



# STREET ADDRESSING INITIATIVE

A Comprehensive Report on the Street Addressing Initiative and the Final Territory-wide Phase for the 35<sup>th</sup> Legislature of the Virgin Islands at the request of Senate President Novelle E. Francis Jr.

Prepared by:

**Office of Lieutenant Governor**

**Tregenza A. Roach, Esq.**

**2/5/2024**

Good Morning Senate President, the Honorable Nouvelle E. Francis Jr., Senators of the 35th Legislature and the People of the Virgin Islands. My name is L. Christopher George, I am the Administrator of the Geospatial Information Systems Division and Project Manager of the Office of the Lieutenant Governor's Street Addressing Initiative (referred to as "SAI"). As the SAI has formally entered its final **Territory-wide phase**, I would like to first thank you for the timely opportunity to present to this body a comprehensive report on this historic, critical infrastructure project. Accompanying me today is Office of Lieutenant Governor Legal Counsel; Ms. Nadja Harrigan, Esquire, SAI Project management team Mr. Pedro Nieves in St. Croix & Mr. John D. Gumbs in St. Thomas-St. John.

## 1. BACKGROUND SUMMARY

I will now provide a summary of the Street Addressing Initiative onto which the Virgin Islands has built a solid foundation and its three successful phases to date.

It has been well documented in human history that navigation by thoroughfare is the most logical and efficient way of transportation. Also, noting that street addressing in the Virgin Islands is not a new concept by any means. There are many who laid the groundwork with past addressing efforts to the best of their abilities, whose shoulders we stand upon, and played their part to get us to where we are today.

In 2012, the SAI's first phase was a historic and lasting partnership with the University of the Virgin Islands, enabled by Title 3, Section 74 of the Virgin Islands Code. It has been a priority for the Office of Lieutenant Governor through the GIS Division to foster a working relationship with the University. This relationship has accomplished many specialized projects across the Territory, but the SAI is our magnum opus. Phase One was the first step together and it created what is now known as the **Strategic Implementation Plan for Addressing**. It is based on the culmination of successes and lessons learned from all addressing iterations that came before. The SAI Implementation Plan has been publicly available since its release on the SAI project website: <https://sites.google.com/view/usvi-sai/home>. Though some conditions such as pricing and fieldwork have changed, it remains the guiding document for execution of this monumental project. Simply put, within this plan is the framework of "WHY IT IS NEEDED" and "HOW TO GET IT DONE," specifically within the context of the Virgin Islands. We can provide specific implementation details upon request but for the purpose of this discussion, I will leave plan technical details to be found therein.

In 2013, the Strategic Implementation Plan for Addressing was then real-time tested in the SAI's second phase. Designated the SAI **Pilot Phase**, it was conducted in the historic districts of St. Thomas and St. John, and the Mon Bijou Community in St. Croix. This phase allowed us to rigorously test our data quality, technical presumptions, fieldwork, and community awareness/response. At the end of the Pilot phase, we generated a report that detailed where initial suppositions fell short and where they were successful. This Pilot Phase report was then used to evolve and strengthen the SAI Implementation Plan for the next phase. This report can also be found on the SAI Project website.

Additionally, during the SAI Pilot Phase the Office of Lieutenant Governor created an efficient process for Virgin Islands Residents and Property Owners to be able to name the roadways in their neighborhoods and communities. This is formally called the Community Naming Protocols. This process is streamlined and designed to be efficient as possible but also provides the necessary substantive community engagement. The SAI provides continual support to neighborhood organizations, homeowners associations, communities, and individual residents in walking them step-by-step through the Community Naming Protocol process. To date, we have assisted countless



individual communities across the Territory as well as entire Estates, who have representing organizations, such as Estates Mountain, Pearl, Grove Place, & Carolina. This process will remain ongoing and protocol details can also be found on the SAI Project website.

In 2019, Lieutenant Governor Tregenza A. Roach Esq. commenced the SAI **Bridge Phase** which accomplished two main goals. First, to develop the Territory's Master Address Repository System (MARS) with its corresponding Addressing Manual draft. Secondly, to fine tune the procedures that will be adapted or "bridged" to the entire Territory from the Pilot phase. During this Phase over 4,000 new addresses were created and ALL urban areas of the Territory are now formally addressed (Christiansted, Frederiksted, Charlotte Amalie, and Cruz Bay). This is the foundation on which the Office of Lieutenant Governor's Street Addressing Initiative currently stands.

