARTS

Trends on business births and deaths in the USVI show a significant amount of churn year to year. The years 2000 and 2001 saw the most positive results for business starts, while 2018 saw the most business deaths. Over 100 businesses did not survive the aftermath of the hurricanes of 2017. The decline in net business gain between 2007 and 2013 follows a similar pattern as the United States mainland, with businesses being impacted by the Great Recession and now the Covid-19 pandemic.

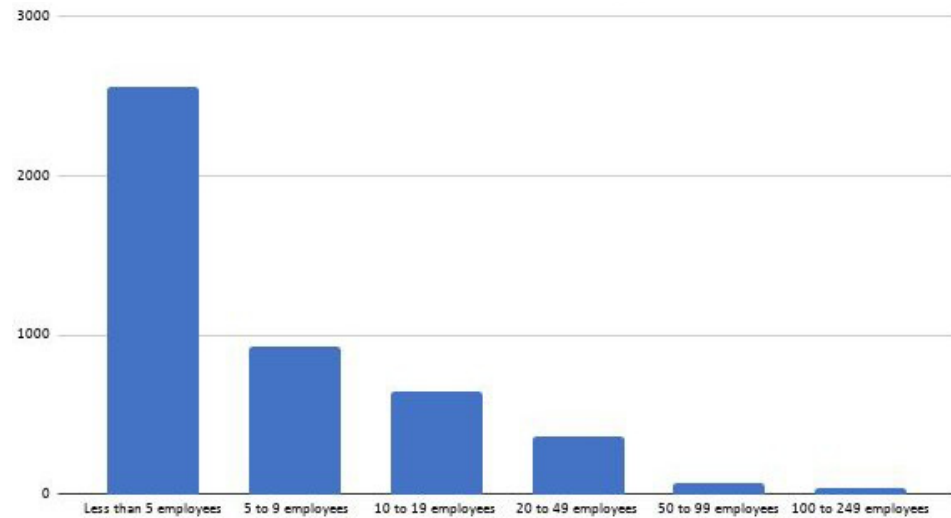
FIRM SIZE

The majority of firms in the USVI have less than 5 employees.

NET BUSINESS BIRTHS AND DEATHS



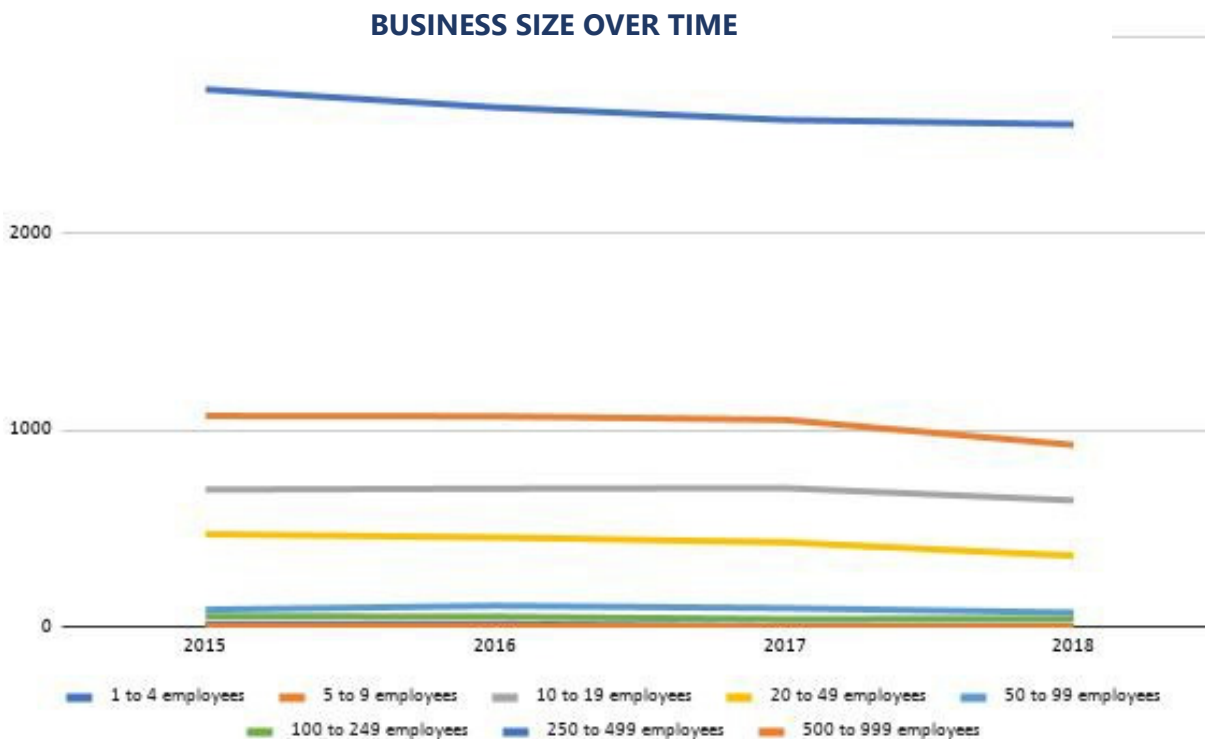
U.S. VIRGIN ISLANDS FIRM SIZES BY NUMBER OF EMPLOYEES



Source: Business Employment Dynamics Data by States, Private sector establishment births and deaths, seasonally adjusted, 1993 - 2019.

BUSINESS SIZE OVER TIME

From the data available, it seems that small businesses are not growing into larger businesses with time. There has been a decline across most firms from 2015 onward, which could be due in part to the effects of the hurricanes in 2017.



Source: Bureau of the Census, Annual Business Survey, 2015 - 2018

IMPACT OF SOLE PROPRIETORS

As can be seen in the table to the right, there are a total of 2,362 establishments in the Territory. C-corporations and other corporate legal forms of organization are the most common, but individual proprietorships are the second most common. Individual proprietorships' annual payroll is nearly \$2 million.

TYPES OF ESTABLISHMENTS AND PAYROLL IN U.S. VIRGIN ISLANDS

Type of Establishment	Number of Establishments	Annual Payroll	Annual Payroll Per Establishment
All Establishments	2,362	\$ 1,015,528,000	\$ 429,944
C-corporations and other corporate legal forms of organization	732	\$ 414,556,000	\$ 566,333
Individual proprietorships	521	\$ 199,837,000	\$ 383,564
S-corporations	488	\$ 161,002,000	\$ 329,922
Partnerships	443	\$ 161,205,000	\$ 363,894

Source: Bureau of the Census, Annual Business Survey, 2018

Support System

ENTREPRENEUR SUPPORT ORGANIZATIONS

According to the Ewing Marion Kauffman Foundation, entrepreneurship support organizations are groups that support, train, and sometimes fund entrepreneurs. They are based in local colleges and universities, government agencies, independent for- and nonprofit organizations, and sometimes in other public-serving institutions such as libraries or healthcare facilities. Their job is to help current or aspiring entrepreneurs move closer to starting or growing a viable business.

The USVI has several groups that provide support to entrepreneurs, with varying degrees of effectiveness. There is a gap in collaboration among these groups, and entrepreneurs could be better served if the different organizations defined their roles and the types of entrepreneur they serve. However, much progress has been made in expanding programs for entrepreneurs in the last decade.

USVIEDA

The United States Virgin Islands Economic Development Administration (USVIEDA) supports entrepreneurs in a number of ways, through programs such as those listed below, and through financing via low interest loans.

EntrepreNow

In July 2016, EntrepreNow was created by the Enterprise Zone Commission (EZC), a division of the

USVI Economic Development Administration, in partnership with the Office of the Territorial Public Defender of the USVI, the USVI Department of Human Services and Youth Arise Inc. The EZC is responsible for the revitalization of distressed neighborhoods that were once vibrant centers of economic activity in the territory. This program was created to address violence and fighting in neighborhoods, and to bring young people together in an inspiring environment.

Since 2016, there have been a total of 42 graduates and the program has expanded from a pilot in St. Thomas to an additional program in St. Croix. Interested candidates fill out an application, and if they are chosen, go through a 6-week program. The program has three components to it: breakfast and lunch daily, goal setting around life issues, and business planning including writing a business plan, working through financials and presenting to a panel.

Made in the USVI

USVIEDA has been involved in promoting small scale manufacturing and artisans in the USVI through an initiative called Made in the USVI. In December 2019 through January 2020 USVIEDA and the Virgin Islands Council on the Arts (VICA) sponsor a Made in the USVI Pop-Up store to provide business opportunities for artists and encourage local residents and visitors to buy local.

Additionally, through a grant from the U.S. Small Business Administration's State Trade Expansion Program (STEP), USVIEDA facilitated a trip for eleven small manufacturing entrepreneurs to attend the NY

NOW Summer 2018 trade show for home and lifestyle products in New York City.

USVIEDA Incubator

The Economic Development Authority houses a Business Incubator Program to support up to 15 entrepreneurs. Aspiring business owners receive an EDA-sponsored home base including computers, telephones, fax machines and rent-free offices to launch their company. The incubator program also offers participants professional consulting services in areas such as accounting and marketing.

Stakeholders involved with entrepreneurship in the territory pointed out that USVIEDA's incubator program lacked a service component, and that there was no formal agreement with other entities to provide services in mentoring, coaching, or business training.

The USVIEDA also supports small businesses with Weekly Small Business Webinars, a Business to Business Event, as well as an Accelerator Program and the USVI Business Hub powered by Startup Space.

University of the Virgin Islands

The University of the Virgin Islands (UVI) is a Land Grant University and a Historically Black University and College. Enrollment is just over 2000, and overall, six-year graduation rate is 32%. UVI has five schools and colleges, six associate programs, thirty-two bachelor programs, eleven graduate programs and four certificate programs.

The University ranked 315th in R&D expenditures of all American institutions in 2017. Federal research money has been invested in the university, including a series of Research Infrastructure Improvement (RII) grants from the National Science Foundation, the latest totaling \$20 million. In 2019, the United States Economic Development Administration (EDA) announced a grant of \$28.6 million for the University of the Virgin Islands to support efforts to diversify and strengthen the resiliency of the economy by helping to grow the medical sector, primarily by investing in the medical school project and the medical simulation center.

Research monies have not resulted in university-led spinoff companies; no evidence of patents being filed through the university were found, and discussion with professors indicated that this was not a primary function of their work. Interviewees indicated that there had been discussion of working with UVI to apply for the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs but there was ultimately no movement.

School of Business

The University of the Virgin Islands School of Business has, in recent years, focused on entrepreneurship through a series of events and by establishing spaces for entrepreneurs to gather and brainstorm. These efforts are led by Dr. Tim Faley and supported by the University of the Virgin Islands (UVI).

Innovation Centers

Innovation Centers were launched in January 2016 to encourage a place for students to meet and discuss ideas; they have equipment to help students collaborate and create prototypes including computers, a 3D imaging camera, and white boards. Innovation centers have been established at the St. Thomas Campus and on the Albert A. Sheen campus on St. Croix.

13D Entrepreneurship Competition

The 13D Entrepreneurship Competition is a marquee program of innovation and entrepreneurship initiatives at UVI. The competition is open to any student enrolled in the university in any capacity, from full to part time. Contestants pitch potentially profitable business plans that lack the funds necessary to launch. Through a series of workshops and feedback sessions, the program operationalizes these business concepts. The competition culminates in the distribution of \$60,000 in business seed money to the three winning teams: \$30,000 to the first-place team, \$20,000 to the second-place team and \$10,000 to the third-place team. The program is funded in the form of a \$5 million grant from Kiril Sokoloff, the founder of the Research and Technology Park company, 13D Research (USVI) LLC.

The program has been running for 5 years, and UVI estimates that nearly 80% of businesses funded through the program are still in operation.

HackFest

HackFest 2015 and 2016 were weekend-long events in which students worked together to find technology-based solutions to real-world problems, mostly in the form of website development or mobile phone apps. The goal of the program is to promote a culture of creative problem solving among young people in the territory. Cash prizes totaling \$900 were awarded for the best hack, the most innovative hack, the most impactful hack and the most sustainability focused hack.

Health Design Slam

The Slam brings together students from across both UVI campuses to conceptualize, design, build, demo and test health-promoting digital apps, devices, and games that address critical and well-articulated problems in healthcare delivery or public/population health and wellness. Teams can win both cash prizes and a chance to compete in a national challenge.

Business Design Grant Program

The Business Design Grants are designed to guide entrepreneurs through the qualitative steps to a completely designed business, including fleshing out a business concept, interviewing potential customers to determine a firm's value proposition to them, developing a supply chain for the firm, articulating the revenue model, and assessing the feasibility of the proposed firm. Teams that successfully complete the deliverables of the Business Design Grant Program earn the grant.

RTPark

RTPark was established in 2002 and secured its first client in 2006. It was created through a vision of leaders at the University of the Virgin Islands (UVI), working closely with members of the legislature and the private sector. Their aim was to create a platform for diversifying the USVI economy and for stimulating growth and development of the islands. The RTPark program headquarters is located on the island of St Croix.

The program has enjoyed a period of rapid growth, almost doubling in size since 2015. In 2014 the number of clients was 27, accelerating to 52 at the end of January 2018. As of January 2021, there were sixty-nine (69) active or in process clients in the program, with operations representing all three islands. Of the 69 firms affiliated with the RTPark, 65 are not started by residents born and raised in the USVI. None of the companies are women-owned, and three entrepreneurs are non-Caucasian.

Nearly all RTP companies are mirror operations of U.S. mainland firms, existing business owners prior to starting up new or expanding their business to the Territory. In the past several years, 30 new entrepreneurs have been added to the RTPark portfolio.

The Park, headquartered on St. Croix, has been operating more as a virtual park since recently reopening after extensive hurricane damage. It can accommodate space for one or two firms. The proposed Tech Village would have 12,000 square feet of space which will allow for some companies

(entrepreneurs and researchers.) The RTPark is independent of the University of the Virgin Islands.

The RTPark aims to attract and grow businesses in the fields of financial technology, health and medicine, energy research and system development, business process outsourcing, and others. It does this through offering tax incentives and services for businesses. Companies have a five-year term for support.

One service that is offered is ACCELERATE VI, a structured three-month pre-accelerator program designed to help early-stage companies grow and scale their businesses in the U.S. Virgin Islands. The program accepts two classes of startups each year. In 2019, the program accepted seven startups, and in 2020, it accepted another seven. The goal of the program is for companies to grow and become formal RTPark clients supporting long term economic development.

The pre-accelerator program offers a community of like-minded entrepreneurs, access to capital, mentorship and advisory services, specialized entrepreneurship curriculum, perks and partnership credits, technical assistance, access to national and international markets, and grant funding to fuel growth. Startups must meet the following standards, but they do not have to be based in the USVI:

- are registered or willing to be registered to do business in the U.S. Virgin Islands
- have a working Minimum Viable Product (MVP)

- have the ability to scale into national / global markets
- have not generated more than \$500,000 in annual revenue
- have received less than \$2,000,000 in total investment (e.g., equity, convertible notes, government grants, academic grants)
- agree to a Code of Conduct and Attendance Policy

The leader of the RTPark is interested in diversifying offerings through real estate acquisitions and developing lending programs to help bridge the gap that exists due to low engagement of commercial lenders in the marketplace.

Virgin Islands Small Business Development Center (VISBDC)

The Virgin Islands SBDC's mission is to grow the Virgin Island's economy by providing the tools, training and guidance that help the Territory's small businesses succeed. They offer workshops, tools, and advising. The SBDC has locations on all three islands and a staff of eight. The VI SBDC is one of only two Lead Centers in the United States within the America's Small Business Development Centers Program that is hosted by a Historically Black College and University (HBCU).

Since the advent of Covid-19, the SBDC has hosted 2-3 virtual events per week, and has continued to provide coaching to small businesses, including a four-part series on how to use Quickbooks.

A new leader of the organization hopes to raise the profile of the SBDC, expand community

engagement, increase collaboration with local partners, and establish a strategic plan for the organization. He noted that entrepreneurs often are sent to him from the USVIEDA, an indicator that they had not heard of the SBDC before approaching USVIEDA. He also notes there is an opportunity to work with UVI’s School of Business to support business owners and entrepreneurs graduating from their programs.

FINANCING FOR SMALL BUSINESS

Other plans have addressed challenges with financing entrepreneurs in the U.S. Virgin Islands. A 2018 report from the USVI Hurricane Recovery and Resilience Task Force, prepared by Bloomberg Associates, explains the financing difficulties, especially in light of recent hurricanes.

“Following storms, businesses’ capital needs are particularly urgent—but there currently are no microlenders, community development banks, rural lending intermediaries, or similar institutions serving the USVI. This especially affects financing available for start-ups, new entrepreneurs, and businesses seeking small loans of \$10,000-30,000.

The Governor’s Office will work with federal agencies in the Economic Recovery Support Function to identify policy measures that may assist USVI businesses with securing capital, credit, insurance, bonding, and related financial capacity to meet the needs of the recovery economy. Any measures taken would be coupled with steps to promote financial literacy among prospective borrowers.”

Since the time of writing this report, there does not seem to have been any new entrepreneur-friendly financing organizations established.

USVIEDA

USVIEDA has some products that address financing gaps, including Post-Disaster Relief Loans and Micro-Credit Loan Program. The USVIEDA programs are categorized lenders of last resort.

- **State Small Business Credit Initiative:** The State Small Business Credit Initiative Program was established by the 2010 Small Business Jobs Act as a means of supporting financing options for small businesses and encouraging financial institutions to do their part in funding more of these ventures. Proceeds of the loan can be used for start-up costs, working capital, franchise fees, business equipment, inventory, construction, renovation, business procurement, tenant improvements and more.

