

# Transportation

# Contents

Overview1	
Roles and Responsibilities1	
Department of Public Works1	
Virgin Islands Office of Highway Safety (VIOHS)1	
Virgin Islands Port Authority (VIPA)2	
U.S. Federal Agencies2	
Transportation System and Infrastructure2	
Roads3	
Pedestrian and Bicycle Infrastructure3	
Public Transportation4	
Taxis4	
Ferries5	
Cruise Ships	
Marine Cargo5	
Aviation	1
Roadway Safety	
Commuting and Travel Patterns7	
Plans and Initiatives	

## Overview

Transportation is a critical topic for any place. People need to travel for work, school, healthcare, and to access other goods and services, as well as recreation. Transportation infrastructure also affects the Territory's access to goods and services from the mainland and elsewhere and its ability to export its own goods and services. The transportation system influences the attractiveness for and experiences of visitors and the ability of the USVI's residents to travel within the Territory and externally. Transportation infrastructure also affects and is affected by environmental resources, such as adjacent waterbodies. For these reasons and more, transportation is a critical driver of economic development and quality of life.

## Roles and Responsibilities

A variety of USVI entities, as well as the U.S. Federal Government, have roles related to transportation. These entities are described in the following sections.

## Department of Public Works

The Virgin Islands Department of Public Works (DPW) is the primary entity responsible for transportation in the territory. DPW includes seven divisions:

- Administration is responsible for transactions, finances, funding, personnel, communications, and compliance.
- **Transportation** is responsible for public transportation, planning, highway research, the Virgin Islands Public Transit System (VITRAN), public parking lots, and traffic control.
- **Operations** is responsible for maintenance of infrastructure, including roads, swales, and guts (see Infrastructure and Natural Resources sections).
- Capital Improvement oversees capital projects exceeding \$100,000 in value.
- Local Engineering provides architectural, engineering, design and inspection services, including project management and review of projects by external entities. Local Engineering also provides services for other USVI government agencies.
- The **Office of Highway Engineering** conducts design and construction management for federally funded projects and administers the Federal Aid Highway Program.
- The **Strategic Development Office** leads future planning initiatives with the other divisions, including communication outputs, project administration, and special projects.

Together, the Transportation and Highway Engineering Divisions serve many of the functions of a department of transportation in a U.S. state.

The Legislature regulates DPW and provides its budget. DPW derives its funding from several sources, with the USVI General Fund the largest source, followed by the Federal Highway Administration in recent years. Other federal grants, miscellaneous appropriations, and revenue also support the department.

## Virgin Islands Office of Highway Safety (VIOHS)

The Virgin Islands Office of Highway Safety (VIOHS) is responsible for the development and implementation of strategies for reducing traffic crashes, injuries, and fatalities. In particular, VIOHS develops an annual Highway Safety Plan (see Roadway Safety sub-section below) and compiles data on crash fatalities and injuries, roadways, drivers, and other information to evaluate safety problems in the

USVI. VIOHS receives federal funding from entities such as the National Highway Traffic Safety Administration and the Federal Motor Carrier Safety Administration.

## Virgin Islands Port Authority (VIPA)

The Virgin Islands Port Authority (VIPA) is a public corporation and autonomous government agency overseen by a board of governors. VIPA owns and operates the Territory's two airports and nearly all of its public seaports and harbors, including 12 cargo and ferry ports and two cruise ports. The agency is also responsible for dredging operations. VIPA revenues are derived from user and rental fees, as well as federal grants, and VIPA does not receive or contribute to USVI government funds. VIPA's roles cover aviation (including seaplanes), cruises, cargo and ferry, and business and economic development.

## U.S. Federal Agencies

The U.S. Federal Government provides funding for and oversight of the Territory's transportation infrastructure and operations. Through grants and appropriations, the U.S. Department of Transportation and its various administrations, including the Federal Aviation Administration (FAA), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) support capital improvements, operations, and management at DPW and VIPA. Other federal entities, such as the Department of Homeland Security - including the U.S. Coast Guard, U.S. Customs and Border Protection (CBP), and U.S. Immigration and Customs Enforcement (ICE) – also serve important roles related to transportation, including security at USVI airports and seaports. It should be noted, however, as a U.S. territory, the USVI is technically not required to follow FHWA requirements.

Federal agencies also support recovery and emergency response. Following the 2017 hurricanes, rebuilding the Territory's transportation infrastructure and other improvements were made possible through available federal funding from many of these agencies, as well as from the U.S. Federal Emergency Management Agency (FEMA) and the Department of Housing and Urban Development (HUD).