## 2. USVI ADDRESSING OVERVIEW

Street addressing or lack thereof can affect the quality of services in many aspects of our lives, from emergency services to food delivery, from utilities to postal mail, curb side trash pickup, taxi services, senior and disability services, etc., not to mention the economic impact we are missing out on via businesses based in these sectors. From a general standpoint Street Addressing (or *addressing data*) is comprised of two parts: a street name and corresponding address. The Street Addressing Initiative is the largest infrastructure project to be set upon since USVI road systems were built but it can be better understood as a composition of three main objectives:

- A. Creating a nationally standardized addressing system designed specifically for the USVI
- B. Fabricating and installing Street name signage for the USVI
- C. USVI Awareness and Participation

In 2011, the US Government through the Federal Geographic Data Committee (FGDC) (a Department of Interior (US DOI) committee) created the United States Thoroughfare, Landmark, and Postal Address Data Standard. This document ([FGDC-STD-016-2011](#)) standardized all US street addressing for Landmark, Postal, and Emergency service use. The FGDC approval is also the prerequisite for ANY state, city, or municipality to be included into the Department of Transportation's (US DOT) National Address Database (NAD).

The Office of Lieutenant Governor sought to keep the USVI in line with the required DOT standards, however, we needed to prove the SAI's viability and validate how we intend to formalize our street addressing. On July 5<sup>th</sup> 2022, the Office of Lieutenant Governor presented to the full body of US DOT, US DOI, & FGDC regarding the SAI. Upon presentation completion the project has been hailed as a success by the FGDC, our data framework has been accepted by DOT, and US DOI is now using the USVI as an example for other US Territories in its General Services Administration 10x Program.

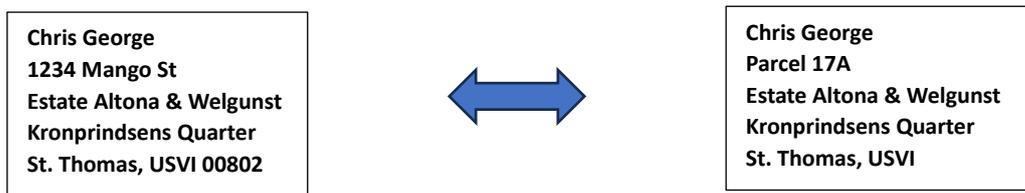
The precedence that was built up in the SAI from our Federal relations have also enabled the GIS Division to expand into authoritative source partnerships with global mapping engines such as Google Maps, Apple Maps, OpenStreet Map, and the Environmental Systems Research Institute (ESRI). We have been dedicatedly striving to provide up to date information and correct data issues with these conglomerates so that they can better serve us.

### A. CREATING A NATIONALLY STANDARDIZED ADDRESSING SYSTEM

As we are part of the United States of America, there is the familiar national addressing framework that should be utilized. However, we are the Virgin Islands, and we are unique in our culture and heritage. Within the process of the SAI, the Office of the Lieutenant Governor fought to make sure these Virgin Islands aspects are engrained and irremovable. Aspects like our Estate structure, our Caribbean environment, as well as our street types that retain non-English languages.

The aforementioned Master Address Repository (MARS) is essentially a database with mapping components and is where the structure of the addressing system is maintained. The addressing system links a street address to a structure, parcel of land, landmark, etc. via a global position. Example 1 below is a graphical interpretation of the data link that is happening inside the MARS database.

#### Example 1:



#### Example 2:



Example 2 depicts the mapping component link of the MARS. On the LEFT is the parcel of land that the Office of the Lieutenant Governor is situated on, Parcel 18 Kongens Gade. On the RIGHT shows the address points (orange) and the one attributed to Parcel 18 Kongens Gade is 1088 Kongens Gade. These links between the two datasets are held and maintained in the MARS in perpetuity. The technical process of how the link happens in the MARS is described by the corresponding Address Manual. This manual will be the exact guide for implementation, maintenance, and archiving of street addressing in the USVI going forward. We can provide specific technical details and manual draft upon request.