Maximum Enhancement Amounts:

- Collateral Support Program – Up to 50% limited to \$500,000 per borrower
- Credit Guarantee Program – Up to 50% of loan or project cost
- Payment, Performance, Surety Bond Program – Up to 30%

- **Frederiksted Loan Program:** Any businesses located in Frederiksted (St. Croix) that have the potential to generate new business activity in that city will get first priority for receiving loans through this program. Those loans have very reasonable interest rates to help encourage business owners to apply and keep growing their businesses in the local area.
- **Micro-Credit Loan Program:** The territory’s Micro-Credit Loan Program offers secured loans subject to the creditworthiness of the applicant and/or guarantor. These loans can be anywhere from \$5,000 to \$50,000—smaller amounts—with loan terms available for up to five years.
- **Farmers and Fishermen Loan Program:** The Farmers and Fishermen Loan Program gives loans to commercial farmers and fishermen, with all loans being secured by “acceptable” collateral.
- **Intermediary Relending Program:** This program exists for anyone in need of funding for community development projects, or for creating new businesses/expanding on existing ones. The program looks especially kindly on business owners seeking to hire low-income people or to save existing jobs.
- **Economic Development Bank (EDB):** Serves to provide business loans and offer technical and managerial assistance to small and medium-sized local businesses to enhance employment opportunities and

economic growth in the U.S. Virgin Islands. According to the last available report (2017), in fiscal year (FY) 2016, loan payments totaled \$975,816.31. At the close of the FY on September 30, 2017, the EDB collected loan payments totaling \$1,347,688.23. The FY 2017 payments increased by 38 percent, or \$371,871.92, over FY 2016. The increase in payments was due to EDB staff concentrating their efforts on loan restructuring, modifications, and reclassifications which contributed to the significant reduction in the loan delinquency rate in 2017 to 47.0 percent when compared to the rate of 77.0 percent in 2016. The report explains that the EDB staff increased its effort to enforce payment of delinquent loans with the strong support of external legal counsel and collection agencies and, in 2017, realized on real estate collateral and exercised its first priority position over business assets in support of delinquent debt. There is also some suggestion that EDB loan conditions were stricter, as in 2017, loan transactions totaled \$875,000 compared to \$1,625,762 in FY 2016.

Revolving Loan Programs

Oftentimes, in the wake of a natural disaster, economic development organizations will implement a Revolving Loan Fund to provide small businesses credit to repair and recover. It appears the EDB has not had success with federal funding for these programs in the past, as the 2017 Annual

report explains that USVIEDA ended its contract with the U.S. Economic Development Administration in June 2017 concerning the Post-Disaster Relief Revolving Loan Fund which sought to assist small-business owners affected by Tropical Storms Otto and Tomas in 2010.

The report explains that the contract was not consummated until three years after the storms and efforts to identify and qualify businesses proved fruitless. Currently, the organization is offering a Post-Disaster Relief Revolving Loan Fund from a 2013 award for \$2 million from U.S. EDA. The lending limit for this program is \$75,000 and is designed to help businesses affected by 2010 disasters. It is unclear whether this fund is the same as the one referenced in the 2017 report. Nevertheless, the more pressing need is for businesses impacted by the 2017 hurricanes,

Bank Financing

According to interviews with entrepreneur support organization stakeholders, the main banks on the islands are conservative in lending to entrepreneurs and have not embraced federal government - backed programs to increase lending. Materials from USVIEDA list four banks participating in the State Small Business Credit Initiative (SSBCI) Guarantee Program, a financing program of the Small Business Jobs Act of 2010. These banks are Merchants Commercial Bank, First Bank, Bank of Nova Scotia, and Banco Popular de Puerto Rico. Further research shows that Bank of Nova Scotia (Scotia Bank) is currently in the process of downsizing activities in the area.

Two federal government backed programs that banks are guaranteed through are the SSBCI, and the SBA 7(a) guaranteed loan program. The former has a target amount of \$5 million, while loans from the latter program typically range from \$25,000 to \$5 million and are repaid in monthly installments. As of 2017, \$25,411,390 had been loaned through the SSBCI program.

Opinions from stakeholders regarding bank financing are not rosy. Interviewees speculated that local banks did not want to participate in SBA-backed loans for fear of opening their books to regulation. This opinion echoes a theme of suspected corruption throughout governments and institutions. There was also a suggestion that banks did not have the knowledge or capacity to process SBA loans. Another complaint about banks in the territory is that their processes are onerous and outdated. Bank customers are frustrated by processes to withdraw funds or even set up accounts, reporting three-hour appointment times to start banking. Online banking services also are lacking. Furthermore, receiving a loan is difficult even without government involvement, due to a general risk averseness among financial institutions.

Micro-Financing

Microfinance is a term used to describe financial services, such as loans, savings, insurance and fund transfers to entrepreneurs, small businesses and individuals who lack access to traditional banking services. Microfinance has proven to be a helpful way to provide early support to entrepreneurs,

especially very small businesses and sole proprietorships in developing countries or among disadvantaged groups that lack access to other means of financing. In the USVI, USVIEDA offers small loans through the Micro-Credit Loan Program. This program offers a secured loan from \$1,000 to \$50,000. The maximum loan term is 5 years.

According to interviews with stakeholders in the entrepreneurship space, microloans and microfinance are less effective in the Virgin Islands due to the burdensome regulatory requirements which result in small businesses needing to pay nearly \$1,000 in fees in order to start their business, much less invest in it.

OTHER NEEDS AND CHALLENGES

Internet

Internet connectivity is an essential aspect of entrepreneurship, necessary for marketing, communication, and shipping. Strong internet connections facilitate the growth of the professional and technical services sector which includes high paying industries like consulting, software development, and other digital services. In fact, growth in these services accounts for 80 percent of U.S. economic growth.

The USVI is uniquely positioned to benefit from internet connectivity, as it is home to the second largest concentration of bandwidth in the Western Hemisphere. Fiber networks that run on and around the island provide 100 Mbp speed internet and have the potential to kickstart economic growth. Internet connectivity is facilitated by Virgin Islands Next

Generation Network, a public corporation and a wholly owned subsidiary of the Virgin Islands Public Finance Authority. viNGN was primarily funded by grants from the Department of Commerce with a charter to provide wholesale broadband middle mile service to providers and to promote local economic growth, innovation and global competitiveness.

Interviews with stakeholders indicate that the promise of internet connectivity has not yet come to fruition, reporting that internet service is unreliable and expensive. Broadband VI, currently working on final approval from the FCC, is intended to fix this problem. Unreliability for digital connection is increased by power outages in the WAPA system. Furthermore, costs of electricity preclude large scale investments in computer and internet businesses.

Culture

There is a culture of skirting regulation - which goes hand in hand with reports of burdensome regulations especially for small businesses. Research and stakeholders report a relatively high level of informal, non-registered businesses, especially in automotive, construction, and service industries. According to stakeholders, many small businesses operate in a cash economy.

Additionally, interviewees report that many legitimate businesses do not pay the full amount of taxes owed. This is due to the feeling among many small businesses that taxes and other costs of doing business are very high and they would not survive if they paid the full amount. Furthermore, there is a lack of coordination between businesses and taxing agencies; one interviewee shared the story of a

retailer who was renewing his license and was denied because records showed that he had not paid taxes. He had to produce his own records to show that he had paid taxes.

Interviewees indicated that the business and organizational culture in the USVI tended toward individualism. There is little interest in partnering, which leads to hampering business growth. This trend is reflected in the number of very small businesses and sole proprietorships shown in data above. Additionally, several of those interviewed cited the "Wrongful Discharge Act" as an example of policy that discourages small business formation. This policy makes it difficult to fire an employee once companies grow beyond five employees. For companies under five employees, their employees work "at will." They can be fired or quit to move to another business at any time. For companies five employees and over, after a short trial period, it is very difficult to fire an employee. Interviewees suggest that this is another reason for companies to skirt regulation and have cash only employees.

There is a lack of collaboration between organizations as well. For example, USVIEDA entrepreneurship programs could be strengthened by increased collaboration with UVI and the SBDC, but there is not currently a framework for sharing resources. RTPark has an agreement with the university to have students work in the companies they attract, but there is a lack of specialized training that would facilitate a strong workforce in RTPark's key sectors. For example, one of these sectors is Financial Technology, but there is no corresponding program at the university to train these workers.

RTPark also encourages companies that are recruited to provide funding to the university, but this engagement is not strategic - one interviewee suggested that a one-time donation from a company was not enough to sustain even one professor.

Interviewees also noted a lack of knowledge and capacity among potential entrepreneurs. There is a skills gap in the population, exacerbated by an exodus of high achieving individuals, who are easily able to move to the United States mainland. Lack of knowledge was most concerning regarding management of companies and abilities to collaborate and scale. Furthermore, data services which can inform aspiring entrepreneurs of industry trends are not applicable in the Territory - data services like IBISWorld do not cover this geography, and data from the federal government is incomplete.

Regulatory Barriers

Every businessperson interviewed for this project named burdensome regulations as a large barrier to starting a business. As one person explained, "difficulty in starting a business is 60 percent regulatory, and 40 percent everything else." Going through the process of obtaining a business license is a multi-step process that can take up to three months and cost up to \$1000. Compared to other jurisdictions, in which businesses licenses can be obtained online in a few days, this is a large hurdle. The steps for obtaining include a background check, a fire inspection, a business address, and potentially other materials (i.e., licenses etc). To interviewees,

these seemed redundant - for example, if a building is up to code, why would a fire inspection be necessary?

The cost of doing business is also expensive. Rent can be \$30 per square foot, and most landlords require first and last month's rent in advance. Insurance is expensive primarily due to the cost of the hurricane or windstorm coverage. Electricity and internet are also expenses that burden small businesses.

The overall opportunity for entrepreneurship and innovation in the Virgin Islands are in professional and business services, if the physical and workforce infrastructure can support it. Additional investment in internet and power generation is needed to sustain connectivity and investment.

Growing the entrepreneurial ecosystem will require closer alignment of professional and technical services from multiple entities including UVI, RTPark, the SBDC and USVIEDA. The example of this would be for the RTPark to be supported with a concentrated attraction campaign for companies in the financial services and technology industry (also known as "FinTech"), as well as attracting or enhancing financing options for this industry among local banks. On the UVI side, it would include increased research dollars and faculty focused on this issue and pivoting or beginning startup programs in the industry. USVIEDA could be the convenor of a task force on the topic and offer financing specifically for financial technology firms. SBDC could be recruited to support and mentor these companies. Funding for a FinTech startup

culture could be leveraged through the federal government, banks, and foundations.

Export Opportunities

When businesses sell products to customers outside of their local communities, additional capital is brought to the local economy, rather than just circulating money among local businesses. Professional and technical services is a weak but growing cluster that has the potential to be an export sector, with companies abroad hiring firms in the USVI to complete projects. Tourism is an export sector, and there are multiple opportunities to increase different types of tourism in the USVI beyond the cruise tourism industry that existed pre-Covid. Another export sector for the USVI includes manufacturing.

Growing the entrepreneurial ecosystem will require closer alignment of professional and technical services from multiple entities including UVI, RTPark, the SBDC and USVIEDA.

Regional Comparison: Entrepreneurship in the Caribbean

Within the Caribbean region, the USVI and Puerto Rico are unique in that they are territories of the United States, which provides some advantages and some disadvantages. Regarding entrepreneurship, disadvantages seem to be that successful or innovative programs by worldwide groups such as the World Bank do not engage the USVI. Furthermore, the USVI is not integrated into the larger regional organizations representing the Caribbean's economic interests. As such, the territory is missing out on key resources for economic development.

ENTREPRENEURSHIP PROGRAMS

Entrepreneurship programs in the Caribbean have seen a boost from international groups such as the World Bank and the Inter-American Development Bank. The USVI is not engaged in either of the two programs profiled.

Entrepreneurship Program for Innovation in the Caribbean

One key initiative of the World Bank over the last decade has been the Entrepreneurship Program for Innovation in the Caribbean (EPIC.) This seven-year program was started in 2011 and is headed by the World Bank's infoDev group. It is funded at CAD\$20M by the Government of Canada which seeks to build an enabling ecosystem to foster high growth and sustainable enterprises throughout the Caribbean. The program had three core activity pillars: digital innovation, climate technology, and

women-led entrepreneurship, and also offered access to finance and skills upgrading and capacity development for all ecosystem stakeholders including entrepreneurs, business enablers, policy makers, universities, seed and early stage investors, and other private sector partners.

The EPIC program covers all CARICOM countries except Haiti: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, Saint Lucia, Saint Kitts and Nevis, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago. The Caribbean Community (CARICOM) is an organization of fifteen states and dependencies throughout the Caribbean having primary objectives to promote economic integration and cooperation among its members, to ensure that the benefits of integration are equitably shared, and to coordinate foreign policy.

Another aspect of infoDev's programming is the Climate Technology Program (CTP) focused on the growing opportunities of the clean technology sector in developing countries. The Caribbean Climate Innovation Center (CCIC) was launched in 2013 and is jointly managed by two leading scientific institutions in the Caribbean, the Scientific Research Council (SRC) based in Kingston, Jamaica and the Caribbean Industrial Research Institute (CARIRI) located in Trinidad and Tobago.

CCIC offers programming in the form of short bootcamps, an accelerator, and an incubator. They also offer a mentoring program. The World Bank publication, *Lessons Learned: Seeding Climate Opportunities for Entrepreneurs in Nascent*

Ecosystems, shares some findings from the work of the CCIC, which can be applied to starting a clean energy cluster in the USVI.

Strengthening Entrepreneurship and Innovation Ecosystems in the OECS

In June of 2020, the Organisation of Eastern Caribbean States Commission (OECS Commission), with the support of Compete Caribbean, hosted a kick-off meeting for a project that seeks to strengthen the entrepreneurship and innovation ecosystems in the OECS.

The project will be implemented by the OECS Commission, with support from the Compete Caribbean Partnership Facility, funded by the Inter-American Development Bank (IDB). The initiative seeks to strengthen the ecosystem for entrepreneurship and innovation in the OECS member states of, Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines.

According to the website for the project, the implementation phase will be comprised of three components, the first of which will be the development of a Hybrid Business Incubator and secondly the development of a regional Hybrid Accelerator Programme for high-potential firms. Component three of the project will focus on increasing access to digital financial services to SMEs in the OECS.

Financing in the Caribbean

Two financing organizations to connect angel investors with fledgling entrepreneurs have grown

from the World Bank and infoDev's involvement in entrepreneurship in the region. LINK Caribbean awarded early-stage startup funding, and First Angels JA is an angel investing group. LINK Caribbean was designed as a two-year joint program between the World Bank and the Caribbean Export Development Agency, and was funded with \$1.6 million USD. Fourteen companies are included in their online portfolio. The website also has significant resources, including webinars, presentations, and financing information that is specific to the products offered by LINK.²⁶ LINK does not seem to be operating as a funding agency currently.

First Angels JA is an active angel investor network based in Jamaica. According to their website, the network has 30 angel investors who have made 16 investments. The group is focused on potential investments in digital applications, digital media, the creative industries and other innovative businesses. Throughout the pandemic, FAJ has been holding Virtual Founders Meetups on topics such as using Google to optimize searches, and managing people and culture.

Regional Caribbean Organizations

Due in part to the status of the USVI as a territory of the United States, engagement with regional Caribbean groups has been limited. Working with these groups could open the door to more collaboration within the Caribbean, such as participation in the entrepreneurship programs listed above; furthermore, increased collaboration

could lead to further exposure and investment from international markets beyond the U.S.

International Groups

CARICOM or Caribbean Community - Caribbean Community (CARICOM or CC) is an organization of fifteen states and dependencies throughout the Caribbean having primary objectives to promote economic integration and cooperation among its members, to ensure that the benefits of integration are equitably shared, and to coordinate foreign policy.

Caribbean Forum (CARIFORUM) - a subgroup of the Organisation of African, Caribbean and Pacific States serves as a base for economic dialogue with the European Union. It was established in 1992 and serves its 15-member states; Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Dominican Republic, Haiti, Grenada, Guyana, Jamaica, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

Caribbean Export - Established in 1996 by an Inter-Governmental Agreement as the regional trade and investment promotion agency, serves the 15 States of the Caribbean Forum (CARIFORUM).

Organisation of Eastern Caribbean States (OECS) is an international inter-governmental organization dedicated to regional integration in the Eastern Caribbean. The goal of this organization is creating a single financial and economic space where goods, people and capital move freely, and allowing alignment of monetary and governmental policies

relating to taxes and revenue. The countries of this economic union adopt a common approach to trade, health, education and the environment, as well as the development of critical sectors such as agriculture, tourism and energy.

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Targeted Industries

Targeted industries were selected based on their potential to contribute to economic diversification through growth and job creation in the U.S. Virgin Islands.

 <h3>Agribusiness</h3> <ul style="list-style-type: none"> • Aquaponics, aquaculture, hemp farming • Specialty foods, farm-to-table 	 <h3>Professional/Tech Services</h3> <ul style="list-style-type: none"> • Financial, IT, customer service centers/back office • Remote work, consulting, diaspora co-ventures
 <h3>Coastal/Ocean Resources</h3> <ul style="list-style-type: none"> • Marine/maritime, biology, sustainable harvesting • Medicinal, nutritional, alternative energy 	 <h3>Renewable Energy</h3> <ul style="list-style-type: none"> • Solar, wind, tidal, wave, biomass, waste • New sustainable technologies
 <h3>Health Sciences</h3> <ul style="list-style-type: none"> • Telemedicine, medical simulation • Specialty care and education 	 <h3>Research & Development</h3> <ul style="list-style-type: none"> • Agri-tech, ocean, climate change • Healthcare, academic partnerships
 <h3>Light Manufacturing</h3> <ul style="list-style-type: none"> • Regional foods, co-manufacturing • Resilient building materials 	 <h3>VI-Style Tourism</h3> <ul style="list-style-type: none"> • Heritage, culture, sports, adventure, wellness • Small conferences, casual-elegant lodging, dining

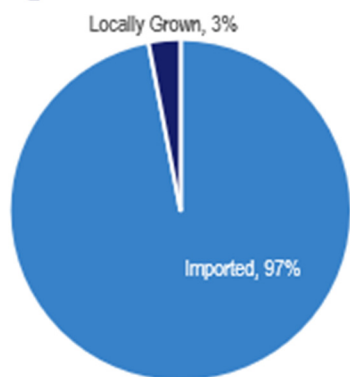
 "Blue Economy" Sector

 Services Technology Energy Agriculture Manufacturing

AGRIBUSINESS

Currently, the U.S. Virgin Islands import over 97% of their food, leaving the islands vulnerable to shocks in global food systems.¹² Agriculture in the U.S. Virgin Islands should be developed to both mitigate food security issues and to be a critical component of the future of the U.S. Virgin Islands Tourism industry with new farm to table establishments, authentic visitor lodging experiences, and unique value-added food products.