## Transportation System and Infrastructure

The USVI transportation system involves different ways of traveling within each island as well as interisland, by land, by sea, and by air. The isolation of the USVI from the U.S. mainland presents unique challenges and makes the territory's transportation networks all the more critical. Common previously identified challenges related to the transportation system include infrastructure maintenance and upkeep, drainage, labor supply, and sourcing construction materials, especially from outside the territory. In the USVI's economic plan, *Vision 2040: Our Community. Our Economy. Our Future. A Vision of Prosperity for All*, the condition of transportation infrastructure was highlighted as a key concern, including in regard to economic development, especially on St. Croix. That report also noted that USVI residents pay more than two times more for transportation than the U.S. population as a whole.

Much of the information in this section is referenced from three primary transportation-related documents: USVI Hurricane Recovery and Resilience Task Force: Report 2018,<sup>1</sup> Interdependent

<sup>&</sup>lt;sup>1</sup> U.S. Virgin Islands Hurricane Recovery and Resilience Task Force (2018). <u>USVI Hurricane Recovery and Resilience</u> <u>Task Force: Report 2018</u>.

Infrastructure Resilience in the U.S. Virgin Islands: Preliminary Assessment (2018),<sup>2</sup> and U.S. Virgin Islands 2040 Comprehensive Transportation Master Plan Report (2014), unless otherwise noted.

#### Roads

The USVI contains approximately 1,230 miles of roads, including approximately 340 miles of federal routes, 410 miles of local roads, and 480 miles of private roads. Federal and public roads tend to be twolanes of asphalt or concrete and without shoulders. Federal funding maintains federal routes, while the DPW budget is used for the upkeep of public roads. Private roads and driveways serve multiple private homes, and residents pay to maintain them. These roads are typically unpaved or semi-paved, with frequent construction and maintenance issues. Retaining walls are present on steep slopes along roads, and guts, culverts, inlets, and swales provide drainage for roadways. Additional information on drainage and stormwater is provided in the Infrastructure and Natural Resources sections. In general, sub-standard designs and maintenance tend to be common issues for the roadway network in the USVI, especially related to stormwater management and flooding. Legislation has been proposed to address roadway standards.

On St. Thomas, frequent traffic congestion is an issue, especially with a large portion of the population residing on the east side and the port of Charlotte Amalie bringing in cruise ship tourists – up to 20,000-30,000 per day during peak tourist season - on the south side. On St. Croix, traffic congestion tends to be less of an issue, with fewer cars and flatter terrain, and because the primary road arteries of Melvin

Evans and Queen Mary Highways run east-west, with many north-south roads connecting to these primary arteries. On the other hand, even though St. John has a smaller population, road congestion is a problem, as only two roads connect the two main population centers of Cruz Bay on the west side and Coral Bay on the east side.

## Pedestrian and Bicycle Infrastructure

Pedestrian infrastructure is very limited throughout the Territory. As noted above, roadways are typically two-lane roads with no shoulders, leaving little to no room for sidewalks or walking paths. A 2016 study found that 89% of the USVI's street lengths had no sidewalks; 47% had no lighting; and 78% had no walkable destinations (e.g., shops, restaurants, parks).

No designated bicycle infrastructure (e.g., lanes, markings, signage) exists in the USVI. There is an approved proposal for a 15-mile bicycle lane on St. Croix through a public-private partnership, involving DPW and the Cruzan Bikeways Inc. non-profit organization, with some permitting and design completed, but lack of funding has stalled the project.

Several organizations, such as the USVI Walkability Institute and the Virgin Islands Trail Alliance (VITAL), are working in the Territory to advance pedestrian and bicycle infrastructure and safety. In particular the USVI Walkability Institute is a partnership between Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET), a program of the Task for Global Health (TFHG), the Centers for Disease Control and Prevention (CDC), and the USVI Department of Health (USVIDOH) that serves to advance pedestrian infrastructure, through events, reports, information sharing, and advocacy. VITAL

<sup>&</sup>lt;sup>2</sup> Alderson, D.L, Bunn, B.B., Eisenberg, D.A., Howard, A.R., Nussbaum, D.A., and Templeton II, J. (2018). Interdependent Infrastructure Resilience in the U.S. Virgin Islands: Preliminary Assessment.

strives to create multi-use pathways on St. Croix and the wider Territory by identifying, planning, developing, building, and in some cases managing paths, trails, green spaces, and parks.