Once the MARS is complete in its data structure, it will be housed on the Territorial GIS Platform, thereby providing the modern digital environment for access to it by our federal and private partners. Alternatively, this will be a significant milestone that awaits at the end of the SAI. *The Territory will be looking towards this body to formally legislate that the USVI has a fully functioning street addressing system.* As per federal regulation, once that state/territory declaration is made the US DOT will make our MARS part of the National Address Database and all the relevant federal entities must utilize it. From there it goes to the US Postal Services, the US Census, IRS, etc. and then on to the global mapping

engines by default. The total cost for USVI MARS infrastructure is \$145,529.19 (See SAI Cost Estimate worksheet).

## B. FABRICATING AND INSTALLING STREET NAME SIGNAGE FOR THE USVI

From the public point of view, the most tangible aspect of the SAI is street name signage. This is what we use to navigate, it is also what we can use to engrain Virgin Islands culture and heritage directly into our infrastructure. The Office of Lieutenant Governor fought to make certain that funding for street name signage would be available in this final phase of the SAI and our goal is to have a sign for every named street throughout the duration of this project. This includes neighborhood signs, sensitive district signs, and highway signs with allotted funding at \$2.3M (See SAI Cost Estimate worksheet).

The Office of Lieutenant Governor communicates routinely with the Department of Planning & Natural Resources and the Department of Public Works, both being core stakeholder agencies of the SAI. It is important to note that all signage purchased by the SAI follows the strict policies on size, type, and placement as prescribed by these two regulating departments.

Additional details on Street Name Signage in subsequent Section C.

## C. USVI AWARENESS & PARTICIPATION

The Office of Lieutenant Governor views the SAI as heavily dependent on external interactivity. Its success can only be garnered through effective participation as compartmentalized into two sectors: *Stakeholder Entities* & the *General Public*.

Stakeholder entities are government agencies (Federal & State) and private companies that are either consumers and/or creators of addressing data. For example, this body has the overarching power to name any thoroughfare in the Territory, thereby being an integral creator of addressing data in the Virgin Islands government. In contrast to the Waste Management Authority (State) or US Census (Federal), who both would be considered large scale consumers of addressing data.

In addition to the three above-mentioned, to date the following entities are considered SAI Stakeholders: Department of Public Works, VITEMA, VI Fire & EMS, VI Police Department, Water & Power Authority, viNGN, Department of Planning & Natural Resources, Bureau of Information Technology, Department of Tourism, Department of Health, VIYA, VI Housing Authority, Economic Development Authority, US Postal Service, and US DOT. Without the support and participation of these entities in the past, the SAI would not have accomplished what it has.

We also look to our SAI Stakeholders for advocacy of the SAI via their own internal Public Relations efforts. The overall success of this Territory wide phase depends on a broad spectrum of advocacy, not solely from the Office of the Lieutenant Governor. As we ramp up our media campaign, we will do our due diligence in fostering stakeholder synchronicity in our public messaging. Moreover, the reality is we are all in servitude to one employer, the People of the Virgin Islands of the United States. If we, as managing entity and stakeholders, do not provide proper public awareness and understanding of the SAI and its purpose, why would people participate in it? Why would they utilize it?

The successes of the past phases can only be attributed to the active broad spectrum public relations campaign that was maintained throughout. With Town halls, door-to-door communication, radio,

television, social media, road-side banners, flyers, etc., the SAI was able to garner active public participation. I would like to thank the members of this body who helped in the effort for the SAI Bridge Phase in their present capacities and in their alternative capacities. Public participation includes the Community Naming Protocols as described in the BACKGROUND SUMMARY, but also in the utilization of street addressing in daily life. It is understood that a period of transition is unavoidable for a project that changes how we as a people navigate our islands. As we go from:

*“To get to Ms. Mary house, go dung by Ms. Sally house and mek deh left by de mango tree, look for de white fence on de corner.”*