US Virgin Islands Food Sourcing



Source: *Hakai Magazine*

Historically, agriculture in the U.S. Virgin Islands has faced its share of challenges. Once one of the top-producing sugar cane nations in the world, farms are now much smaller than they previously were; farms with less than 10 acres of land make up nearly three quarters of all farms in the Territory.¹³ Available land for agriculture is limited, and government or private



UVI Commercial Aquaponic System

land ownership often makes farmland use costly for tenant farmers. Furthermore, antiquated and costly island infrastructure have presented challenges to farmers looking to make advancements in agricultural technology. Processes like cold storage for example are cost prohibitive due to the territory's expensive electric rates. Limited water and poor soil have further compounded the challenges faced by the U.S. Virgin Islands' farmers.¹⁴

Despite these challenges, farmers in the U.S. Virgin Islands have continued to press forward and have begun exploring sustainable agriculture practices such as the use of solar panels and cover crops.

Coupled with the Territory's need to reduce import dependency, this has paved the way for the U.S. Virgin Islands to be a leader in technology-based agriculture in the Caribbean.

Given the U.S. Virgin Islands' location, aquaponics and aquaculture are natural fits for the future of the territory's agriculture industry and food security. Both aquaculture, or the farming of fish, and aquaponics, which combines aquaculture with growing plants in water, build upon the region's existing natural assets and remediate some of

¹² Guo, Eileen. *Feeding the Virgins*. *Hakai Magazine*, 17 July 2017.

¹³ USDA 2018 Census of Agriculture

¹⁴ *Agriculture in the U.S. Virgin Islands Challenging, but Prevailing with Sustainable Agriculture Practices*.

Sustainable Agriculture Research and Education, 26 June 2018.

agriculture's existing challenges (such as soil quality).

Although aquaponics and aquaculture are a natural fit for the region, the U.S. Virgin Islands has only just begun to tap into the vast aquaponics and aquaculture opportunities that exist, indicating that there is much untapped opportunity for growth. In 2020 ground broke on the St. Croix (STX) Aquaponics Center, which will be an agribusiness center for aquaponic farming. The University of the Virgin Islands also developed a commercial-scale aquaponic system for tilapia. In accelerating these trends, agribusiness has the potential to reduce the U.S. Virgin Islands' dependency on agricultural imports.

Growth in local food systems will support demand from grocery stores, restaurants, and hotels. This connection will create additional opportunities for niche local products, including crops like dragon fruit (pitaya) and value-added products such as coconut oil, hot sauces, and soaps.¹⁵

Agriculture in the U.S. Virgin Islands should be developed to both mitigate food security issues and to be a critical component of the future of the U.S. Virgin Islands Tourism industry with new farm to table establishments, authentic visitor lodging experiences, and unique value-added food products.



University of the Virgin Islands has a stellar marine biology program with a respected reputation.

BLUE ECONOMY

According to the World Bank, the "blue economy" is the sustainable use of ocean resources for economic growth, improved livelihood and jobs, and ocean ecosystem health. Globally, the blue economy encompasses many activities including:

- **Renewable energy;**
- **Tourism;**
- **Climate change;**
- **Fisheries;**
- **Waste management; and**
- **Maritime transport.**

These industries are spread amongst many traditional industry classifications developed for land-based economies. If these industries were segregated, their impact to the island economy of the Territory might be conservatively estimated to account for nearly one-third of the total economic output of the U.S. Virgin Islands. The blue economy is uniquely vital to the Territory not only because of its location in the Caribbean, but because businesses in this industry support nine times more jobs in the U.S. Virgin Islands than in the mainland United States.¹⁶

By 2040, these industries and related emerging jobs will be at the global forefront of a booming blue

¹⁵ (Sustainable Agriculture Research and Education, 2018).

¹⁶ *A Snapshot of Sustainability in the USVI*. RTPark, 5 Aug. 2020.

economy. For the USVI, they could account for the largest share of GDP, replacing government and redefining tourism as the most significant contributors to economic growth. Currently blue economy industries include boat building and repair, fisheries, shipping, ports, marine biology and conservation, dredging, transport, and related businesses.

The United Nations and World Bank expect enormous global growth in emerging industries, “such as offshore renewable energy, aquaculture, seabed extractive activities, and marine biotechnology and bioprospecting.” They add that “...a number of services provided by ocean ecosystems, and for which markets do not exist, also contribute significantly to economic and other human activity such as carbon sequestration, coastal protection, waste disposal [water management] and the existence of biodiversity.”

Over the last several years the University of the Virgin Islands (UVI) has expanded the scope of its coastal/ocean resource research through its Center for Marine and Environmental Studies. The VI-EPSCoR program, funded through a 5-year \$20-million grant, for example, supported the expansion of its coral reef research program and the integration of oceanography, watershed dynamics, and climate change into this research. Grants from other sources such as the USGS, NOAA, and EPA

¹⁷ Artiga, Samantha, et al. *Health Care in Puerto Rico and the U.S. Virgin Islands: A Six-Month Check-Up After the Storms*. KFF, 24 April 2018.

have helped the institution attract researchers from around the world to the Territory and publish 20-25 papers per year.

Continuing to grow the industry will require promotion of this work so that the U.S. Virgin Islands is recognized as a leader in ocean-based research. This is necessary to attract additional resources, including funding and workforce, to the Territory. To give credence to the research that is being undertaken, these efforts should be complemented by the establishment of a sustainable blue economy.

HEALTH SCIENCES

Currently, health care represents 8% of all U.S. Virgin Island jobs and 7% of GDP. Within the U.S. Virgin Islands, there are two hospitals, Schneider Regional Medical Center on St. Thomas and the Governor Juan F. Luis Hospital and Medical Center on St. Croix. Additionally, there are two Federally Qualified Health Centers (the St. Thomas East End Medical Center Corporation on St. Thomas and the Frederiksted Health Center on St. Croix). The Schneider Regional Medical System operates the Myrah Keating Smith Community Health Center on St. John, and there is also a network of private providers, although the territory faces difficulties attracting and retaining providers.¹⁷ While there is



generally a good availability of regular medical, dental and pharmacy services in the Virgin Islands, a shortage or lack of specialty medical care does require resident travel outside of the Territory for treatment. A focus on building up the health sciences industry and expertise will benefit the Territory not only economically, but also in terms of quality of life for residents.

The overall health of residents and healthcare options in the Territory compares poorly to that of most Americans living on the mainland and research has begun to understand and address these challenges. In response to an application submitted by the Division of Nursing at the University of the Virgin Islands, in 2004 the National Institutes of Health, National Center on Minority Health and Health Disparities (NIH/NCMHD) awarded a three-year grant to establish “The Caribbean EXPORT Center for Research and Education in Health Disparities.” The Export Center provided support for UVI faculty to develop the capacity and infrastructure to begin to investigate and address health issues and disparities in the U.S. Virgin Islands. Later, in October 2007, a five-year NCMHD grant was awarded to establish the “Caribbean Exploratory Research Center” and continue and expand this work.¹⁸

As a result of this research, barriers to good healthcare were found to include insufficient

training for health professionals, lack of enforcement of rules protecting confidentiality, confusion about where to go to receive specific health services, and concerns about the limitations of services provided by the Department of Health. Fiscally, the provision of healthcare is a challenge for the Territory. Unlike the U.S. mainland, federal Medicaid funds are capped for the U.S. Virgin Islands, and they have a fixed federal Medicaid match rate that is lower than the rate they would receive if they were states.

The 2017 hurricanes exacerbated pre-existing fiscal and health challenges in the U.S. Virgin Islands. Additionally, the storms accelerated migration trends, particularly among young professionals and health care providers. Additionally, with the economic hardships that have been caused by the hurricanes, and more recently Covid-19, the territory’s uninsured populations have grown due to increases in unemployment, which is in turn putting a financial strain on hospitals and clinics.

Outside of these local challenges, the healthcare industry is undergoing a digital transformation. Technology advancements, including data driven patient care and telehealth care delivery are requiring today’s healthcare providers to possess skillsets beyond that of traditional medicine.

The fast pace of transformation represents an opportunity for the U.S. Virgin Islands to build on

previous efforts, including those by UVI, to transform the Territory’s health system. More opportunities in health science occupations, along with improvements to the healthcare system, will help retain and attract residents. The existing Healthier Horizons initiative and forthcoming U.S. Virgin Islands Territorial Health Plan will provide the foundation for new investment in this sector. As the health sciences sector continues to advance technologically, there are opportunities for the U.S. Virgin Islands to undertake research and development in, and become a center of excellence for, telemedicine, medical simulation, and specialty care and education.

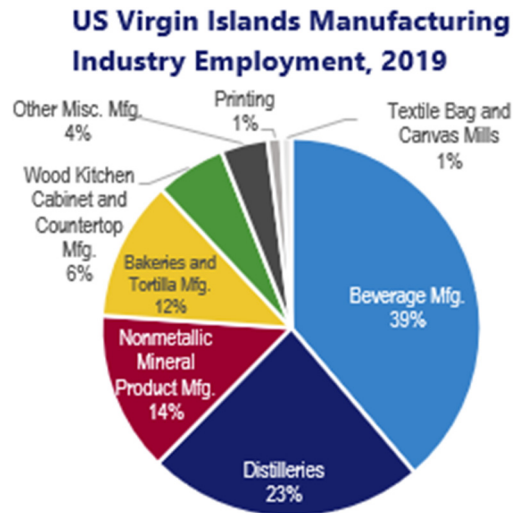
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¹⁸ Callwood, Gloria B. et al. *Health and Health Care in the U.S. Virgin Islands: Challenges and Perceptions*. The ABNF Journal: Official Journal of the Association of

Black Nursing Faculty in Higher Education, Inc. 2012; 23(1):4-7.

LIGHT MANUFACTURING

Manufacturing currently accounts for 1.5% of U.S. Virgin Island jobs. Today, manufacturing in the U.S. Virgin Islands is dominated by rum production, which accounted for 41% of total exports in 2018.



Source: US Virgin Islands Department of Labor Quarterly Census of Employment and Wages

The need to diversify the U.S. Virgin Island's economy, and in particular the manufacturing sector, was made clear by the closure of the Hovensa refinery, which resulted in a loss of over 2,000 jobs. The most promising opportunities for manufacturing diversification exist in the manufacturing of regional foods and resilient building materials.



Beverage manufacturing in the U.S. Virgin Islands

Regional Foods

Building upon the agri-business targeted industry sector, there are small-scale opportunities in food processing that will allow locally sourced food products to be consumed within the territory or exported regionally throughout the Caribbean. In addition to reducing the territory's dependence on food imports, such manufacturing can capitalize on the locally grown food movement in which global consumers perceive locally grown, produced, and sourced foods to be of higher quality and desirability. The benefits associated with buying locally sourced products include:

- Fresher products
- Supports local business and farms
- Creates jobs
- Strengthens the community
- Safer to the consumer due to fewer touch points and contamination risks
- Improves overall food safety
- Healthier products for consumers
- Better for the environment due to reduced transportation.

Locally-sourced food products are also appealing to tourists who seek out authentic experiences during their visits. Food is a large component of this authenticity, and locally sourced food products help tourists feel that they are truly immersed in the vibrant local culture.

Resilient Building Materials.

Another emerging manufacturing opportunity that is also related to agriculture is the production of hemp based resilient building materials. Hempcrete blocks and hempwood are increasing in popularity as building materials.

Hemp shives (the woody hurds of the inner hemp stem) are strong enough that they can be used in building. Hemp grows quickly—it is ready for harvest in 4-6 months—and may be a sustainable crop and building material option. While growing, hemp roots grow densely so that weeds aren't a problem, and hemp adds to the vegetation and thus increases the absorption of carbon in the Territory.

The U.S. Virgin Islands is an opportune location to manufacture these building materials given the potential demands that will arise within the Territory as well as from nearby islands in the wake of hurricanes or other natural disasters.

Hempcrete is an infill material made from hemp hurds mixed with a lime-based binder and water. Hempcrete is less dense than concrete and a good insulator for both heat and noise.

PROFESSIONAL/TECHNICAL SERVICES

Currently, the professional/technical services sector represents 3% of all U.S. Virgin Islands jobs. Professional/technical services is a broad targeted industry sector that encompasses financial organizations, IT, customer service and back office centers, remote work, independent consultants, and diaspora co-ventures.

US Virgin Islands Professional/Technical Services Industry Employment, 2019



Source: US Virgin Islands Department of Labor Quarterly Census of Employment and Wages

As of 2019, there were just over 1,400 professional/technical services jobs in the U.S. Virgin Islands. Half of these jobs were in St. Thomas, 46% were in St. Croix, and the remainder were in St. John.

The industry is growing; since 2014, nearly 300 jobs have been added to this industry, an increase of 25% for the U.S. Virgin Islands. In total, there are 382 professional/technical services establishments in the Virgin Islands. Total wages in this industry equal over \$31.1 million.



The breadth of this sector means that expansion across each of these areas will create new job opportunities that will in turn help to retain residents and attract more professionals to the U.S. Virgin Islands. Some opportunities within this sector, such as remote work, independent consultants, and some financial organizations are targeted towards individuals who have the ability to work from anywhere. Others, such as targeted customer service and back office centers and IT will require small offices to house operations.

A 2014 competitive industry study prepared for the U.S. Virgin Islands by TIP Strategies found that being a U.S. territory with an English-speaking population works in the USVI's favor for attracting business process outsourcing. Roles in this sector represent opportunities for unemployed or underemployed residents of the territory. Given labor market and office space constraints, the biggest opportunity is for the USVI to attract small to medium-size companies. Development of this sector will be curtailed without reliable electric and broadband services

RENEWABLE ENERGY

Renewable energy is generally considered to be carbon neutral, non-fossil fuel, useful "natural" energy that comes from replenishable sources such as sunlight, wind, waves, tides, rivers, and geothermal sources. U.S. investment in renewable energy is strong and growing. From 2004 to 2019



Solar installation in the U.S. Virgin Islands

the value of annual U.S. investments in renewable energy increased from \$6.0 billion to \$59.0 billion. The Biden administration has also signaled that energy policy will be part of its agenda.

Given these trends and the U.S. Virgin Islands' numerous natural assets, there is significant economic potential for the Territory in the renewable energy space. Historically, most electricity generation in the Territory was powered by imported petroleum. Fuel surcharges have typically

resulted in U.S. Virgin Islands electricity rates up to five times higher than the average price for electricity in the mainland U.S.¹⁹

In terms of renewable energy, about 20% of the territory's electricity generation capacity comes from renewables. The local government has worked with federal agencies and local industries to begin to develop the island's renewable energy potential, including solar, wind, and biomass technologies.

¹⁹ *US Virgin Islands Territory Energy Profile*. U.S. Energy Information Administration, 15 Oct. 2020.

There is strong solar power potential on all of the territory's islands, and more than 8 megawatts of

large-scale solar power generating capacity have been installed. Additionally, some commercial and wind energy potential has been identified on the high ridges and exposed capes of the islands.²⁰

This targeted industry builds upon these and other efforts that are already underway in the islands. WAPA's Strategic Transformation Plan issued in June 2020, for example, includes the planned increase in use of solar and wind to replace oil and propane generation, with the future goal of 50% electric energy from renewable sources. WAPA is also considering a 10-megawatt wind energy farm on St. Thomas, which would be the first large-scale wind project in the Territory.²¹

The benefit of a transition to renewable energy is two-fold. First, there are immediate improvements to the territory's quality of place and life. Renewables are a primary ingredient in WAPA's plans to reduce its reliance on costly fuel oil and propane, thereby reducing residential energy costs. Similarly, by reducing these costs, businesses will benefit from a lower cost of doing business and the territory's cost competitiveness for attracting new businesses will be improved.

Second, renewable energy presents an opportunity as a business development target. In the past, development of a world-wide and world-class

location for research and development and production in a variety of renewable energy industries was considered for St. Croix. This included solar energy, solar heating, solar powered equipment and items, desalination technologies, waste-to-energy technologies, and other related products and services.²² Many of these opportunities still exist and are applicable not just to St. Croix, but to the entire Territory. In addition to these, new opportunities continue to emerge, including floating solar, wave generation, geothermal, biomass/biofuels, fuel cells, small-scale waste-to-energy facilities, methane recapture, electric charging, and microgrids and related equipment. Business development opportunities for the U.S. Virgin Islands in these areas include research and development, prototyping, and full-fledged production.

Renewable and Alternative Energy is a strong target for the USVI, which is blessed with many of the "raw materials" necessary for research and development, production and deployment across a wide range of applications. With the right preparation work, programs and services, and marketing, the USVI can become and be recognized as a highly desirable, world-class location for research and development and production in Renewable and Alternative Energy and benefit from the deployment of these technologies to modernize its electric power

infrastructure, reduce its electric costs and improve the reliability of its electric system.

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²⁰ (U.S. Energy Information Administration, 2020).

²¹ (U.S. Energy Information Administration, 2020).

²² *St. Croix Economic Development Action Agenda*. Triad Associates, Nov. 2001.



Historic sites are an important component of a “VI-Style” tourism approach.

VI-STYLE TOURISM

Historically, tourism has been a critical driver of the territory’s economy. Recent disruptions, including the 2017 hurricanes and the Covid-19 pandemic have highlighted the need to adapt and strengthen this industry, concurrent with efforts for economic diversification.

Tourism as a targeted industry sector is focused on promoting the unique heritage and culture of the U.S. Virgin Islands, along with Virgin Islands specific experiences and adventures. Tourism is already an established sector and economic driver for the Virgin Islands. In 2018 over 1.9 million people visited the Virgin Islands, spending over \$1.0 billion. Of this,

day-visit excursionists (both cruise ship and air excursionists) represented 80% of visitation but only 37% of expenditures. Longer-stay tourists on the other hand accounted for 20% of visitors and 63% of expenditures.²³

To further bolster the economic contribution and sustainability of the tourism industry, returning to

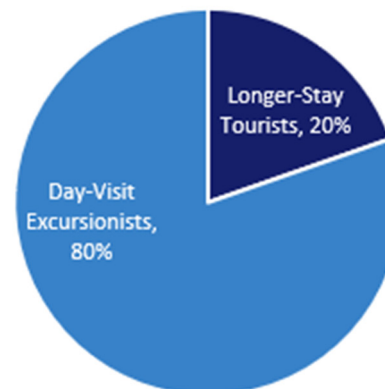
²³ US Virgin Islands Bureau of Economic Research.

pre-Covid levels of cruise ship visitation while attracting more longer-stay visitors is important. Longer-stay visitors who stay on the islands spend more money at local businesses and have a greater economic impact on the Territory. Even a small increase in the number of these tourists can have a measurable impact on the level of tourism-related spending in the U.S. Virgin Islands.