In 2021, USVI senators in the Committee on Housing, Transportation, and Telecommunications proposed a complete streets bill (Bill 34-0087) to create a task force to develop a Complete Streets Policy to advance complete streets, serving all modes of transportation and users, including bicyclists, pedestrians, and those with mobility challenges.

#### **Public Transportation**

VITRAN provides bus service on St. Croix, St. John, and St. Thomas, as part of the Transportation Division of the DPW. Fares are \$1.00 for a regular fare, \$0.75 for students with identification, and senior citizens and individuals with a disability ride for free.

There are three bus routes on St. Croix that generally run east-west between Frederiksted and Christiansted and adjacent areas. Buses typically run Monday through Friday, with the earliest bus starting its route at 5:30 AM and the latest bus ending its route at 9:00 PM. Times between buses range from one hour and twenty minutes to three and a half hours, depending on the route and time of day.

On St. Thomas, VITRAN's busiest location in the USVI, there are seven routes generally running eastwest, all through Charlotte Amalie, with routes extending from the east end of the island to the west end of the island. The earliest bus is at 5:00 AM, and the latest at 8:55 PM, with up to four hours between buses, although routes tend to have one to two hours between buses. Ridership on St. Thomas is four times higher than on St. Croix or St. John.

On St. John, there are three bus routes that generally run east-west between Cruz Bay and Coral Bay. Buses typically start at 4:00 AM, and the latest bus at 8:40 PM, depending on the route. There are two hours between buses. This service on St. John is particularly important for students who have to take the ferry to Ivanna Eudora Kean High School on St. Thomas each day.

Even with VITRAN's service, public transit options remain limited in the territory. Over 95% of street lengths have no public transit stops. In addition, the USVI's population density does not meet the frequently cited minimum threshold density of four dwelling units per acre to have enough demand for hourly transit service, even in the highest density areas of the territory, such as Charlotte Amalie and Christiansted. However, public transit service is the only means of transportation for many sectors of the population.

#### Taxis

There are private, informal open-air taxis without schedules, provided by "safari" buses, also known as "dollar rides," that tend to stop at or near VITRAN bus stops but sometimes can also be hailed by potential passengers on major routes. Private taxis also provide service in the form of shared-ride vehicles that are typically 8-12 passenger vans. These vehicles travel between major points of interest and are the only public transportation option from the airport. The USVI Taxicab Commission regulates this service and its fixed fares, based on the destination, but in practice, fares and the decision to pick-up passengers tend to be at the discretion of drivers, with tourists and cruise passengers considered more lucrative passengers than locals. Taxi drivers are known to accept tourists over locals and refuse or overcharge passengers.

#### Ferries

Ferries are an important transportation link between St. Thomas, St. John, and Water Island. Private companies provide ferry and car barge services, with Varlack Ventures and Transportation Services of St. John operating the most common route, which runs between St. Thomas (Red Hook) and St. John (Cruz Bay). These franchises also receive a DPW operations and maintenance subsidy. Two other private franchises operate car barges from VIPA facilities on St. Thomas and St. John. In addition, one ferry connects Water Island with St. Thomas (Crown Bay), and another ferry connects Frenchman's Reef Resort with Charlotte Amalie on St. Thomas.

Ferries also connect the USVI with other Caribbean islands. On St. Croix, the Gallows Bay Dock in Christiansted provides passenger ferry service and cargo vessel service between the island and other islands in the Caribbean, and it can also serve mini-cruise vessels, small sloops traveling between islands, private yachts, and the U.S. Coast Guard. On St. John, the Loredon Lawrence Boynes Sr. Dock located in Cruz Bay provides the aforementioned ferry service to Red Hook and Charlotte Amalie on St. Thomas. On St. Thomas, the Edward Wilmoth Blyden IV Marine Terminal in Charlotte Amalie provides seaplane service and ferry service between the USVI and British Virgin Islands (BVI), as well as between the island, St. Croix, and other islands in the Caribbean. The Urman Victor Fredericks Marine Terminal in Red Hook provides the aforementioned ferry service to/from the island and St. John and the BVI.

#### **Cruise Ships**

Passenger cruises are an important part of the USVI economy, although the USVI is not a home port for any ships. In general, St. Thomas experiences much more cruise ship traffic than St. Croix and is one of the most popular cruise ship destinations in the region. During the peak tourist season, 15-20 cruise ships visit St. Thomas per week, while in the off-peak season, 7-10 cruise ships visit the island per week.