**TO**

*“Ms. Mary house is 4389 Soursop Lane in Estate Adrian”*

Without street addressing, one would hope the mango tree did not blow down during IrMaria or if Ms. Mary had her fence painted a different color. The distinct difference between the two is that no matter what happens structurally or environmentally, Ms. Mary’s Street address will always lead to her house from anywhere. You also don’t have to know what a mango tree or soursop looks like, and you really don’t have to know Ms. Sally either. These aspects of the SAI must be continually expressed, and we must make it extremely clear to all demographics. A large part of the community awareness is being able to educate the younger generations. Inevitably they are the ones to utilize it, pass it on, and build it into their colloquial speech. The Office of Lieutenant Governor’s SAI team has visited many schools and conducted exciting presentations across the Territory, which we will continue for project duration.

Total cost for SAI project management expenses for this final phase is estimated at \$389,319.34 (see SAI PROJECT MANAGEMENT EXPENSES sheet for breakdown).

### **3. PAST PHASE FUNDING**

The funding amount and sources for the past phases of the SAI are as follows:

Implementation Plan: **\$63,985.00** - Department of Interior Office of Insular Affairs (DOI-OIA)  
Technical Assistance Grant

Pilot Phase: **\$218,207.49** - Office of Lieutenant Governor

Bridge Phase: **\$200,000.00** - Office of Lieutenant Governor

All executed contracts can be provided upon request. For the SAI’s final Territory-wide phase, it has been our priority to make sure that the necessary funding would not burden GVI general fund.

### **4. FINAL PHASE**

As the Bridge Phase was completed in 2020, we immediately started to pursue funding opportunities with the US Department of Housing & Urban Development’s Community Development Block Grant through the VI Housing Finance Authority. The SAI was inevitably awarded \$5,300,000 in total. However, being such a specialized project, it took a monumental effort, years of time, and multiple versions to get our application approved. The Office of the Lieutenant Governor was steadfast and completed every requirement, policy review, and compliance audit necessary to arrive at our current



active project. However, there were many challenges in obtaining approvals to proceed that were outside of the Office of the Lieutenant Governor's control. I must state for the record that the Office of the Lieutenant Governor felt the burden of the inactive passage of time during this extensive application process. With the guidance and leadership of Lieutenant Governor Roach, the GIS Division maintained its focus and did not lose sight of our goal to implement and complete this life changing initiative.

From an overall standpoint this Final phase is not dissimilar to the previous phases, where our primary partner is the University of the Virgin Islands. However, due to federal procurement restrictions of the grant we could not simply rely on Title 3, Section 74 of the Virgin Islands Code to establish a contract for services. The Office of the Lieutenant Governor openly solicited bids through the Department of Property & Procurement's Request for Proposal process, and the University was formally awarded via bid evaluation. This contract is in the execution stage in the amount of \$1.9M (See SAI Cost Estimate worksheet).

In addition to the USVI creating a state-of-the-art MARS; equivalent to a major US city, this grant allowed us to purchase road mapping equipment that is being utilized now and well beyond the SAI. It is a multi-purpose survey unit that provides the GVI autonomy in mapping capacity that we, nor this region, has put to use before. Total cost for Trimble MX-50 Mobile Mapping unit was \$347,705.00 (See SAI Cost Estimate worksheet).



As stated, the total cost for the SAI Territory wide phase is \$5.3M and is in table form in the SAI COST ESTIMATE WORKSHEET. The green lined items have either been fully procured or in contract execution stage.

## 5. CONCLUSION

A standardized street addressing system has been a long time in the making for the Territory, well before the SAI. Through the dedication of the Office of the Lieutenant Governor, the efforts of our partnership with UVI, and our stakeholder support the finish line is finally in sight. Barring any unforeseeable circumstances; in this year (2024), most of the addressing will be completed, street names signs will be installed, have an operational Master Address Repository System, and St. John will be the first island to be fully addressed. Beyond that the Office of Lieutenant Governor will provide whatever assistance is needed to this body in the formulation of the relevant legislation.

This concludes our report on the SAI and its final Territory-wide phase current status, and the Office of Lieutenant Governor wishes to provide a report upon project close out. Again, we thank this body for the opportunity to present this report and we are available for questions and comments.