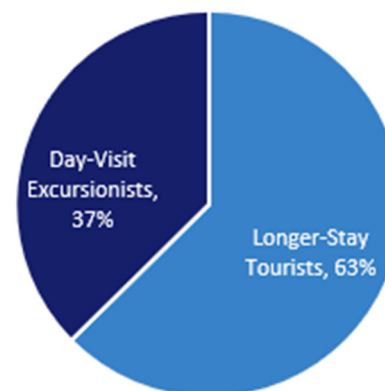
Today, tourists seek out destinations where they can experience authentic local lifestyles, customs, and culture. People seek out travel experiences where they can interact with the local community and travelers prefer to spend money on activities rather than things. Given the territory's rich history and cultural heritage, the U.S. Virgin Islands are in a prime position to promote and support VI-style experiential tourism. Visitors of this type are attracted to casual-elegant boutique lodging, dining options, wellness focused amenities, cultural experiences, and adventurous activities.

In shifting the focus of tourism to attract visitors who are interested in authentic experiences, the Virgin Islands will be able to benefit from higher levels of visitor spending from tourists who spend longer amounts of time on the islands and participate more fully in all of the activities that the islands have to offer. This will create a more sustainable tourism industry and brand for the Territory that will help to support and grow a more diverse U.S. Virgin Islands economy.

% of US Virgin Island Visitors, 2018



% of US Virgin Island Visitor Spending, 2018



Source: US Virgin Islands Bureau of Economic Research

Tourism as a targeted industry sector is focused on promoting the unique heritage and culture of the U.S. Virgin Islands, along with Virgin Islands specific experiences and adventures.

RESEARCH AND DEVELOPMENT

Research and development (R&D) will be one of the critical elements of the world's future economy. Investopedia defines R&D as "activities that companies undertake to innovate and introduce new products and services. It is often the first stage in the development process. The goal is typically to take new products and services to market and add to the company's bottom line."

R&D is big business. Worldwide corporate and government R&D spending totaled \$1.978 trillion and accounted for about 2% of GDP globally as of December 2018. Emerging markets – which could include the USVI in the future – accounted for \$767 billion of the total.²⁴

The Congressional Research Service's April 29, 2020 report *Global Research and Development: Fact Sheet* states that total global R&D expenditures more than tripled between 2000 and 2018. On March 19, 2020, it was estimated global R&D spending in 2020 would increase to \$2.4 trillion, a monetary increase of 2.7% from 2019.²⁵ While estimates of future growth in R&D spending may vary, they all project future growth.

Where does the USVI fit in? On a global basis, it will probably remain a miniscule amount. In terms of the

Territory's economic prosperity and Gross Domestic Product, it has the potential to grow significantly and perhaps exponentially over the next 20 years.

Research and development opportunities intersect many of the other targeted industry sectors recommended in Vision 2040. A few simple examples – definitely not an all-inclusive list – clearly demonstrate how the USVI is uniquely positioned to, and could benefit from, research and development activities across the following potential areas:

Agri-tech for Agri-Business

Research and development around adaptation strategies to combat rising global temperatures is of increasing importance globally, as well as in the Virgin Islands, to support the agri-business targeted industry sector.

QuantumRun Foresight's website "Predictions for 2030" predicts aquaculture will provide the nearly two thirds of the world's seafood.²⁶ On July 10, 2020, an article in the *Hindu Business Times* was headlined "R&D is the way forward for a robust agricultural sector."²⁷

As part of the USVI's renewed focus on agriculture, the Territory has the opportunity to be a worldwide leader in developing new technologies, processes

and products (for instance, seeds for export) applicable to other islands and countries in tropical climates, as well as countries whose agriculture is or will be impacted by global warming.



Griffith Hill School third grader and GHS Head of School plant sprouts in a new aquaponic system. Source: Daily News.

Coastal/Ocean Resources

Opportunities for research and development related to ocean resources are vast, including the opportunities for use as renewable energy. The

²⁴ <https://www.msci.com/research/global-investing-trends/global-research-and-development-spending-gdp-percentage>,

²⁵ <https://www.rdworldonline.com/global-rd-investments-unabated-in-spending-growth/>

²⁶ <https://www.quantumrun.com/future-timeline/2030>

²⁷ <https://www.thehindubusinessline.com/economy/agri-business/rd-is-the-way-forward-for-a-robust-agriculture-sector/article32042502.ece0>

QuantumRun Foresight projection on aquaculture cited above is equally pertinent to the Coastal/Ocean Resources target sector.

In January 2019 the U.S. Department of Energy invested \$25 million in multiple “marine energy projects”.²⁸ We expect this type of alternative energy research to dramatically increase in the future as the world combats climate change.

Sargassum is an increasing problem for the USVI and many other places. The May 14, 2019 issue of Travel Weekly: “There are several proposals for recycling sargassum, including using the plant to make shoes, bricks, fertilizer and biodiesel. The biggest challenge in processing sargassum is to desalinate it -- the rootless plant lives (and reproduces) as it drifts, its capillaries filled with saltwater.”²⁹



Sargassum on St. John

As a nation comprised of three small islands, the USVI must be greatly concerned about the impacts

of climate change. Building upon existing climate change related efforts, there are opportunities for the Territory to become a leader in R&D focused on sea level rise, marine resiliency, freshwater preservation, adaptive planning and many other areas. On September 26, 2019, Fekitamoeloa Katoa 'Utoikamanu, the UN High Representative for Small Island Developing States of the United Nations said “Small island nations are “not sitting idly by” but are emerging as “frontrunners” in the fight against climate change....”³⁰

Health Sciences

This is an exploding field and an unintended benefit of Covid-19 was the “discovery” that a lot more of healthcare could be provided remotely.

Research and development in new health technologies and techniques, such as telemedicine, simulation, 3-D printing, medical records storage and others will support and contribute to the success of the health sciences cluster as well as improve the quality of healthcare in the Territory. In 2018, KPMG International published *R&D 2030*, which focused on the life sciences field, of which Health Sciences is a part. The preamble to the document says “...Life Sciences executives should fundamentally revisit their approach to R&D. By 2030, these companies will be adopting methods that focus on outsourcing, resource sharing and advanced technologies.” (Google KPMG R&D 2030)

As part of the Healthier Horizons initiative, in January 2020, the first meeting of the Virgin Islands Telehealth Workgroup was convened to begin the planning and implementation of telehealth services in the U.S. Virgin Islands. Telemedicine will increasingly take advantage of telehealth tools – increasingly more sophisticated devices and applications that provide health providers with better information about patient conditions. The USVI can be a consumer of increased telehealth services, and also the developer and provider of such services.

Rapidly changing Health Sciences operations will require specialty education – not just for “entry level” jobs but as part of required continuing education. UVI can be a leader in researching needs and developing/delivering new curricula, especially through on-line distance learning.

Renewable/Alternative Energy

This topic was covered in great detail in the Electricity section of the Infrastructure analysis. The USVI is blessed with the “raw materials” for multiple renewable and alternative energy applications – solar, wind, wave, tidal, biomass, waste-to-energy and others – and new forms should be expected in the future. Application of these will help address the Territory’s electricity cost problem. Furthermore, USVI businesses can develop them and become a world-class renewable energy R&D center.

²⁸ <https://www.energy.gov/articles/us-department-energy-awards-25-million-next-generation-marine-energy-research-projects>

²⁹ <https://www.travelweekly.com/Mexico-Travel/What-to-do-with-that-stinky-sargassum>reported

³⁰ <https://news.un.org/en/story/2019/09/1047652>

Light Manufacturing

As diversification of the Territory's economy progresses, we expect small, light manufacturing to play an important role.

Production and processing of regional foods are cited as examples. The Territory's renewed emphasis on agriculture should result in the growing of new products (or the return of old ones), which will require new forms of processing to generate the greatest value. Research and development for use in the USVI can be exported to other warm weather climates, and perhaps even to more temperate climates – for instance, new methods of disease control.

Global warming has been resulting in more and stronger tropical storms and hurricanes in the islands, fires in the western U.S, tornados in the Midwest. The USVI is a perfect place for R&D, and then production of resilient building materials. The composite poles being installed across the Territory is one example. But increasingly, there is a focus on both residential and commercial building materials.³¹

As an increasing number of businesses avail themselves of the services and assistance programs of the USVIEDA, RTPark, and other providers. It is expected that some of these companies will be



Examples of hemp building materials ("hempcrete"). Research into manufacturing applications of hemp can support research, agriculture, manufacturing, and construction industry jobs in the Territory.

manufacturing operations, whose business success will be dependent on targeted R&D.

Important Resources

The USVI is not starting from scratch in the R&D arena. Rather there are already existing resources that can be capitalized on, expanded, or otherwise used to meet R&D needs. These include:

- USVIEDA can assist eligible companies with incentives or develop new incentive programs to support research and development across multiple target sectors. Google "R&D incentives" for many examples of relevant programs. USVIEDA also has a Small Business



Incubator that can play an important role in the R&D process.

The USVI is not starting from scratch in the R&D arena. Rather there are already existing resources that can be capitalized on, expanded, or otherwise used to meet R&D needs.

³¹ <https://www.greenbuildermedia.com/resilient-housing/disaster-resilient-homes-2018s-top-green-building-trends> and

<https://www.resilientdesign.org/resilient-design-strategies/>

- The UVI can play an essential role in supporting R&D through the expertise of its faculty either in the classroom or as “consultants” to companies, its ability to successfully obtain grants, providing vocationally focused training and education, and other ways that will emerge in the future.
- The RTPark’s mission is “to establish the USVI as the premier business destination of choice for firms in knowledge and technology-intensive sectors.” Working with both new and young businesses, the RTPark can use its services and expertise and leverage its UVI connection to provide R&D services.
- The USVI Diaspora, scattered around the globe but concentrated in the U.S., includes many people with high levels of education, technical skills, innovation, and success as entrepreneurs. These can be tapped to assist in the R&D process, and with the right conditions in the USVI, may return there to live and continue to develop new ideas and businesses.
- There is already an unknown number of U.S. Virgin Islands businesses conducting R&D and others that can. These and the other resources noted above can be brought together into a USVI R&D Consortium to stimulate ideas that will increase the market share for this sector.



Guiding Impact by Island

The three (primary) islands of the Territory are inherently unique with their own individual identities, assets, workforce, businesses, infrastructure, challenges, community vision, and economic potential.

While it is critical to plan for equal economic prosperity across all islands, it is equally as critical to identify the target industries that are best to achieve

that economic prosperity on each island. The following matrix aligns the target industries with each island based on their “strength of fit.”

The matrix is intended to serve as a guide and should not preclude businesses in any industry from operating where they believe they can be most successful. Rather, it is intended to help guide and prioritize economic development initiatives and resources.

TARGET INDUSTRIES	ST. THOMAS	ST. CROIX	ST. JOHN	
Agribusiness	Light Opportunity	Strong Opportunity	Light Opportunity	
Coastal/Ocean Resources	Strong Opportunity	Strong Opportunity	Strong Opportunity	
Health Sciences	Strong Opportunity	Strong Opportunity	Light Opportunity	
Light Manufacturing	Light Opportunity	Strong Opportunity	Not Recommended	
Professional/Tech Services	Strong Opportunity	Moderate Opportunity	Light Opportunity	
Renewable Energy	Moderate Opportunity	Strong Opportunity	Moderate Opportunity	
Research & Development	Strong Opportunity	Strong Opportunity	Moderate Opportunity	
VI-Style Tourism	Strong Opportunity	Strong Opportunity	Strong Opportunity	
				Strength of Fit Strong Opportunity Moderate Opportunity Limited Opportunity Not Recommended

6

TAKING ACTION





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TAKING ACTION

Vision 2040 is about the future economic success of the Territory.

This report in six volumes is the first part of the plan. It lays out conceptual goals and objectives and provides key first steps for moving forward (see Action Matrix on pages 233–250 of this Volume 6.) The report does not provide technical specifications for how to achieve *everything* that needs to be accomplished.

There will be many changes over the next 20 years—some within the Territory and some in the broader global economic context that will influence the

Territory. These must be factored into any implementation strategy as progress is tracked. It is also expected that there will be added components of Vision 2040 in the months and years to follow.

This first part of Vision 2040 describes the potential future so that multiple public and private stakeholders can contribute to building that future.

The surest way to achieve a brighter future is to have all facets of government, the education system, civic leaders, private businesses, institutions, and not-for-profit organizations endorse Vision 2040 and focus their individual efforts on advancing its aspirational goals.

In any construction project, a solid foundation is a requirement, and that foundation must be made of the right building blocks.

Below are some building blocks for the Territory's economic future:

- 1. Moving from strategic planning to strategic doing.** This document provides the results of the planning to date, although over the 20-year timeframe for implementing Vision 2040, additional planning will be necessary. More importantly, it is time to start doing and continuing that process.

2. **Ownership.** Residents, stakeholders, businesses, not-for-profits, government officials and agencies, and others must work collaboratively, to make the necessary decisions and changes to progress.
3. **Team USVI.** All teams have differences of opinion and potentially conflicting desires and goals. These can either cause serious division or stimulate effective thinking. Small divisions cannot become big divisions.
4. **The future starts today.** A principle of proactive thinking is that the future is determined by the decisions made today. The longer it takes to start making necessary decisions, the farther off the future will be.
5. **Balancing urgency and patience.** There is no time to waste, but no reason to be hasty. Careful thought and decision-making are imperatives. The USVI has been characterized by Vision 2040 participants as too eager to make short-term, quick fixes and not disciplined enough to take the time and make the investments needed to do things correctly.
6. **Stop kicking the can down the road.** That is what elected officials have said short-term, ineffective thinking and doing has resulted in. The problems and challenges identified in Vision 2040 are not new ones but stop-gap measures can no longer be the answer.
7. **Problems and opportunities.** No problem of human destiny is beyond human beings. Reason and spirit have often solved the seemingly unsolvable. The job is to change the problems of the Territory into opportunities, and opportunities into successes.
8. **Stretch thinking.** Successes will not come from the same old approaches. It is time to try new things that will make a difference and challenge conventional wisdom with carefully selected new ideas, approaches, and tools.
9. **Singles and doubles.** Economic development success is rarely won with home runs, although there may be a few. Creating jobs is a lengthy series of small successes that when added together create a more prosperous economy.
10. **Incentives as a strategic investment.** Historically, incentives were offered as a payment to get a company to promise to locate somewhere and employ residents. Today, incentives are—or should be—seen as a strategic investment that results in both the company and location meeting their economic goals. To do that the USVI needs to adjust existing incentives to meet new realities.
11. **Funding.** Economic development does not happen spontaneously. It requires an investment with a high probability of

receiving an adequate return on investment. Yes, the USVI is consistently low on capital, but money invested in sound economic development programs produces net positive return on investments.

12. **Impact—not just activity.** A failure of many economic development programs is that they settle for measures of activity rather than insist on measures of impact and accomplishment.

A good place to begin is by highlighting a few initiatives related directly to the work of economic development that can advance Vision 2040 aspirational goals.

The recommendations, measures, and initiatives outlined on the pages that follow are influenced by or are a direct result of conversations, participation, suggestions, and input from Vision 2040 participants.

These initiatives are what must occur in the Territory, they are not necessarily directed at any specific agency unless clearly noted. Following the list of initiatives is an Action Matrix on pages 233-250 that lists agencies and organizations that should be involved in helping to execute these initiatives and, on page 251, are initiatives that relate to specific agencies, organizations, and groups.

RECOMMENDATIONS & INITIATIVES

1. Infrastructure

The USVI must modernize its infrastructure to grow the economy and be competitive in the Caribbean marketplace and the global economy. This includes having extremely efficient and effective communications systems, reliable energy, roads, ports, airports, attainable housing, efficient and environmentally friendly water and sewer systems, desirable sites and buildings, among other physical requisites.

Vision 2040 calls on the VIPA, DPW, WAPA, and other agencies with public facility and infrastructure responsibilities to adapt current and long-term plans to align with and advance the goals and objectives of Vision 2040.

Two key infrastructure needs relating most directly to economic development which require immediate attention are outlined below: energy and development of land for industry growth.

ENERGY

- 1.1 Develop clean energy venture capital linkages to grow industry base.
- 1.2 Increase alternative energy sources to 5% by 2025, 25% by 2030, 50% by 2035, and 75% by 2040.

- 1.3 By 2025, reduce commercial rate for electricity to be equivalent to or lower than the residential rate.
- 1.4 Adjust electricity rates only as caused by inflation, not by capital improvements.
- 1.5 By 2030, create commercial incentive rate to increase competitiveness for business attraction, creation, retention, and expansion.
- 1.6 By 2030, maintain or reduce WAPA's rates to be no more than 110% of the average Caribbean rate.

GAME CHANGER

Realizing that economic prosperity is impossible without reliable and affordable sources of energy, the Territory reduces its dependence on fossil fuels and increases alternative energy sources to 75% by 2040.

- 1.7 By 2035, manage WAPA's rates to be equivalent to the average Caribbean rate or manage WAPA's rates to be no more than 2.5 times the U.S. average rate, whichever is less.
- 1.8 By 2040, manage WAPA's rates to be 10% less than the average Caribbean rate, or manage WAPA's rates to be no more than twice the U.S. average rate, whichever is less.

- 1.9 Reduce current (2020) SAIFI (System Average Interruption Frequency Index) and SAIDI (System Average Interruption Duration Index) indices by at least 10% by 2025, 25% by 2030, 40% by 2035, and 50% by 2040.
- 1.10 Improve WAPA's Fitch Ratings bond rating from CCC to B by 2025, B to BB by 2030, BB to BBB by 2035, and BBB to A by 2040.

SITES

- 1.11 Prepare Market Analysis supporting development of a speculative industrial building (built for specific uses but usually prior to identification of known occupants) and begin construction of that building swiftly (by either USVIEDA, the private sector, or partnership) to reach at least 50% occupancy by 2025 and 100% by 2030.
- 1.12 Design and have operating a real estate inventory portion of the USVIEDA website that includes all sites and buildings in the USVI suitable for larger manufacturing, warehouse/distribution, office or R&D operations, particularly for target sectors. Creation and effective management of centralized available properties database and easy access to this database from USVIEDA's and partners' websites are necessary as long as business executives and site selection consultants have this as a preferred research method.