There are two cruise ship docks on St. Thomas, the Austin "Babe" Monsanto Marine Facility on the west side of Charlotte Amalie with two docks that can serve three ships and the West Indian Company Ltd. (WICO) Dock on the east side of Charlotte Amalie in Havensight that can serve three ships. VIPA owns the former, while WICO, a VI Public Finance Authority (VIPFA)-owned public corporation, owns the latter. The WICO Dock receives more cruise ship traffic than any other facility in the USVI, and over the last several years, there have been potential plans to expand it with a new pier and associated development. The current WICO facility can also receive cargo vessels with their own crane-equipment, but the dock does not have its own crane. Smaller vessels, such as yachts, mini-cruise ships, and cruise ship transport vessels (i.e., "tenders"), can also dock in Charlotte Amalie Harbor at a site known as The Waterfront, which was formerly a U.S. Navy terminal.

On St. Croix, VIPA's Ann E. Abramson Marine Facility in Frederiksted can receive two cruise ships.

## Marine Cargo

Most products, including much of the USVI's food and building materials, enter the Territory via cargo ship, making that sector particularly critical for the USVI. Two Florida-based companies, Tropical Shipping and Crowley Marine, provide cargo service. There are two primary cargo ports in the USVI: the Wilfred "Bomba" Allick Port and Transshipment Center on St. Croix, located next to the Limetree Bay facility (former Hovensa Refinery) and the Crown Bay Cargo Port on St. Thomas, located on the west side of Charlotte Amalie. U.S. Customs facilities are also located at Crown Bay. These cargo facilities, and the USVI as a whole, also serve as transshipment ports for cargo moving to other areas of the Caribbean, including to the east and south.

St. Croix is also home to the Gordon A. Finch Molasses Pier, which primarily services Virgin Islands Rum Industries Limited but is also used for importation of construction materials including all liquid asphalt to the island. It can also service submarine cable vessels. In June 2022, VIPA completed a new cargo facility at this site.

On St. John, adjacent to Cruz Bay, the Theovald Eric Moorehead Dock and Terminal (Enighed Pond) is the primary cargo terminal for the island, located adjacent to Cruz Bay. In Red Hook on St. Thomas, the Urman Victor Fredericks Marine Terminal also has a roll-on/roll-off ramp for transporting vehicles and other cargo to/from St. John.

In general, cargo shipping and importation can be an onerous process in the USVI, requiring various paperwork and multiple stops. These challenges can be exacerbated by unique tax and customs structures, given the USVI's role as a territory of the U.S.

#### Aviation

There are two major airports in the USVI, Cyril E. King Airport on St. Thomas and Henry E. Rohlsen Airport on St. Croix. VIPA owns both of these facilities, however the FAA owns and operates the air traffic control tower on St. Thomas. VIPA owns the air traffic control tower on St. Croix, but FAA operates it. Several major airlines serve both airports, with non-stop service available to a number of U.S. cities, particularly Miami and others on the east coast. In addition, the airports provide commuter flights between each other, as well as Puerto Rico and other Caribbean islands. Both airports also serve inter-island cargo service and charter planes and private jets. In 2022, VIPA began upgrades to both airports through a public-private partnership, although both airports are fairly constrained by adjacent land uses.

There is also seaplane service at the Svend Aage Ovesen, Jr. Seaplane Terminal in Christiansted in St. Croix, with service available to downtown Charlotte Amalie, St. Thomas, and San Juan, Puerto Rico, as well as connections to the ferries to the BVI. The Charles F. Blair, Jr. Seaplane Terminal in downtown Charlotte Amalie, adjacent to the Blyden Terminal, serves St. Thomas.

#### Roadway Safety

VIOHS's Fiscal Year 2022 Highway Safety Plan identifies roadway safety problems and proposes program areas and countermeasures to address those problems. The plan notes that the USVI's fatality rate is low compared to the VIOHS's Fiscal Year 2022 Highway Safety Plan identifies several high crash locations on the following roads:

St. Croix

- Route 62: Southside
- Route 66: Melvin Evans Highway
- Route 70: Queen Mary Highway
- Route 75: Northside Road
- Route 82: East End Road

St. Thomas

- Route 30: Veterans Drive
- Route 38: Weymouth Rhymer Highway, Raphune Hill Road
- Route 32: Red Hook Road, Brookman Road
- Route 37: Northside Road
- Road 39: Donoe Road
- Route 20: Mandela Circle