**SAI COST ESTIMATE WORKSHEET**

Office of Lieutenant Governor (OLG) - Geospatial Information Systems Division Territory Wide - Street Addressing Initiative (SAI) Cost Estimate

Section 1A						
Labor	# of Staff	Hourly Rate	Estimated Hours per Week	Estimated Timing in Weeks	Estimated Total	Comment/Explanation of Cost Assumptions
MARS (DIGITAL INFRASTRUCTURE)	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>a x b x c x d</i>	
NEW LIGHT TECHNOLOGIES	5		0	0	\$ 100,000.00	Based OLG Master Address Repository System (MARS) Software approved evaluation of RFP BD-23-300-3001-191 See Supporting Math for Numbers Tab/MARS Positions & Rates Tab for additional information.
<b>SUBTOTAL</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 100,000.00</b>	Estimated total rounded based on supporting documentation.
Section 1B						
Hardware	Unit				Estimated Total	Comment/Explanation of Cost Assumptions
Geographic Mapping Technologies Corp. (GMT)	1	N/A	N/A	N/A	\$ 36,456.00	HFA/HUD APPROVED PROCUREMENT
Background Data						
PRX	1	N/A	N/A	N/A	\$ 9,073.19	Current aerial imagery is one of the critical background datasets the OLG is responsible for providing. Procurement under \$10,000 threshold. See Supporting Math for Numbers Tab/MARS Positions & Rates Tab for additional information.
<b>TOTAL MARS Software &amp; Hardware Costs</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 145,529.19</b>	
Section 2						
Road Mapping System	Unit					Comment/Explanation of Cost Assumptions
HLCM Group, Inc.	1	N/A	N/A	N/A	\$ 347,705.00	HFA/HUD APPROVED PROCUREMENT
Section 3						
Addressing Contractor	Unit				Estimated Total	
University of the Virgin Islands (UVI)	1	N/A	N/A	N/A	\$ 1,999,970.00	Based USVI Address Data Implementation approved evaluation of RFP BD-23-600-6001-187. See Supporting Math for Numbers Tab/Contractor (UVI) Expenses Tab/Contractor (UVI) Labor Costs Tab for additional information. AWAITING FINALIZED PRICE
Section 4						
Street Name Signage	Unit					
MANUFACTURING & SIGN POSTING CONTRACTOR	1	N/A	N/A	N/A	\$ 2,324,328.81	See Supporting Math for Numbers Tab/Street Signs -- DPW Contracting Tab for additional information.
<b>Total Contractor Cost</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 4,817,533.00</b>	
<b>SAI Project Management Expenses</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 389,319.34</b>	See Supporting Math for Numbers Tab/SAI Project Mgmt. Expenses Tab for additional information.
<b>SAI Project Contingency</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 93,147.66</b>	See PROJECT CONTINGENCY Tab for additional information.
<b>Project Cost</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$ 5,300,000.00</b>	

Signature:  Date: 11/9/2023  Approved  Disapproved  
 L. Chris George, Project Manager

<b>PROJECT CONTINGENCY AMOUNT:</b>	<b>\$93,147.66</b>	
DESCRIPTION	VALUE	REFERENCE TAB
This amount is specifically designated to cover additional costs for ADVERTISEMENT DEVELOPMENT conditions arising from causes of which is indeterminable at the time of estimate.	\$20,000.00	SAI Project Mgmt Expenses
This amount is specifically designated to cover additional costs for STREET NAME SIGNAGE conditions arising from causes of which is indeterminable at the time of estimate.	\$73,147.66	MANUFACTURING & SIGN POSTING



**SAI PROJECT MANAGEMENT EXPENSES**

**TOTAL = \$389,319.34**

**1. SAI-GISD TEAM TRAVEL**

Project Estimated Travel Costs **\$33,376.90**

ESTIMATED COSTS

<b>St. Croix Travel</b>	
St. Croix Round Trip	service provided by Seaborne Airlines
\$238.00	
Number of Days per Week	Daily per Diem
4	\$75
	per Diem (weekly)
	\$300
HOTEL COST PER NIGHT + 20.5% (Avg)	Hotel Cost per Week
\$185.57	\$742.28
Travel Cost Per Week per Person	
\$1,280.28	
Travel Cost Per Month per Person (avg.=4.345)	Travel Cost Per St. Croix Duration (3 Months)
\$5,562.82	\$16,688.45
Total Persons	Project Mgmt Team St. Croix Travel
2	\$33,376.90