- 1.13 Maintain and strengthen the working relationship with all USVI commercial and industrial real estate brokers to assure all listed properties are included in the USVIEDA real estate inventory.
- 1.14 Prepare and maintain a list of site location consultants and provide them with the real estate inventory at least semi-annually, with goal of establishing or expanding at least 2 new businesses per year attributable to the real estate inventory.
- 1.15 Complete development of at least 50 acres of the St. Croix Renaissance Park by 2025, 35% of developable land by 2030, 50% by 2035, and 75% by 2040.
- 1.16 Maintain full occupancy of USVIEDA properties in the Virgin Islands and William D. Roebuck Industrial Parks.
- 1.17 Prepare Market Analysis and Development Plans for a mixed-use business park on the 261 +/- acres of USVI government owned 361 Estate Betty's Hope property south of Henry Rohlsen Airport.
- 1.18 Begin development on 361 Betty's Hope with 10% complete by 2030, 25% by 2035, and 50% by 2040.
- 1.19 By 2025, prepare Market Analysis supporting development of a second speculative building

and construct that building (by either USVIEDA, the private sector, or partnership); reach at least 60% occupancy by 2035 and 100% by 2040.

- 1.20 By 2030, prepare Market Analysis supporting development of a third speculative (or pre-leased) building and construct that building (by either USVIEDA, the private sector, or partnership); reach 85% occupancy by 2040.
- 1.21 Host a Site Location Consultant Familiarization Tour at least twice between 2025 and 2030 with goal being to host at least three nationally-recognized selection consultants.
- 1.22 Conduct a Real Estate Brokers Appreciation Day every other year; alternate between St. Thomas/St. John and St. Croix locations.

2. Business Climate

The Territorial government must fundamentally alter its approach to interacting with the business community. Businesses need evidence that public officials are interested in supporting their growth instead of the widespread current belief that government impedes growth. This can be largely addressed by improving the responsiveness, efficiency, transparency, and accountability of government to the private sector. There are, however, related problems that the Territory must address. A serious restructuring of government is needed to reduce

employment and costs while increasing efficiencies of service. As the economy diversifies and new industry jobs are added, it is expected that government will no longer be regarded by many as the employer of first resort.

ROLE OF PUBLIC SECTOR

- 2.1 All heads of cabinet departments and agencies should provide the governor with three of the most substantive actions that they could take to improve services to the business community. This would produce over 100 changes (in addition to the initiatives described in this report) and send a very clear message that the public sector is serious about improving the business climate.
- 2.2 To achieve Vision 2040 business growth projections, establish a Business Climate Commission with majority private sector representation that would be provided resources needed to thoroughly review, assess fiscal impact, and propose to the Executive and Legislative branches of government changes to the tax and regulatory environment, and recommend supportive public/private initiatives to improve the business climate. The Commission should include appropriate government officials whose departments, employees, regulations, and actions impact the process of establishing and operating a business. The government officials remain on and the businesspeople are replaced over

time with new private sector representatives which refreshes the process of identifying problems and solutions.

GAME CHANGER

The public sector commits to changing the way it relates to business— understanding that this is an absolute imperative if the Territory is to generate the tax receipts it needs to be fiscally solvent, provide needed services, create jobs, and realize economic prosperity for its residents.

- 2.3 Undertake a continuous process of team building and training for all government employees who interact with the business development and operations process. It is clear from interviews, that many government employees don't think of themselves as part of the economic development team, but they need to think that way because their actions can seriously impede economic and business development. They need to be viewed as open and enthusiastic problem solvers, and patiently listen, question, learn, and respond with accurate and complete service.
- 2.4 Establish maximum 10 business day turnaround for receiving a business license; if there is no action taken in that period, then the license is automatically approved.
- 2.5 As part of a constant performance improvement effort, many places utilize electronic feedback and follow-up surveys (a modern-day version of the "How Did We Do?" hard-copy forms) in every instance where businesspeople and residents interact with government employees. Make sure this kind of feedback is built into all departments of government. These surveys remain anonymous and are evaluated frequently to identify where improvements are needed.
- 2.6 Address the underground economy by developing supportive outreach and specific, system-wide approaches that lead to licensing, tax payments, and compliance.
- 2.7 Develop a research and development tax credit program.
- 2.8 Develop visitation training and certification for workers in hospitality sectors and share key messages with the public so that visitors to the Territory feel welcomed.
- 2.9 Establish incentives to encourage formation of angel funds by residents and those living outside the Territory, with emphasis on diaspora groups, to benefit pre-early stage businesses.
- 2.10 Develop formal arrangements to partner with the World Bank, CARICOM, and other Caribbean groups that are advancing initiatives to help entrepreneurs succeed.
- 2.11 Enhance export technical assistance capacity to substantially increase the number of businesses exporting products.
- 2.12 The USVIEDA should establish a best practices Business Expansion and Retention program with dedicated staffing and funding to track individual business needs and responses via a customer management relationship database.
- 2.13 Working in close collaboration with the chambers of commerce, the USVIEDA should conduct twice a year periodic temperature taking and appreciation days for the business community where trained representatives fan out and visit as many businesses as possible in a single day.
- 2.14 Conduct a business survey on an annual basis. By conducting the survey every year, the USVI will be able to see progress toward a goal of achieving majority support from businesses. Consider simplifying the survey. As an alternative, a "Question of the Month" approach can be used, which spreads out the survey over time, reduces the time needed to complete it each month, and

ECONOMIC DEVELOPMENT/CIVIC STAKEHOLDERS

becomes a form of regular communication with the Territory's business community.

2.15 Conduct a series of business town halls at least once a year but ideally more frequently. They can be done as an invitation to all businesses or segmented by business type. This will offer the USVIEDA leadership qualitative as well as quantitative input. These can be used to explore in more detail important topics that emerge from the "Question of the Week." Just as important, even for the businesses that do not participate, it will convey a sense that the USVIEDA and its partners are listening.

2.16 Increase frequency of communications between the public and private sectors with quarterly e-newsletters and publications to the entire licensed business community; fact-based updates on progress in addressing business climate and related quality of place and life issues (energy, crime, etc.), profiles of/testimonials by successful businesses in the territory, important calendar notes for the quarter ahead, and information on available services and programs, particularly when they change. These publications could also be distributed to the USVI diaspora as a means of maintaining contact and

encouraging people to return to the Territory and operate a business there.

2.17 Conduct an ongoing local media relations campaign, promoting through the press the newsworthy USVIEDA, RTPark, SBDC, and other economic initiatives, progress, and testimonials.

2.18 Publicize locally the results of the public relations effort nationally. Get a positive feature in the Wall Street Journal or a trade publication about doing business in the Territory. Do not assume the businesses in the Islands have seen it. Play it back to them, letting it serve as a validation for their own decision to operate in the Territory.

2.19 Conduct receptions in diaspora-concentrated cities in the United States, including: Washington, D.C., Atlanta, Houston, and New York.

2.20 Host annual receptions on St. Thomas and St. Croix for the majority of diaspora who return for a visit (often during the holidays) at least once a year.

2.21 Conduct semiannual diaspora town halls, similar to those done for this report, hosted by the USVIEDA CEO or even, on occasion, by the governor.

2.22 Develop a new brand for economic development that reflects the targeted industries and new direction for the USVI.

2.23 Develop Territory-wide Annual Economic Development Scorecards as important measuring sticks for evaluating progress, including metrics and a benchmarking system for reporting small business and entrepreneurial services and customer satisfaction measures.

2.24 Develop resources for improving storefronts in neighborhood centers.

3. Education and Workforce

The USVI must re-think its education system to achieve economic growth by focusing intently on creativity and discovery, and by aligning with industry and workforce needs of the future to help stem the outflow of some of the Territory's best and brightest. Better education means better workers, better jobs, and less brain drain.

3.1 Promote and expand curricula focused on critical thinking and skills-based proficiency education.

3.2 Develop programs that are centered on motivating young people with entrepreneurial interests.

3.3 Secure commitment of public educators to connect teachers with businesses so

classrooms can better prepare students for high-quality technology jobs.

- 3.4 Establish an “idea infrastructure” in the K-12 curriculum that provides focus on fun exploration and discovery, research, and hands-on science and technology learning. This will help address inequality brought on in part by the pace of technological changes by providing comfort with technology and encourage higher level skills aptitudes.

GAME CHANGER

The full range of education—pre-school to graduate degrees—is upgraded, including a robust vocational system, to better prepare students for the world of work and the industries of the future.

- 3.5 Develop stackable credentials to provide career pathways for students, employees, and adults that support skill attainment and employment in the targeted industry sectors. The benefit of stackable credentials (programs and certificates that build on each other) is that they can be earned in a short period of time and provide career-relevant skills for jobs that often do not require a four-year degree.
- 3.6 Develop more academic and research-oriented partnerships with U.S. mainland higher education institutions.

- 3.7 Establish K-12 community-based learning science and technology scholarships to encourage students to pursue internships and apprenticeships with employers.

- 3.8 Double science and technology enrollment at UVI.

- 3.9 Position the University of the Virgin Islands to be known as an “honors university” among Historically Black Colleges and Universities (“HBCU”). Over time, this will help attract more talent from the mainland and help stem brain drain.

- 3.10 Once the Comprehensive Economic Development Plan (CEDS) is approved, UVI should consider applying to the U.S. Department of Commerce’s Economic Development Administration to become an EDA University Center. Currently, five HBCUs have been designated, and as such, become part of a community of institutions that share information and receive support.

- 3.11 Recruit world-class academic and industry investigators to provide increased visibility and capacity to diversify the economy, with a special focus on the blue economy.

- 3.12 Focus on technology in all aspects of learning, advance research and development, and introduce new technologies into classrooms to help diversify the industry base and improve all facets of life in the territory.

- 3.13 Encourage life-long learning and volunteering opportunities with local nonprofits and foundations.

- 3.14 Encourage youth volunteers and input for events and other economic development related endeavors to expose young people to critical economic issues facing their communities.

4. Diversified Economy

Diversifying the economic base in the Vision 2040 targeted industries will help produce family-sustaining job opportunities, reduce dependence on public sector employment, and shift the tourism focus to longer-stay visitors by celebrating the cultural, recreational, and heritage-related assets of the territory.

ECONOMIC DEVELOPMENT INFRASTRUCTURE

- 4.1 Commission a consultant to help develop most efficient and effective delivery of economic development programs and incentives, along with performance measurement systems, and joint protocols for interactions among the SBDC, RTPark, and USVIEDA, and other entities engaged in providing technical assistance to entrepreneurs and small businesses with the goal to clarify support and have one access point for those seeking help.

- 4.2 Diversify start-up activities across traded sectors and targeted industries.
- 4.3 Develop more outreach and programming for early-stage and second-stage minority and women-owned businesses.
- 4.4 Develop financial incentives that are targeted to local small businesses and entrepreneurs so that they can meet the needs of the local market.
- 4.5 Prioritize financial incentives and lending products at all levels (from start-ups to growth and mature firms) to business activity that will accelerate the advancement of targeted industries and transition the Territory to Green and Blue Economies (by expanding renewable energy, improving the environment, healthy water, land, and food, etc.)
- 4.6 Form a Community Development Financial Institution (CDFI) to increase innovative lending options and meet critical early-stage capital gaps. CDFIs are locally controlled versus shareholder centered capital institutions approved by the U.S. Treasury Department to promote social responsibility and inclusion. A CDFI can have a depository bank or credit union structure and be eligible to receive federal bond guarantees, loans, grants, equity investments, and affordable housing solutions.
- 4.7 Integrate financial incentives with other economic development tools such as entrepreneurial support and BRE. Activities in both areas should spread the word about what is available, gather information on what is and is not working for the businesses, and provide insight on where programs should be adjusted.
- 4.8 Establish a process through which all providers of direct support (USVIEDA, RTPark, etc.) submit annual performance metrics in the same format.
- 4.9 Develop a loan guarantee program to assist second-stage businesses in the targeted sectors with their growth plans.
- 4.10 Establish a revolving loan fund (RLF) for targeted industries to purchase advanced technology, machinery, and equipment. Approval of the CEDS and subsequent recognition of the Territory by USEDA as an Economic Development District may help in obtaining USEDA funding to establish an RLF to provide gap financing enabling small businesses to grow and generate new employment opportunities with competitive wages and benefits.
- 4.11 Support and secure funding for at least six SBIR (Small Business Innovation Research) proposals to federal agencies.
- 4.12 Establish international investment partnerships for information/digital technologies and environmental management.
- 4.13 Focus on new in-Territory manufacturing of resilient building materials (including hemp-based materials) and create an incentive (or mandate) for properties to utilize these types of materials as a way to stormproof structures and support local construction jobs.
- 4.14 Develop “Maker Spaces” for small local craftspeople/manufacturers to support entrepreneurial growth by offering low-cost or free facilities that allow individuals to produce goods to earn a living and that help incubate and grow potential businesses.
- 4.15 Create a recycled materials manufacturing initiative to utilize waste for “green” products.
- 4.16 Attract more mid-sized meetings and conferences to the Territory, in the group size 200-400 persons.

THE DIASPORA (“EX-PATS”)

- 4.17 Establish a USVI Worldwide Affinity Group to initiate a strong and durable effort to engage the diaspora. The initiative could include, but not be limited to: a dedicated hire of an experienced business person to manage the

effort along with benchmarks that lead to established goals of metrics such as number of ex-pats who return, businesses they bring with them, investments they make, and new businesses they launch.

- 4.18 Establish and maintain a diaspora database. Cast a wide net in the beginning, refining it over time based on those most likely to return and add value to the Territorial economy.
- 4.19 Use social media and produce and distribute a diaspora-focused quarterly newsletter. Highlight progress on the quality of life issues that are their greatest concerns, features on fellow ex-pats who made the move back and are “making it happen” back home, reminders and updates on USVIEDA and other government resources that can lead to joint business ventures, investments, and increased relocation back to the Territory.
- 4.20 Establish Relocation Assistance Program to help diaspora and other remote working professionals to relocate to the Territory. This may not need to involve an incentive, but rather resources for program support.

AGRI-BUSINESS

- 4.21 Develop fund to help support farm-to-table enterprises and encourage restaurants and services, where driven by market demand, to purchase Territory-produced fresh food.
- 4.22 Facilitate the creation of a hemp processing facility through public-private partnerships.
- 4.23 Prepare analyses to develop a co-processing facility for value-added food products among multiple businesses.
- 4.24 Produce feasibility study for creation of an agri-business park on St. Croix to provide buildable sites with appropriate infrastructure for food processing, packaging, shipping, and related activities such as hemp-based manufacturing of resilient building materials.
- 4.25 In partnership with UVI, establish a business support program for local farmers to assist with grant applications and other business services. Explore academic programs that would include business-oriented classes to support local farmers through business plan preparation and other activities at little or no cost to farmers.

- 4.26 Establish a Farm Credit institution or arrange as a division of a new CDFI to focus on the credit needs of farmers.

BLUE ECONOMY

- 4.27 Create a Blue Economy Consortium as a private-public group to provide guidance for the development of initiatives related to the blue economy.

GAME CHANGER

The governor and U.S. representative working with the Biden Administration agree to establish a premier federal center for U.S. ocean-based clean energy and blue economy research and commercialization activities in the USVI.

- 4.28 Promote and build upon existing work being conducted by UVI’s Center for Marine and Environmental Studies.
- 4.29 Prioritize rebuilding of the MacLean Marine Science Center.
- 4.30 Expand and strengthen UVI’s research partnerships with the University of Miami, University of Pennsylvania, Penn State University, and the Nature Conservancy.

- 4.31 Continue UVI's Ocean Lab research and ocean buoy management partnership with the CARICOOS network.
- 4.32 Set clear, measurable, and consistent targets for a sustainable blue economy.
- 4.33 Assess and communicate performance on these goals and targets.
- 4.34 Advise policymakers regarding legislative and regulatory initiatives that impact the blue economy.
- 4.35 Develop integrated strategies for sustainable tourism and related infrastructure that take into account the blue ecosystem.
- 4.36 Unlock sustainable blue energy potential by developing a policy framework to accelerate the transfer and application of blue economy technologies.
- 4.37 Optimize conservation and sustainable fisheries along with aquaculture resources.
- 4.38 Explore and implement mechanisms to support public and private investments in the blue economy that would allow the transition of established sectors to the economy or that would open up new sectors. Such mechanisms could include visitor entry fees to marine

protected areas, debt for nature swaps, or blue bonds.

- 4.39 Partner with other Caribbean places to create a regional initiative for aquaculture/mariculture in the future. Build a robust research and development infrastructure at UVI to support this initiative.

5. Quality of Place and Life

The Territory must systematically upgrade public places, streets, general cleanliness, modernize health care, address public safety, and reduce the high cost of living. A major deterrent to high crime rates is the availability of good, private sector jobs. Broader economic prosperity—the singular focus of Vision 2040—will reduce the need to commit crime in order to survive. Maintain an intense focus on portions of Vision 2040 that will reduce the cost of living including but not limited to reducing dependence on imported foodstuffs, WAPA electric rates, and the cost of operating the government that results in higher than necessary fees and taxes.

PUBLIC SAFETY

- 5.1 As a companion to the Territory's focus on reducing violent crime, continue to find new methods of reducing the drug trade on the islands which often leads to violent crime. Support enhancements of vocational

education programs, extracurricular activities for youths, internships and apprenticeship opportunities.

GAME CHANGER

Bring crime and especially homicide levels down to levels consistent with the average in the U.S. mainland.

- 5.2 Engage youth in community revitalization efforts and volunteerism to build community pride and provide alternatives to crime and gangs, such as a proposed public art initiative.

PHYSICAL ENVIRONMENT

- 5.3 Develop a Territory-wide recycling program to reduce litter and landfill deposits, salvage valuable materials, and improve the appearance of the islands. Position the Territory as an example of how small-scale recycling can work.
- 5.4 Ensure that road construction and repair are designed and constructed to high standards intended to have a long lifespan. Repairs cannot be just a short-term fix of potholes. Roads in areas with high truck traffic should be constructed and maintained to industrial road standards.
- 5.5 Produce Comprehensive Land Use and Water Plan for each island in the Territory.

- 5.6 Document, map, and prioritize sites and neighborhoods of historic significance for preservation/restoration/historic adaptive reuse.
- 5.7 Develop new programs to provide micro-grants and low-interest loans to restore and rehabilitate single-family homes, with incentives for utilizing resilient building materials to mitigate impacts of future storms, support the local construction industry, and to support new domestic manufacturing of resilient building materials (including hemp-based products).
- 5.8 Enhance downtown revitalization programs that target resources on a competitive basis to the town centers throughout the Territory to improve public spaces, create pedestrian friendly streets, and redevelop vacant and underutilized properties. These programs should seek to leverage private investment to the maximum extent possible.
- 5.9 Facilitate the creation of small- and moderate-scale community gardens into the fabric of communities by repurposing underutilized public and private lots. For new development, encourage development to incorporate agricultural/garden components to create “agrihoods” or neighborhoods oriented toward gardens and small-scale farming.