#### St. John

- North Shore Road
- Kings Hill Road

mainland U.S. Specific priorities in the plan include addressing serious injuries from traffic crashes, unrestrained vehicle occupant fatalities, and speeding fatalities, with goals related to traffic fatalities, alcohol impaired driving fatalities, unrestrained vehicle occupant fatalities, seat belt usage rate, bicyclist fatalities, driver age 20 or younger fatalities, and average days bet ween the crash date and the crash report submission. Program areas and countermeasures to address these priorities include planning and administration, traffic records, occupant protection, impaired driving, police traffic services, and media communications. More specifically, the report emphasizes particular safety-related needs, such as better data and coordination, higher rates of seatbelt use (which the report notes is significantly lower in the USVI than the national average), education, staffing and training (e.g., for police), additional enforcement, and public education.

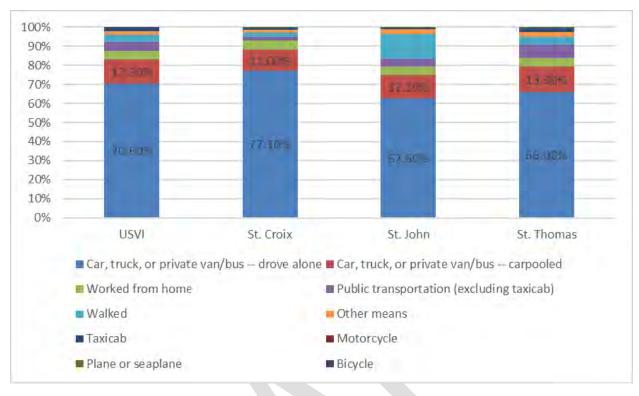
#### Commuting and Travel Patterns

According to U.S. Census data, roughly 70% of USVI residents commute to work alone by car, truck, or private van/bus, with 77% on St. Croix, 63% on St. John, and 66% on St. Thomas. Roughly 12% carpool territory wide, a value that is fairly consistent across all three islands. This category of commuting may be inclusive of the "safari" or "dollar ride" taxis described previously.

Of note, 13% of St. John residents walk for their commutes, substantially higher than the 4% who walk for their commutes territory-wide.

Territory-wide and on individual islands, all other modes of commuting represent less than 10% of residents. Roughly 5% of USVI residents take public transportation, with that value even lower for St. Croix (2%) and St. John (4%) and slightly higher for St. Thomas (7%) residents, reflecting the higher VITRAN ridership on St. Thomas (see Public Transportation sub-section above). Approximately 5% of workers work from home in the USVI, possibly inclusive of new teleworkers from the mainland U.S. who have moved to the USVI since the onset of the COVID-19 pandemic. Additional information about that trend is in the Housing section.

A full breakdown of commuting information is provided in Figure 1 below.



#### Figure 1: USVI Commuting Patterns

#### Plans and Initiatives

Under Executive Order 333-1991, the 2014 United States Virgin Islands 2040 Comprehensive Transportation Master Plan Report guides long-range transportation planning for the territory. The plan evaluates the social, economic, and environmental conditions of the Territory along with the transportation system and facilities to identify short and long-range transportation needs and improvements. To support recommended strategies of the plan, potential funding sources and financing for implementation are also discussed. A community outreach program was used to engage USVI's citizens and stakeholders in the development of the plan in order to identify project goals and objectives, determine transportation needs, and obtain feedback on recommendations for projects to be included in the plan.

The plan's vision is "An integrated transportation system which serves the needs of the USVI community," and its mission is "Develop, operate and maintain an integrated transportation system that promotes safe, reliable, cost effective and efficient movement of people, services and goods."

Goals cover the following eight topics:

- Economic Development
- Safety and Security
- Operation and Maintenance
- Environmental Sustainability and Land Use
- Manage Congestion to Optimize Mobility and Accessibility
- Provide a Seamless and Integrated Transportation Network
- Agency and Public Outreach in Transportation Planning and Programming

8

• Financial Accountability

The DPW has expressed interest in updating the transportation plan by 2024.

In addition to this plan, as referenced above, post-hurricane federal funding has been allocated for transportation sector(s). Specific plans govern some of these funding sources, such as the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant Disaster Recovery (CDBG-DR) program. That funding also supports sectors and topics discussed elsewhere in this Baseline Report, such as infrastructure, housing, and natural hazards, climate, and resilience.