**2. MEDIA & PUBLIC AWARENESS**

Project Estimated Promotional Costs **\$287,863.24**

**HFA PROCUREMENT PRO**

	ICE	OFFICIAL INVOICE	VEND
<b>RADIO</b>			
REEF Broad casting (390, 60 sec)	\$5,460.00		
105 JAMZ (327, 60 sec)	\$6,797.40		
Radio One (360, 60sec) GOLD PACKAGE for 9 months	\$10,800.00		
WSTA (327, 60 sec)	\$11,412.00		
WSTX (459, 60sec)	\$6,885.00		
ISLE 95 Station Network	\$14,722.50		
VYBE 107.9 (393, 60 sec + 26, 30 min program)	\$20,936.00		
Sunstroke Vivid Streaming	\$6,000.00		
<b>VIDEO/TELEVISION</b>			
LIVE SAI SHOW PRODUCTION & STREAMING (MDM)	\$25,000.00		
ADVERTISEMENT DEVELOPMENT	\$30,000.00		
(Prime Media, VIYA) AIRING ON NETWORKS	\$16,905.00		
STUDIO & SET COSTS (Fabtabulous, 20'x23' space)	\$4,600.00		
STUDIO & SET COSTS (Evnets by Krystal, furniture)	\$4,210.00		
<b>PRINT MEDIA</b>			
LARGE ROAD SIDE INFO FLAGS (48)	\$11,000.00	Sub. 11/20 rev.2	
Aluminum A-Frame DISPLAY, 2 insert Signs (6)	\$530.00	Sub. 11/21 rev.1	
PROMOTIONAL BANNERS (10, 4X8)	\$1,225.00		
TRI-FOLD BROCHURES (1500)	\$400.00		
RCE Roadside Billboards max funding	\$11,582.04		
SSVI Roadside Billboards max funding	\$6,256.30		
AVIS (2 full color, 1/2 pg per month @ 9 mon)	\$21,150.00		
DAILY NEWS (2, 1/2 pg per month @ 12 mon)	\$18,492.00		
Vehicle Wrap (Cool signs)	\$5,700.00		
<b>COMMUNITY OUTREACH</b>			
8 TOWN HALL VENUES (USVI avg = \$500.00)	\$4,000.00		
INTERACTIVE KIOSKS (3)	\$13,800.00		
PUBLIC AWARENESS PROMOTIONAL CAMPAIGN EXECUTION	\$30,000.00		

Total Town Halls for the Territory STJx2, STTx3, STXx3

**3. OLG FIELD EXPENSES & SUPPLIES**

Estimated: **\$68,079.20**

FIELD WORK EXPENSES: \$33,079.20  
 POST FIELD WORK EXPENSES: \$35,000.00

Unit Type	Number of Units	COST PER UNIT	TOTAL COST
Envelopes For Mail Out	50000	\$0.30	\$15,000.00
USPS Bulk Mailing Fee	50000	\$0.40	\$20,000.00
HP OfficeJet MOBILE Printers	6	\$399.00	\$2,394.00



SAI PROJECT MANAGEMENT EXPENSES (cont.)

HP Mobile Printer Carriage Black	32	\$50.48	\$1,615.36
HP Mobile Printer Carriage Color	16	\$54.99	\$879.84
Field Crew Custom Polos	60	\$45.00	\$2,700.00
Field Crew Custom T Shirts	60	\$35.00	\$2,100.00
Field Crew shaded headgear	30	\$38.00	\$1,140.00
Address Sheet	500000	\$0.03	\$15,000.00
Advocation Letter (Double Sided, VITEMA-VIYA)	100000	\$0.03	\$3,000.00
FACT/FAQ Sheet	100000	\$0.03	\$3,000.00
Door Hanger bags	50000	\$25 per 1000	\$1,250.00