- 5.10 Create a Territory-wide Public Art Initiative: a formal public art program focused on creating artistic installations and murals on public and private property. Focus on resource-neutral approaches to begin, including utilizing volunteers and donations. Identify appropriate public properties and provide opportunities to private property owners to enlist their properties in the programs. Focus public art projects in areas in need of revitalization.
- 5.11 Support projects and business that add to a sense of place with focus on space for business start-ups, the gig economy, arts and culture, and livability in core communities.

HEALTH SCIENCES

- 5.12 Embrace and employ telemedicine, simulation, 3-D printing, and other emerging medical technologies to improve healthcare in the Territory and reduce the concern about the quality of healthcare that is a major impediment to the return of the diaspora.
- 5.13 Implement the 11 elements of the Healthier Horizons Initiative, in particular the U.S. Virgin Islands Territorial Health Plan being prepared by the VI Department of Health.
- 5.14 Support projects and business initiatives that add to a sense of place with focus on space

for business start-ups, the gig economy, arts, culture, and livability in core communities.

- 5.15 Invest in high-quality childcare.
- 5.16 While building the quality of healthcare services in the Territory, begin to promote medical and wellness tourism in the U.S. Virgin Islands with a focus on the high quality of life available during long recuperation periods.
- 5.17 Promote efforts to create retirement communities and assisted living facilities for both seniors in the Territory and those from the U.S. Mainland that might wish to retire or “snowbird” to the U.S. Virgin Islands. Market the Territory as a retirement destination to attract wealthy retirees that will also create demand for, and increased viability of, high caliber health care institutions and facilities.

IMPLEMENTATION GUIDE

The recommendations and initiatives are first steps to be taken in what will be a long road to achieving prosperity for residents of the U.S. Virgin Islands. They complement existing efforts and other recommendations addressed in recent reports on related subjects (see page 254).

Some initiatives are programmatic and can be implemented immediately by the territorial government, private sector, or not for profit organizations, while others involve policy or new practices which will take years to fully develop.

The Vision 2040 initiatives are presented in the Action Matrix on the pages that follow to help guide implementation. Each lays out the lead group that is responsible for making sure the initiative moves forward, as well as organizations and partners that need to be involved.

Action Plan Matrix Legend

✓	Applies to St. Thomas	Immediate	0-2 Years
✓	Applies to St. John	Mid-Term	2-5 Years
✓	Applies to St. Croix	Long-Term	5+ Years

As shown in the legend above, each initiative shows the islands where the initiative has direct impact, as well as expected timeframe for starting and/or achieving the initiative. Finally, the matrix notes aspirational goals that each initiative helps advance.

Vision 2040 needs centralized management control and accountability to realize its goals and objectives.

Just as an orchestra needs a conductor, Vision 2040 needs to have one person who has influence and authority to coordinate future actions, monitor progress, assume responsibility and accountability, and communicate results to residents and multiple stakeholders. That person must be the Governor.

The Governor's office launched Vision 2040 and should be ultimately responsible for executing the plan and, these responsibilities must be assumed by future governors. While the USVIEDA was tasked by the governor's office with staffing the planning process and overseeing the production of the plan, most of the actions that are now required fall outside the official purview of the USVIEDA.

Central Group

We recommend the Governor reconstitute the Vision 2040 Task Force as a smaller group of public and private leaders who will meet monthly to help guide implementation of Vision 2040.

This group must be chaired by the Governor to provide the authority needed to succeed. There should be no substitutes or alternates allowed to represent the members of this group. Staffing should be the responsibility of a person reporting directly to the Governor whose full-time job is working with lead organizations identified in the Action Matrix, along with others, to execute Vision 2040 initiatives.

An annual report should be presented to the public and to the legislature on progress made regarding Vision 2040 activities.

Business Climate Commission

As noted with initiative 2.2, it is recommended that a Business Climate Commission be established by the executive and legislative branches of government, in collaboration with individuals and/or groups representing the business community. The Commission should be co-chaired by one representative of the public and another from the private sector whose terms would be limited to two years and rotate among members. Resources would be appropriated to the Commission by the Territorial government to thoroughly review, assess fiscal impact, and propose to the executive and legislative branches of government changes to the tax and regulatory environment, and recommend supportive public/private initiatives to improve the business climate. The governor should appoint a department/agency responsible for providing staffing and support to the Commission.

Blue Economy Consortium

Per initiative 4.27, a consortium should be formed consisting of experts in industries that are part of the emerging blue economy. The governor would be responsible for appointing the initial members of this consortium and outlining its goals and objectives in keeping with the goals presented in Vision 2040 to have the U.S. Virgin Islands become a leader in this industry.

Infrastructure

Initiative Area 1: INFRASTRUCTURE							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island Benefit			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
Energy							
1.1	Develop clean energy venture capital linkages to grow industry base.	Business Community	✓	✓	✓	Mid-Term	6, 4, 2
1.2	Increase alternative energy sources to 5% by 2025, 25% by 2030, 50% by 2035, and 75% by 2040.	Virgin Islands Energy Office; WAPA; Governor's Office	✓	✓	✓	Immediate	6
1.3	By 2025, reduce commercial rate for electricity to be equivalent to or lower than the residential rate.	WAPA	✓	✓	✓	Mid-Term	6
1.4	Adjust electricity rates only as caused by inflation, not by capital improvements.	WAPA	✓	✓	✓	Immediate	6
1.5	By 2030, create commercial incentive rate to increase competitiveness for business attraction, creation, retention, and expansion.	USVI Legislature/ Public Service Commission	✓	✓	✓	Long-Term	6
1.6	By 2030, maintain or reduce WAPA's rates to be no more than 110% of the average Caribbean rate.	WAPA/ Public Service Commission	✓	✓	✓	Long-Term	6
1.7	By 2035, manage WAPA's rates to be equivalent to the average Caribbean rate or manage WAPA's rates to be no more than 2.5 times the U.S. average rate, whichever is less.	WAPA/ Public Service Commission	✓	✓	✓	Long-Term	6
1.8	By 2040, manage WAPA's rates to be 10% less than the average Caribbean rate, or manage WAPA's rates to be no more than twice the U.S. average rate, whichever is less.	WAPA/ Public Service Commission	✓	✓	✓	Long-Term	6
1.9	Reduce current (2020) SAIFI and SAIDI indices by at least 10% by 2025, 25% by 2030, 40% by 2035, and 50% by 2040.	WAPA	✓	✓	✓	Mid-Term	6
1.10	Improve WAPA's Fitch Ratings bond rating from CCC to B by 2025, B to BB by 2030, BB to BBB by 2035, and BBB to A by 2040.	WAPA	✓	✓	✓	Mid-Term	6

Initiative Area 1: INFRASTRUCTURE							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island Benefit			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
Sites							
1.11	Prepare Market Analysis supporting development of a speculative building and begin construction of that building swiftly (by either USVIEDA, the private sector, or partnership) to reach at least 50% occupancy by 2025 and 100% by 2030.	USVIEDA; private consultant	✓		✓	Immediate	SUPPORTS JOB-CREATING GOALS
1.12	Design and have operating a real estate inventory portion of the USVIEDA website that includes all sites and buildings in the USVI suitable for larger manufacturing, warehouse/distribution, office or R&D operations, particularly for target sectors. Creation and effective management of an available properties database and access to this database from USVIEDA's website are necessary as long as business executives and site selection consultants have this as a preferred research method.	USVIEDA	✓	✓	✓	Immediate	SUPPORTS JOB-CREATING GOALS
1.13	Develop and maintain a working relationship with all USVI commercial and industrial real estate brokers to encourage their submission of listed properties for the USVIEDA real estate inventory.	USVIEDA; commercial and industrial real estate brokers	✓	✓	✓	Immediate	SUPPORTS JOB-CREATING GOALS
1.14	Prepare and maintain a list of site location consultants and provide them with the real estate inventory at least semi-annually, with goal of establishing or expanding at least 2 new businesses per year attributable to the real estate inventory.	USVIEDA	✓	✓	✓	Mid-Term	SUPPORTS JOB-CREATING GOALS
1.15	Complete development of at least 50 acres of Renaissance Park by 2025, 35% of developable land by 2030, 50% by 2035, and 75% by 2040.	ST. Croix Renaissance Group, LLLP			✓	Mid-Term	SUPPORTS JOB-CREATING GOALS
1.16	Maintain full occupancy of USVIEDA properties in the Virgin Islands and Roebuck Industrial Parks.	USVIEDA	✓		✓	Immediate (Ongoing)	SUPPORTS JOB-CREATING GOALS
1.17	Maintain occupancy of RTPark buildings on St. Croix and St. Thomas to 100% by 2025.	RTPark	✓		✓	Mid-Term (Ongoing)	SUPPORTS JOB-CREATING GOALS
1.18	Prepare Market Analysis and Development Plans for a mixed-use business park on the 261+/- acres of USVI government owned 361 Estate Betty's Hope property south of Henry Rohlsen Airport.	VIPA; USVIEDA			✓	Immediate	SUPPORTS JOB-CREATING GOALS

Initiative Area 1: INFRASTRUCTURE							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island Benefit			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
1.19	Begin development on 361 Betty's Hope with 10% complete by 2030, 25% by 2035, and 50% by 2040.	VIPA			✓	Mid-Term	SUPPORTS JOB-CREATING GOALS
1.20	By 2025, prepare Market Analysis supporting development of a second speculative building and construct that building (by either USVIEDA, the private sector, or partnership); reach at least 60% occupancy by 2035 and 100% by 2040.	USVIEDA; private consultant	✓		✓	Mid-Term	SUPPORTS JOB-CREATING GOALS
1.21	By 2030, prepare Market Analysis supporting development of a third speculative (or pre-leased) building and construct that building (by either USVIEDA, the private sector, or partnership); reach 85% occupancy by 2040.	USVIEDA; private consultant	✓		✓	Long-Term	SUPPORTS JOB-CREATING GOALS
1.22	Host a Site Location Consultant Familiarization Tour at least twice between 2025 and 2030 and have at least five consultants participate.	USVIEDA	✓		✓	Mid-Term	SUPPORTS JOB-CREATING GOALS
1.23	Conduct a Real Estate Brokers Appreciation Day every other year; alternate between St. Thomas/St. John and St. Croix locations.	USVIEDA	✓	✓	✓	Immediate	SUPPORTS JOB-CREATING GOALS

Business Climate

Initiative Area 2: BUSINESS CLIMATE

ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
Role of Public Sector							
2.1	All heads of cabinet departments and agencies should provide the Governor with three of the most substantive actions that they could take to improve services to the business community. This would produce over 100 changes (in addition to the initiatives described in this report) and send a very clear message that the public sector is serious about improving the business climate.	Governor; Agency Heads	✓	✓	✓	Immediate	All
2.2	To achieve Vision 2040 business growth projections, establish a Business Climate Commission with majority private sector representation that would be provided resources needed to thoroughly review, assess fiscal impact, and propose to the Executive and Legislative branches of government changes to the tax and regulatory environment, and recommend supportive public/private initiatives to improve the business climate. The Commission should include appropriate government officials whose departments, employees, regulations, and actions impact the process of establishing and operating a business. The government officials remain on and the businesspeople are replaced over time with new private sector representatives which refreshes the process of identifying problems and solutions.	Governor; Chambers of Commerce; Private sector representatives	✓	✓	✓	Immediate	All
2.3	Undertake a continuous process of team building and training for all government employees who interact with the business development and operations process. It is clear from interviews, that many government employees don't think of themselves as part of the economic development team, but they need to think that way because their actions can seriously impede economic and business development. They need to be viewed as open and enthusiastic problem solvers, and patiently listen, question, learn, and respond with accurate and complete service.	Governor; Agency Heads	✓	✓	✓	Immediate	All
2.4	Establish a maximum 10 business day turnaround for receiving a business license; if there is no action taken in that period, then the license is automatically approved.	Business Climate Commission; DLCA	✓	✓	✓	Immediate	All

Initiative Area 2: BUSINESS CLIMATE

ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
2.5	As part of a constant performance improvement effort, many places utilize electronic feedback and follow-up surveys (a modern-day version of the “How Did We Do?” hard-copy forms) in every instance where businesspeople and residents interact with government employees. Make sure this kind of feedback is built into all departments of government. These surveys remain anonymous and are evaluated frequently to identify where improvements are needed.	Business Climate Commission	✓	✓	✓	Immediate	All
2.6	Address the underground economy by developing supportive outreach and specific, system-wide approaches that lead to licensing, tax payments, and compliance.	DLCA	✓	✓	✓	Immediate	All
2.7	Develop a research and development tax credit program.	RTPark/USVIEDA; USVI Legislature	✓	✓	✓	Mid-Term	1, 2, 3, 6, 7

Economic Development/Civic Stakeholders

2.8	Enhance visitation training and certification for workers in hospitality sectors and share key messages with the public so that visitors to the Territory feel welcomed.	USVI Hotel and Tourism Association/ USVI Department of Tourism; Bar and Restaurant Associations	✓	✓	✓	Immediate	8
2.9	Establish incentives to encourage formation of angel funds by residents and those living outside the Territory, with emphasis on diaspora groups, to benefit pre-early stage businesses.	USVIEDA/ RTPark	✓	✓	✓	Immediate	All
2.10	Develop formal arrangements to partner with the World Bank, CARICOM, and other Caribbean groups that are advancing initiatives to help entrepreneurs succeed.	Governor and USVI Legislature	✓	✓	✓	Immediate	All
2.11	Enhance export technical assistance capacity to substantially increase the number of businesses exporting products.	USVIEDA	✓	✓	✓	Mid-Term	All
2.12	The USVIEDA should establish a best practices Business Expansion and Retention program with dedicated staffing and funding and track individual business needs and responses via a customer management relationship database.	USVIEDA	✓	✓	✓	Immediate	All

Initiative Area 2: BUSINESS CLIMATE

ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
2.13	Working in close collaboration with the chambers of commerce, the USVIEDA should conduct twice a year periodic temperature taking and appreciation days for the business community where trained representatives fan out and visit as many businesses as possible in a single day.	USVIEDA; Chambers of Commerce	✓	✓	✓	Immediate	All
2.14	Conduct a business survey on an annual basis. By conducting the survey every year, the USVI will be able to see progress toward a goal of achieving majority support from businesses. Consider simplifying the survey. As an alternative, a “Question of the Month” approach can be used, which spreads out the survey over time, reduces the time needed to complete it each month, and becomes a form of regular communication with the Territory’s business community.	Business Climate Commission; Chambers of Commerce; USVIEDA	✓	✓	✓	Immediate (Ongoing)	All
2.15	Conduct a series of business town halls at least once a year but ideally more frequently. They can be done as an invitation to all businesses or segmented by business type. This will offer the USVIEDA leadership qualitative as well as quantitative input. These can be used to explore in more detail important topics that emerge from the “Question of the Month.” Just as important, even for the businesses that do not participate, it will convey a sense that the USVIEDA and its partners are listening.	USVIEDA	✓	✓	✓	Immediate (Ongoing)	All
2.16	Increase frequency of communications between the public and private sectors with quarterly e-newsletters and publications distributed to the entire licensed business community; fact-based updates on progress in addressing business climate and related quality of place and life issues (energy, crime, etc.), profiles of/testimonials by successful businesses in the territory, important calendar notes for the quarter ahead, and information on available services and programs, particularly when they change. These publications could also be distributed to the USVI diaspora as a means of maintaining contact and encouraging people to return to the Territory and operate a business there.	USVIEDA	✓	✓	✓	Immediate	All

Initiative Area 2: BUSINESS CLIMATE							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
2.17	Conduct an ongoing local media relations campaign, promoting through the press the newsworthy USVIEDA, RTPark, SBDC, and other economic initiatives, progress, and testimonials.	USVIEDA	✓	✓	✓	Immediate	All
2.18	Publicize locally the results of the public relations effort nationally. Get a positive feature in the Wall Street Journal or a trade publication about doing business in the Territory. Do not assume the businesses in the Islands have seen it. Play it back to them, letting it serve as a validation for their own decision to operate in the Territory.	USVIEDA	✓	✓	✓	Immediate	All
2.19	Conduct receptions in diaspora-concentrated cities in the United States, including: Washington, D.C., Atlanta, Houston, and New York.	USVIEDA	✓	✓	✓	Immediate	All
2.20	Host annual receptions on St. Thomas and St. Croix for the majority of diaspora who return for a visit (often during the holidays) at least once a year.	Governor; USVIEDA	✓	✓	✓	Immediate	All
2.21	Conduct semiannual diaspora town halls, similar to those done for this report, hosted by the USVIEDA CEO or even, on occasion, by the governor.	USVIEDA; Governor	✓	✓	✓	Immediate	All
2.22	Develop a new brand for economic development that reflects the targeted industries and new direction for the USVI.	USVIEDA	✓	✓	✓	Immediate	All
2.23	Develop Territory-wide Annual Economic Development Scorecards as important measuring sticks for evaluating progress, including metrics and a benchmarking system for reporting small business and entrepreneurial services and customer satisfaction measures.	USVI Bureau of Economic Research; USVIEDA; Business Climate Commission; RTPark; SBDC	✓	✓	✓	Immediate	All
2.24	Develop resources for improving storefronts in neighborhood centers.	VIHFA; St. Croix Foundation; USVIEDA; Chambers of Commerce	✓	✓	✓	Mid-Term	5, 8

Education and Workforce

Initiative Area 3: Education and Workforce							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
3.1	Promote and expand curricula focused on critical thinking and skills-based proficiency education.	Board of Education / VICTEB ; Workforce Development Board	✓	✓	✓	Immediate	7
3.2	Develop programs that are centered on motivating young people with entrepreneurial interests.	Nonprofits and foundations	✓	✓	✓	Immediate	7
3.3	Secure commitment of public educators to connect teachers with businesses so classrooms can better prepare students for high-quality technology jobs.	Board of Education	✓	✓	✓	Immediate	7
3.4	Establish an "idea infrastructure" in the K-12 curriculum that provides focus on fun exploration and discovery, research, and hands-on science and technology learning. This will help address inequality brought on in part by the pace of technological changes by providing comfort with technology and encourage higher level skills aptitudes.	Board of Education	✓	✓	✓	Mid-Term	7
3.5	Develop stackable credentials to provide career pathways for students, employees, and adults that support skill attainment and employment in the targeted industry sectors. The benefit of stackable credentials (programs and certificates that build on each other) is that they can be earned in a short period of time and provide career-relevant skills for jobs that often do not require a four-year degree.	Department of Labor; Workforce Development Board; UVI; VICTEB	✓	✓	✓	Mid-Term	7
3.6	Develop more academic and research-oriented partnerships with U.S. mainland higher education institutions.	UVI	✓	✓	✓	Mid-Term	2, 7
3.7	Establish K-12 community-based learning science and technology scholarships to encourage students to pursue internships and apprenticeships with employers.	Business Community	✓	✓	✓	Mid-Term	2, 7
3.8	Double science and technology enrollment at UVI.	UVI	✓		✓	Mid-Term	2, 7

Initiative Area 3: Education and Workforce							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
3.9	Position the University of the Virgin Islands to be known as an “honors university” among Historically Black Colleges and Universities (“HBCU”). Over time, this will help attract more talent from the mainland and help stem brain drain.	UVI	✓		✓	Long-Term	7
3.10	Once the Comprehensive Economic Development Strategy is approved by the U.S. EDA, UVI should consider applying to the U.S. Department of Commerce to become an EDA University Center. Currently, five HBCUs have been designated, and as such, become part of a community of institutions that share information and receive support.	UVI	✓		✓	Immediate	7
3.11	Recruit world-class academic and industry investigators to provide increased visibility and capacity to diversify the economy, with a special focus on the blue economy.	UVI	✓		✓	Mid-Term	2, 7
3.12	Focus on technology in all aspects of learning, advance research and development, and introduce new technologies into classrooms to help diversify the industry base and improve all facets of life in the territory.	Board of Education/ UVI	✓	✓	✓	Immediate	2, 7
3.13	Encourage life-long learning and volunteering opportunities with local nonprofits and foundations.	Local nonprofits and foundations	✓	✓	✓	Immediate	7
3.14	Encourage youth volunteers and input for events and other economic development related endeavors to expose young people to critical economic issues facing their communities.	Local nonprofits and foundations; USVIEDA	✓	✓	✓	Immediate	7

Diversified Economy

Initiative Area 4: DIVERSIFIED ECONOMY							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
Economic Development Infrastructure							
4.1	Commission a consultant to help develop most efficient and effective delivery of economic development programs and incentives, along with performance measurement systems, and joint protocols for interactions among the SBDC, RTPark, and USVIEDA, and other entities engaged in providing technical assistance to entrepreneurs and small businesses with the goal to clarify support and have one access point for those seeking help.	Governor; USVIEDA; RTPark; SBDC	✓	✓	✓	Immediate	4
4.2	Diversify start-up activities across traded sectors and targeted industries.	(outcome of 4.1)	✓	✓	✓	Mid-Term	4
4.3	Develop more outreach and programming for early-stage and second-stage minority- and women-owned businesses.	(outcome of 4.1)	✓	✓	✓	Immediate	4
4.4	Develop financial incentives that are targeted to local small businesses and entrepreneurs so that they can meet the needs of the local market.	USVIEDA; USVI Legislature; U.S. Congress Representative; RTPark	✓	✓	✓	Mid-Term	4
4.5	Prioritize financial incentives and lending products at all levels (from start-ups to growth and mature firms) to business activity that will accelerate the advancement of targeted industries and transition the Territory to Green and Blue Economies (by expanding renewable energy, improving the environment, healthy water, land, and food, etc.)	USVIEDA; USVI Legislature; U.S. Congress Representative; RTPark	✓	✓	✓	Immediate	4

Initiative Area 4: DIVERSIFIED ECONOMY							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
4.6	Form a Community Development Financial Institution (CDFI) to increase innovative lending options and meet critical early-stage capital gaps. CDFIs are locally controlled versus shareholder centered capital institutions approved by the U.S. Treasury Department to promote social responsibility and inclusion. A CDFI can have a depository bank or credit union structure and be eligible to receive federal bond guarantees, loans, grants, equity investments, and affordable housing solutions.	Governor to appoint CDFI Implementation Committee (Note: CDFIs cannot be linked with government)	✓	✓	✓	Immediate	1, 2, 3, 4, 6, 8
4.7	Integrate financial incentives with other economic development tools such as entrepreneurial support and BRE. Activities in both areas should spread the word about what's available, gather information on what is and isn't working for the businesses, and provide insight on where programs should be adjusted.	USVIEDA	✓	✓	✓	Immediate	4
4.8	Establish a process through which all providers of direct support (USVIEDA, RTPark, etc.) submit annual performance metrics in the same format.	USVI Bureau of Economic Research	✓	✓	✓	Immediate	4
4.9	Develop a loan guarantee program to assist second-stage businesses, particularly those in the targeted sectors, with their growth plans.	USVIEDA	✓	✓	✓	Mid-Term	4
4.10	Establish a revolving loan fund (RLF) for targeted industries to purchase advanced technology, machinery, and equipment. Approval of the CEDS and subsequent recognition of the Territory by USEDA as an Economic Development District may help in obtaining USEDA funding to establish an RLF to provide gap financing enabling small businesses to grow and generate new employment opportunities with competitive wages and benefits.	USVIEDA	✓	✓	✓	Mid-Term	1, 2, 3, 4, 6, 8
4.11	Support and secure funding for at least six SBIR (Small Business Innovation Research) proposals to federal agencies.	RTPark; UVI	✓	✓	✓	Mid-Term	4
4.12	Establish international investment partnerships for information/digital technologies and environmental management.	RTPark; UVI	✓	✓	✓	Immediate	4

Initiative Area 4: DIVERSIFIED ECONOMY							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
4.13	Focus on new in-Territory manufacturing of resilient building materials (including hemp-based materials) and create an incentive (or mandate) for properties to utilize these types of materials as a way to stormproof structures and support local construction jobs.	USVIEDA	✓	✓	✓	Mid-Term	1, 4
4.14	Develop “Maker Spaces” for small local craftspeople/manufacturers to support entrepreneurial growth by offering low-cost or free facilities that allow individuals to produce goods to earn a living and that help incubate and grow potential businesses.	RTPark; UVI	✓		✓	Mid-Term	4
4.15	Create a recycled materials manufacturing initiative to utilize waste for “green” products.	USVI Recycling Partnership	✓	✓	✓	Immediate	4
4.16	Attract more mid-sized meetings and conferences to the Territory, in the group size 200-400 persons.	Hotel and Tourism Association; Department of Tourism	✓		✓	Mid-Term	8
The Diaspora (“Ex-Pats”)							
4.17	Establish a USVI Worldwide Affinity Group to initiate a strong and durable effort to engage the diaspora. The initiative could include, but not be limited to: a dedicated hire of an experienced business person to manage the effort along with benchmarks that lead to established goals of metrics such as number of expats who return, businesses they bring with them, investments they make, and new businesses they launch.	Governor	✓	✓	✓	Immediate	5
4.18	Establish and maintain a diaspora database. Cast a wide net in the beginning, refining it over time based on those most likely to return and add value to the Territorial economy.	USVI Worldwide Affinity Group	✓	✓	✓	Immediate	5

Initiative Area 4: DIVERSIFIED ECONOMY							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
4.19	Use social media and produce and distribute a diaspora-focused quarterly newsletter. Highlight progress on the quality of life issues that are their greatest concerns, features on fellow ex-pats who made the move back and are “making it happen” back home, reminders and updates on USVIEDA and other government resources that can lead to joint business ventures, investments, and increased relocation back to the Territory.	USVI Worldwide Affinity Group	✓	✓	✓	Immediate	5
4.20	Establish Relocation Assistance Program to help diaspora and other remote working professionals to relocate to the Territory. This may not need to involve an incentive, but rather resources for program support.	USVI Worldwide Affinity Group; USVIEDA	✓	✓	✓	Mid-Term	5
Agri-Business							
4.21	Develop fund to help support farm-to-table enterprises and encourage restaurants and services, where driven by market demand, to purchase Territory-produced fresh food.	Department of Agriculture	✓	✓	✓	Immediate	1, 4
4.22	Facilitate the creation of a hemp processing facility through public-private partnerships.	USVIEDA; Department of Agriculture; UVI School of Agriculture; Private sector			✓	Mid-Term	1, 4
4.23	Prepare analysis to determine feasibility of developing a co-processing facility for value-added food products among multiple businesses.	USVIEDA; Private consultant; Private sector			✓	Mid-Term	1, 4
4.24	Produce feasibility study for creation of an agri-business park on St. Croix to provide buildable sites with appropriate infrastructure for food processing, packaging, shipping, and related activities such as hemp-based manufacturing of resilient building materials.	USVIEDA; Department of Agriculture; VIPA; Private sector			✓	Immediate	1, 4
4.25	In partnership with UVI, establish a business support program for local farmers to assist with grant applications and other business services. Explore academic programs that would include business-oriented classes to support local farmers through business plan preparation and other activities at little or no cost to farmers.	UVI; Department of Agriculture	✓	✓	✓	Immediate	1, 4

Initiative Area 4: DIVERSIFIED ECONOMY							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
4.26	Establish a Farm Credit institution or as a division of a new CDFI to focus on the credit needs of farmers.	Refer to 4.6	✓	✓	✓	Immediate	1, 4
Blue Economy							
4.27	Create a Blue Economy Consortium as a private-public group to provide guidance for the development of initiatives related to the blue economy.	Governor ; DPNR; UVI; USVIEDA	✓	✓	✓	Immediate	2, 3, 6
4.28	Promote and build upon existing work being conducted by UVI's Center for Marine and Environmental Studies.	UVI	✓	✓	✓	Immediate	2, 7
4.29	Prioritize rebuilding of the MacLean Marine Science Center.	UVI	✓			Immediate	2, 7
4.30	Expand and strengthen UVI's research partnerships with the University of Miami, University of Pennsylvania, Penn State University, and the Nature Conservancy.	UVI	✓	✓	✓	Immediate	2, 7
4.31	Continue UVI's Ocean Lab research and ocean buoy management partnership with the CARICOOS network.	UVI	✓	✓	✓	Immediate	2, 7
4.32	Set clear, measurable, and consistent targets for a sustainable blue economy.	Blue Economy Consortium	✓	✓	✓	Immediate	2
4.33	Assess and communicate performance on these goals and targets.	Blue Economy Consortium	✓	✓	✓	Immediate	2
4.34	Advise policymakers regarding legislative and regulatory initiatives that impact the blue economy.	Blue Economy Consortium	✓	✓	✓	Immediate	2
4.35	Develop integrated strategies for sustainable tourism and related infrastructure that take into account the blue ecosystem.	Blue Economy Consortium	✓	✓	✓	Immediate	2, 8
4.36	Unlock sustainable blue energy potential by developing a policy framework to accelerate the transfer and application of blue economy technologies.	Blue Economy Consortium	✓	✓	✓	Mid-Term	2, 6
4.37	Optimize conservation and sustainable fisheries along with aquaculture resources.	DPNR	✓	✓	✓	Immediate	1, 2

Initiative Area 4: DIVERSIFIED ECONOMY							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
4.38	Explore and implement mechanisms to support public and private investments in the blue economy that would allow the transition of established sectors to the economy or that would open up new sectors. Such mechanisms could include visitor entry fees to marine protected areas, debt for nature swaps, or blue bonds.	Blue Economy Consortium	✓	✓	✓	Mid-Term	2
4.39	Partner with other Caribbean places to create a regional initiative for aquaculture/mariculture in the future. Build a robust research and development infrastructure at UVI to support this initiative.	Governor; DPNR; UVI	✓	✓	✓	Immediate	1, 2, 7

Quality of Life and Place

Initiative Area 5: Quality of Life and Place							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
Public Safety							
5.1	As a companion to the Territory's focus on reducing violent crime, continue to find new methods of reducing the drug trade in the islands which often leads to violent crime. Support enhancements of vocational education programs, extracurricular activities for youths, internships and apprenticeship opportunities.	USVI Police Department , Nonprofits and foundations, businesses, Neighborhood and community groups	✓	✓	✓	Immediate	5, 8
5.2	Engage youth in community revitalization efforts and volunteerism to build community pride and provide alternatives to crime and gangs, such as the proposed Public Art Initiative.	Nonprofits and foundations	✓	✓	✓	Immediate	5, 8
Physical Environment							
5.3	Develop a Territory-wide recycling program to reduce litter and landfill deposits, salvage valuable materials, and improve the appearance of the islands. Position the Territory as an example of how small-scale recycling can work.	USVI Recycling Partnership	✓	✓	✓	Immediate	4, 5, 8
5.4	Ensure that road construction and repair are designed and constructed to high standards intended to have a long lifespan. Repairs cannot be just a short-term fix of potholes. Roads in areas with high truck traffic should be constructed and maintained to industrial road standards.	DPW	✓	✓	✓	Immediate	5, 8
5.5	Produce Comprehensive Land Use and Water Plan for each island in the Territory.	DPNR	✓	✓	✓	Mid-Term	All
5.6	Document, map, and prioritize sites and neighborhoods of historic significance for preservation/restoration/historic adaptive reuse.	DPNR (VIHPC); Neighborhood and community groups	✓	✓	✓	Immediate	8
5.7	Develop new programs to provide micro-grants and low-interest loans to restore and rehabilitate single-family homes, with incentives for utilizing resilient building materials to mitigate impacts of future storms, support the local construction industry, and to support new domestic manufacturing of resilient building materials (including hemp-based products).	VI Housing Finance Authority	✓	✓	✓	Mid-Term	1, 5

Initiative Area 5: Quality of Life and Place							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
5.8	Enhance downtown revitalization programs that targets resources on a competitive basis to the town centers throughout the Territory to improve public spaces, create pedestrian friendly streets, and redevelop vacant and underutilized properties. The program should seek to leverage private investment to the maximum extent possible.	Governor	✓	✓	✓	Mid-Term	5, 8
5.9	Facilitate the creation of small- and moderate-scale community gardens into the fabric of communities by repurposing underutilized public and private lots. For new development, encourage development to incorporate agricultural/garden components to create “agrihoods” or neighborhoods oriented toward gardens and small-scale farming.	Department of Agriculture	✓	✓	✓	Immediate	1, 5, 8
5.10	Create a Territory-wide Public Art Initiative: a formal public art program focused on creating artistic installations and murals on public and private property. Focus on resource-neutral approaches to begin, including utilizing volunteers and donations. Identify appropriate public properties and provide opportunities to private property owners to enlist their properties in the programs. Focus public art projects in areas in need of revitalization.	Governor	✓	✓	✓	Mid-Term	5, 8
5.11	Support projects and business initiatives that add to a sense of place with focus on space for business start-ups, the gig economy, arts, culture, and livability in core communities.	USVIEDA	✓	✓	✓	Immediate	4, 5, 8
Health Sciences							
5.12	Embrace and employ telemedicine, simulation, 3-D printing, and other emerging medical technologies to improve healthcare in the Territory and reduce the concern about the quality of healthcare that is a major impediment to the return of the diaspora.	UVI/ Territorial Hospital Board	✓	✓	✓	Immediate	3, 4, 5
5.13	Implement the 11 elements of the Healthier Horizons Initiative, in particular the U.S. Virgin Islands Territorial Health Plan being prepared by the VI Department of Health.	Department of Health	✓	✓	✓	Immediate	3

Initiative Area 5: Quality of Life and Place							
ID #	Initiative	Lead and Supporting Partners (Lead in Red)	Island			Timeframe	Aspirational Goal Alignment
			STT	STJ	STX		
5.14	Invest in high-quality childcare.	Department of Human Services	✓	✓	✓	Immediate	3, 5
5.15	While building the quality of healthcare services in the Territory, begin to promote medical and wellness tourism in the U.S. Virgin Islands with a focus on the high quality of life available during long recuperation periods.	UVI/ Territorial Hospital Board/ Department of Tourism	✓		✓	Mid-Term	3, 8
5.16	Promote efforts to create retirement communities and assisted living facilities for both seniors in the Territory and those from the U.S. Mainland that might wish to retire or “snowbird” to the U.S. Virgin Islands. Market the Territory as a retirement destination to attract wealthy retirees that will also create demand for, and increased viability of, high caliber health care institutions and facilities.	USVIEDA; Private developers; USVI Worldwide Affinity Group	✓	✓	✓	Long-Term	3, 5

Initiatives by Lead Entity

The following table provides a summary of the initiatives that each Lead Entity is responsible for implementing. Green=immediate, Purple=mid, Red=long-term.

Lead Entity	Initiative	Lead Entity	Initiative
Blue Economy Consortium-New	4.32; 4.33; 4.34; 4.35; 4.36; 4.38	University of the Virgin Islands	3.6; 3.8; 3.9; 3.10; 3.11; 3.12; 4.25; 4.28; 4.29; 4.30; 4.31
Board of Education	3.1; 3.3; 3.4; 3.12	USVI Bureau of Economic Research	2.23; 4.8
Business Climate Commission-New	2.4; 2.5; 2.14	USVI Economic Development Authority	1.11; 1.12; 1.13; 1.14; 1.16; 1.20; 1.21; 1.22; 1.23; 2.7; 2.9; 2.11; 2.12; 2.13; 2.15; 2.16; 2.17; 2.18; 2.19; 2.21; 2.22; 4.4; 4.5; 4.7; 4.9; 4.10; 4.13; 4.14; 4.22; 4.23; 4.24; 5.11; 5.16
Business Community	1.1; 3.7	USVI Energy Office	1.2
Department of Agriculture	4.21; 5.9	USVI Hotel and Tourism Association	2.8; 4.16
Department of Health	5.13	USVI Housing Finance Authority	2.24; 5.7
Department of Human Services	5.14	USVI Legislature	1.5; 2.10
Department of Labor	3.5	USVI Police Department	5.1
Department of Licensing and Consumer Affairs	2.6	USVI Port Authority	1.18; 1.19
Department of Planning and Natural Resources	4.37; 5.5; 5.6	USVI Recycling Program	4.15; 5.3
Department of Public Works	5.4	USVI Worldwide Affinity Group-New	4.18; 4.19; 4.20
Department of Tourism	2.8; 4.16	UVI/Territorial Hospital Board	5.11; 5.15
Governor's Office	2.1; 2.2; 2.3; 2.10; 2.20; 4.1; 4.6; 4.17; 4.27; 4.39; 5.8; 5.10	VICTEB	3.1
Nonprofit Organizations	3.13; 3.14; 3.2; 5.2	WAPA	1.3; 1.4; 1.6; 1.7; 1.8; 1.9; 1.10
Public Service Commission	1.5; 1.6; 1.7; 1.8		
Research and Technology Park	2.7; 2.9; 4.11; 4.12		
St. Croix Renaissance Park	1.15		

PREDICTING IMPACT

In 2040, the U.S. Virgin Islands will have a larger and more diverse economy than it does today. By focusing efforts on the targeted industries and goals identified in this strategy, total jobs in the territory could grow by 35% from under 40,000 today to over 52,000. In 20 years, the number of jobs would surpass the pre-Great Recession peak, placing the territory on a path toward stable economic growth.

Critically, the number of government jobs would remain flat, or even decline, over the next 20 years, representing a decreasing share of the territory's employment base. These jobs would shrink from 27% of the economy today to 20% in 2040.

Each targeted industry would grow overall and as a share of the U.S. Virgin Islands economy. Tourism, already a key contributor to the local economic base, would climb above pre-Covid and pre-hurricane levels, with an increasing share of visitor spending coming from longer-stay visitors as compared to cruise excursionists. The tourism sector would add over 4,000 jobs by 2040.

The health sciences sector would grow substantially as the quality of the healthcare in the territory improves and the U.S. Virgin Islands becomes a magnet for patients seeking care from throughout the Caribbean region. Health sector employment would increase from 4% today to 15% by 2040, adding over 6,000 jobs.

The U.S. Virgin Islands will successfully nurture and attract professional and technical services businesses whose proprietors and employees will be drawn to the territory's high quality of life. Nearly 1,000 new professional and technical workers would call the U.S. Virgin Islands home by 2040.

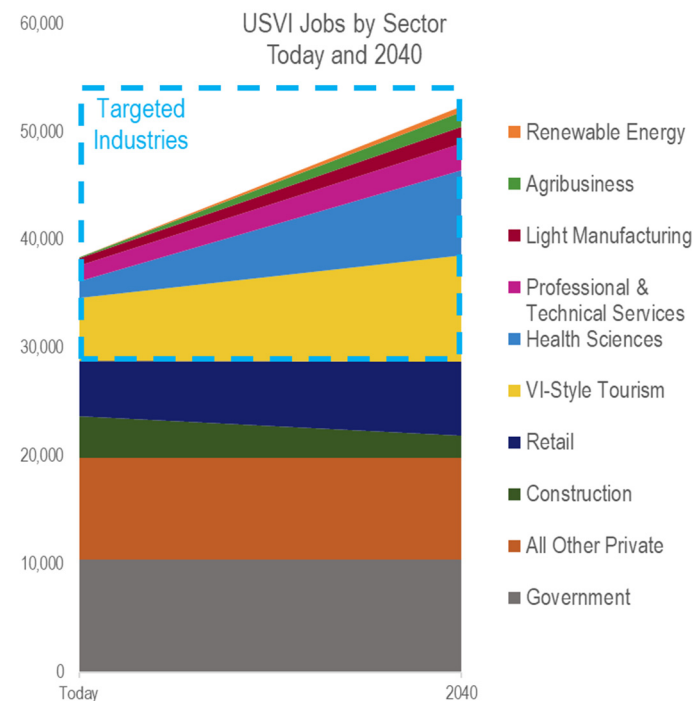
Expansion of the light manufacturing sector will be achieved through efforts to improve the business environment and investments in critical infrastructure. The sector would add over 800 new positions over the next 20 years in a diverse array of industries.

The budding sectors of agribusiness and renewable energy will grow and contribute to sustainability and resiliency efforts in the territory. The islands will dramatically increase their capacity to meet local food demand while also adding over 1,300 new agriculture and food production jobs.

Renewable energy will increasingly replace traditional energy generation methods and contribute 500 new jobs to the local economy.

The Blue Economy, which bridges many sectors, will grow in importance from an estimated 15% of jobs today to 30% in 2040, as the U.S. Virgin Islands continues to leverage its most ubiquitous resource—the ocean.

At the center of all sectors will be Research and Development, driving innovation throughout the economy and spurring economic growth.



Non-target industries will also continue to contribute to the territory's economy. The retail sector will grow in proportion to the territory's expanding population, adding over 1,700 jobs and continuing to make up an important share of the islands' employment base.

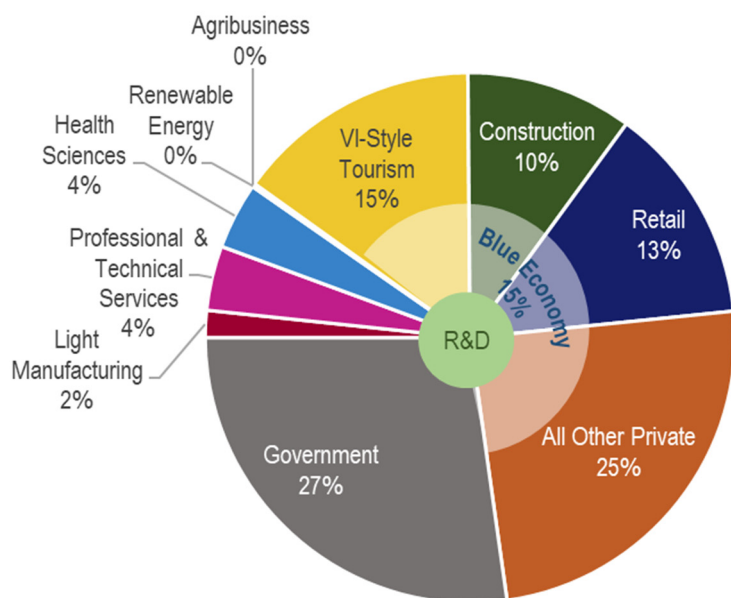
As U.S. Virgin Islanders continue to rebuild from hurricane damage, the construction sector will eventually revert to baseline pre-storm levels, though it will likely expand and contract over the period in response to future storm events.

In 20 years' time, the U.S. Virgin Islands will have a substantially larger economy with an abundant supply of jobs across the targeted sectors for residents of all education and skill levels.

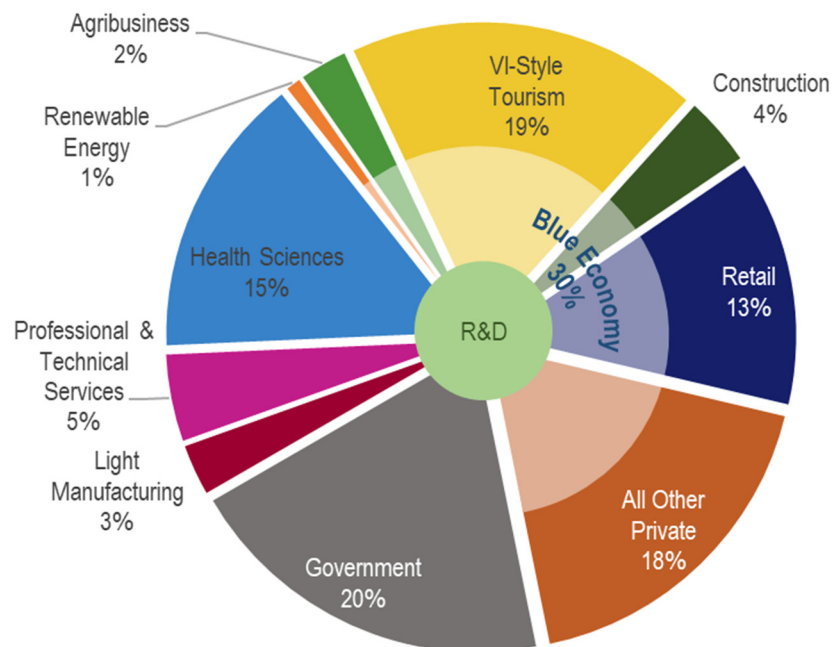
The number of jobs in the U.S. Virgin Islands could expand from under 40,000 today to over 52,000 by 2040. Jobs would expand across targeted industries, and the public sector would represent a lower share of total employment.

U.S. Virgin Islands Employment Base by Sector


TODAY



2040

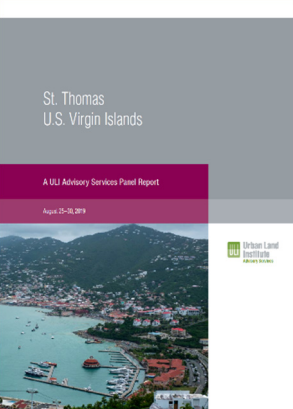




SUPPORTING PLANS & DOCUMENTS

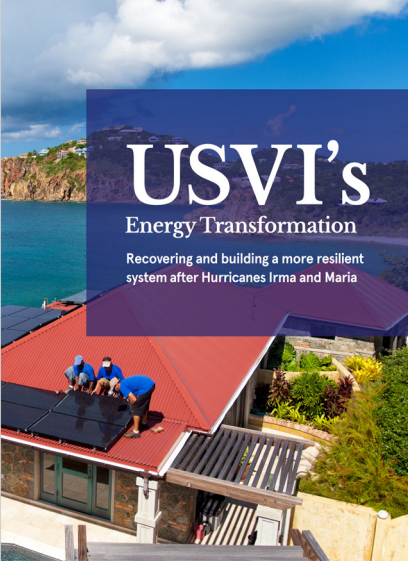
EXISTING PLAN	DESCRIPTION	SPECIFIC FINDINGS/ RECOMMENDATIONS	RELATES TO/COMPLEMENTS VISION 2040 INITIATIVE(S)
	<p>Issued by the World Bank Group and United Nations, published in 2017, this report provides a thorough overview of the Blue Economy.</p>	<p>The report helps define the issues and challenges that must be considered to position the territory as a center for blue economy activity. Recommendations on pages 28-33 of the report are transferrable objectives. A seven-point statement from the World Wildlife Fund on how public and private sectors can approach creating a sustainable blue economy, includes ideas for:</p> <ul style="list-style-type: none"> - Goal setting - Communications - Inclusive ecosystem governance - Development of standards, guidelines, best practices - Interlink of maritime and land-based economies - Active cooperation, shared information, knowledge, best practices, lessons learned, perspectives and ideas 	<p>3.11 4.28—4.39</p>

EXISTING PLAN	DESCRIPTION	RELEVANCE AND/OR RECOMMENDATIONS	RELATES TO/COMPLEMENTS VISION 2040 INITIATIVE(S)
<p>HEALTH</p> 	<p>Issued by the Caribbean Exploratory Research Center in 2019, this report reviews the immediate needs and trauma of recent hurricanes on USVI residents and impact to support systems benefiting children and families.</p>	<p>The report describes immediate challenges facing the residents of the USVI and includes recommendations to better prepare the Territory for the future. It is critical to attend to these recommendations to improve living conditions and the prospects for future prosperity.</p> <p>Areas addressed include recommendations to:</p> <ul style="list-style-type: none"> - Improve the overall health of vulnerable children and families; - Improve educational outcomes for youth; - Increase economic stability of vulnerable families; - Improve neighborhood and the built environment; - Improve community preparedness for future disruptions. 	<p>3.1-3.5; 3.7; 3.12-3.14 5.2; 5.12; 5.14</p>

EXISTING PLAN	DESCRIPTION	RELEVANCE AND/OR RECOMMENDATIONS	RELATES TO/COMPLEMENTS VISION 2040 INITIATIVE(S)
<p>AGRICULTURE</p> 	<p>Issued in 2019 by the Food and Agriculture Organization of the United Nations, this report reviews the state of agriculture in the Caribbean. The focus is primarily on small islands nations and includes assessment of conditions similar to the U.S. Virgin Islands.</p>	<p>Section eight of the report includes recommendations for economic growth, employment, reduction of poverty, food and nutritional security. Specific recommendations that should be reviewed and considered by USVI policy makers include:</p> <ul style="list-style-type: none"> 8.3 Food and Nutrition Security 8.4 Gender Inequality 8.5 Transformation of the agri-food sector 8.6 Transformation of the livestock sector 8.7 Transformation of fisheries/ aquaculture 8.8 Trade and value chains 8.9 Climate and natural hazards 	<p>4.21—4.26; 4.32—4.39</p>

EXISTING PLAN	DESCRIPTION	RELEVANCE AND/OR RECOMMENDATIONS	RELATES TO / COMPLEMENTS VISION 2040 INITIATIVE(S)
<p data-bbox="128 337 548 386">COMMUNITY DEVELOPMENT</p>  	<p data-bbox="590 410 1052 683">Prepared by the Urban Land Institute over a two-year period, these separate reports provide descriptions of physical conditions facing downtown areas on St. Thomas and St. Croix, as well as housing and community amenities and provide land use and development recommendations.</p>	<p data-bbox="1083 410 1646 651">Focused recommendations for St. Thomas include: exploring energy alternatives, including resilient measures in new development, decoupling and privatizing portions of the utility, restructuring the PSC, equitable economic development, housing revitalization, government reform and coordination.</p> <p data-bbox="1083 695 1646 894">Focused recommendations for St. Croix include equitable economic development, fostering the agribusiness sector, transforming housing in Christiansted, new housing constructions, and placemaking with attention to parks and waterfront areas.</p>	<p data-bbox="1671 410 1829 505">2.3; 2.5; 2.24 4.6 5.2; 5.5—5.11</p>

EXISTING PLAN	DESCRIPTION	RELEVANCE AND/OR RECOMMENDATIONS	RELATES TO / COMPLEMENTS VISION 2040 INITIATIVE(S)
<div data-bbox="117 402 466 500" style="background-color: red; color: white; padding: 5px; text-align: center; font-weight: bold;"> DISASTER RECOVERY/RESILIENCY </div> <div data-bbox="109 548 529 1107" style="border: 1px solid black; padding: 10px; margin-top: 10px;">  <p style="font-size: 1.2em; font-weight: bold; margin-top: 10px;">Recovery in the U.S. Virgin Islands</p> <p style="font-size: 0.8em; margin-top: 5px;">Progress, Challenges, and Options for the Future</p> <p style="font-size: 0.7em; margin-top: 10px;">SHELLEY COLBERTSON, BLAS NUNEZ-NETO, JOE D. AZOVEDA, CYNTHIA R. COOK, ANDREW LANGLAND, KRISTIN J. LEEDENBER, SHANTH NATHARAJ, BENJAMIN LEE PRESTON, SUSAN A. RESETER, ADAM C. REISCH, PATRICK ROBERTS, HOWARD J. SHATZ</p> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;">  <p style="font-size: 0.6em; margin: 0;">An FYRDC operated by the RAND Corporation under contract with DHS</p> </div> </div>	<p>Produced by the Rand Corporation in 2020. According to a website that hosts the report, it “covers multiple recovery needs: a set of crosscutting capacities required for progress in multiple sectors (management, fiscal, workforce, and supply chain), the rebuilding of physical infrastructure (infrastructure, services, energy, housing, and natural and cultural resources), and the development of key aspects of the economy and public services (the tourism economy, education, and health).”</p>	<p>This report provides detailed review of capacities and shortcomings of recovery efforts and what needs to happen. It exposes systemic issues and causes, while providing comprehensive recommendations for better positioning the USVI to recover from recent hurricane disasters. It focuses on:</p> <ul style="list-style-type: none"> - Government management capacity - Government fiscal capacity - Workforce capacity - Supply chain - Energy - Housing - Natural and cultural resources - Tourism economy - Education - Health and human services 	<p>1.2; 1.10 2.2—2.6 3.1; 3.5; 3.7; 3.13 4.5; 4.13; 4.24; 4.32—4.39 5.5; 5.7; 5.12; 5.14</p>

EXISTING PLAN	DESCRIPTION	RELEVANCE AND/OR RECOMMENDATIONS	RELATES TO / COMPLEMENTS VISION 2040 INITIATIVE(S)
<p>ENERGY</p> 	<p>Prepared by Bloomberg Philanthropies this report provides a solid overview of the energy system in the USVI.</p>	<p>Provides potential options for electrical power resiliency. Outlines four goals for resilience and reliability:</p> <ul style="list-style-type: none"> - Transformation of WAPA generation portfolio by replacing aged systems with use of renewables to equal 75% of peak demand by 2025 - Modernization of grid - Fortification against climate risks - Strengthening of energy planning and regulatory structures. 	<p>1.1—1.10</p>

SOME PROPOSED/PENDING PLANS	DESCRIPTION	RELEVANCE	RELATION TO VISION 2040 INITIATIVE(S)
 Proposed Agriculture Plan	Senate Bill 33-0376 requires the Department of Agriculture to produce a territorial agriculture plan.	Designed to increase local food production and address food security issues.	CAN SUPPORT GOALS 2.4; 2.6; 2.9; 2.10; 2.12; 3.2; 3.7; 3.11; 3.12; 4.2—4.6; 4.10; 4.13; 4.21—4.27; 4.35; 4.37; 4.39; 5.5; 5.9
 Blue Economy Plan (No formal title yet)	Project of a nonprofit organization, Blue Tide, based in Puerto Rico. U.S. Virgin Islands' DPNR is currently assisting with this project.	Designed to position Puerto Rico as the epicenter for blue economic development and coastal resilience "for the U.S. Caribbean".	REQUIRES ATTENTION to position the USVI as the center for this sector. 2.2; 2.7; 2.9; 2.10; 3.6; 3.8; 3.11; 4.4—4.6; 4.9—4.12; 4.28—4.39; 5.5
 Five-Year Comprehensive Economic Development Strategy	To be released 1 st quarter 2021, this is a required 5-year plan for the U.S. EDA and produced by UVI.	Supports goals for diversifying the USVI economy.	SUPPORTS GOALS
 Tourism Master Plan	To be released 1 st quarter 2021, produced by UVI.	Supports goals for longer stay tourism and more authentic experiences.	SUPPORTS GOALS 2.3—2.6; 2.8—2.10; 2.12—2.14; 2.17—2.24; 3.2; 3.13; 4.4; 4.6; 4.35
 Others to be considered or underway, including annual, long-term operating and strategic plans, such as: <ul style="list-style-type: none"> - FEMA Hazard Mitigation Plan - Proposed VI 2040 Energy Sector Plan - Proposed VI 2040 Marketing Plan - Proposed Community Health Improvement Plan - Proposed Comprehensive Water & Land Use Plan 	Before considering additional reports, ask: <i>"Will they advance Vision 2040 Macro-economic and Aspirational Goals?"</i>	Before publishing additional reports, ask: <i>"Can recommendations be aligned with 20-year goals for the USVI?"</i>	TBD

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