July 1, 2025 - July 31, 2025





July 1, 2025 - July 31, 2025

TABLE OF CONTENTS

1.	PSAP Operations	5
	9-1-1 Call Volume Civilian PSAPS – July 2025	5
	9-1-1 Call Volume Civilian PSAPS – Calendar Year 2025	5
	Note:	5
	9-1-1 Call Volume By Agency – July 2025	6
	9-1-1 Call Volume By Agency – Calendar Year 2025	6
	PSAP Operation Notes:	8
	For Your Information	8
	Text to 911 Oahu Civilian PSAPs – Current Month – July 2025	9
	Note:	9
	911 Wireless Oahu Civilian PSAP Testing – July 2025	9
	Notes:	9
2.	2. MSAG (Master Street Address Guide)	10
	Oahu Civilian MSAG Transactions Current Month/Year – July 2025	10
	Oahu Civilian Msag current month notes:	11
	Oahu Civilian Telephone Record (ALI) Transactions current month notes:	11
	Oahu Civilian Open Telephone Record (ALI) Discrepancy Status:	11
	TNCR (Telephone Number Change Request) Current Status – July 2025	12
	NOTE:	12
	Dispatchable Location – Status as of – July 2025	13
	Narrative:	13





July 1, 2025 - July 31, 2025

	Spectrum (Charter) 9-1-1 VoIP Database Verification Project – July 2025	14
	Bandwidth 9-1-1 VoIP Database Verification Project – July 2025	15
3.	Geographic Information System (GIS) – July 2025	16
	Mapping Layers Updated (Part I)	16
	Mapping Layers Updated (Part II)	17
	Mapping Layers Updated (Part III)	18
	Mapping Layers Updated (Part IV)	19
	Mapping Layers Updated (Part V)	20
	Mapping Layers Updated (Part VI)	21
	Mapping Layers Updated (Part VII)	22
	Mapping Layers Updated (Part VIII)	23
	Geographic Information System (GIS) Narrative	24
	GIS Key Activities/Updates	24
	GIS for 911	25
	Honolulu Police Department TriTech CAD Project	25
	MapFlex/SCC System	26
	MapFlex Issues	26
	Speed Limit Updates	26
	Routing id Updates	26
	Honolulu EMS Response Area	27
4.	Service Requests Transactions	28
	Open Service Requests - July 2025	28
	Note:	28
	Service Request Year-to-Date (YTD) Summary – 2025	28





July 1, 2025 - July 31, 2025

5	. E9-1-1 Oahu Civilian Database Synchronization	29
	Two-way (2-way) comparision	
	Three-way (3-way) comparision	31
	Invalid MSAG Streets and Address Ranges – ESN 199 MSAG & ALI Records Project completed	35





July 1, 2025 - July 31, 2025

1. PSAP OPERATIONS

9-1-1 CALL VOLUME CIVILIAN PSAPS – JULY 2025

Source: Intrado Viper system

	9-1-1 Primary PSAP Call Volume																		
Honolulu City & County PSAPs		Wire	eline	Wireless		VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls		IIs Calls			
2025	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	Wireless	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	No. of Other Calls	% of Total Calls	No. of Calls with No Value	
July	78,303	6,108	7.80%	66,237	84.59%	11.88%	72.71%	2,641	4.02%	273	0.42%	1,468	1.87%	11,546	14.75%	1,047	1.34%	2,081	3.17%

9-1-1 CALL VOLUME CIVILIAN PSAPS - CALENDAR YEAR 2025

							9-1-1 Pr	imary PS	SAP Call	Volume	!								
Honolul	u City & County PSAPs	Wireline		Wireless					Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls		Calls with No Value		
2025	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	No. of Total Call Received	% of Total Calls	No. of Calls with No Value	% of Calls with no value
JAN	82,495	11,153	13.52%	68,009	82.44%	12.65%	69.79%	2,937	3.56%	396	0.48%	1,740	2.11%	12,515	15.17%	1,559	1.89%	0	0.00%
FEB	74,657	10,026	13.43%	61,622	82.54%	12.70%	69.84%	2,635	3.53%	373	0.50%	1,440	1.93%	10,765	14.42%	1,390	1.86%	0	0.00%
MAR	81,065	10,636	13.12%	66,919	82.55%	16.67%	65.88%	3,024	3.73%	486	0.60%	1,572	1.94%	12,909	15.92%	1,349	1.66%	0	0.00%
APR	77,401	9,489	12.26%	64,622	83.49%	18.25%	65.24%	2,825	3.65%	464	0.60%	1,426	1.84%	11,219	14.49%	1,516	1.96%	2,144	2.77%
MAY	79,609	9,991	12.55%	66,267	83.24%	16.30%	66.94%	3,073	3.86%	279	0.35%	1,625	2.04%	11,319	14.22%	1,285	1.61%	2,311	2.90%
JUNE	73,973	8,966	12.12%	61,745	83.47%	13.60%	69.87%	3,033	4.10%	229	0.31%	1,543	2.09%	10,589	14.31%	1,573	2.13%	2,112	2.86%
JULY	78,303	6,108	7.80%	66,237	84.59%	11.88%	72.71%	2,641	4.02%	273	0.42%	1,468	1.87%	11,546	14.75%	1,047	1.34%	2,081	3.17%
AUG																			
SEPT																			
ост																			
NOV																			
DEC																			
YTD	547,503	66,369		455,421				20,168		2,500		10,814		80,862		9,719		8,648	
MON AVG	78,215	9,481	12.11%	65,060	83.19%	14.58%	68.61%	2,881	3.78%	357	0.47%	1,545	1.97%	11,552	14.75%	1,388	1.78%	1,235	1.67%

NOTE:

- 2911 Calls with No ALI for July 2025 = 0.42% Statewide average for 2024 = 0.42%
- 911 Calls with "no value" for July 2025 = 2,081 (see report on page 7)
- Total call volumes do not include Administrative Calls. Administrative calls = Calls originating on Administrative lines that required 911 service.
- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Dropped Calls are hang ups after transfers.
- Abandoned Calls are not included in the Wireline and Wireless total counts respectively.
- All VoIP (Voice over Internet Protocol) types of 911 calls are combined in the Call Volume statistic.





July 1, 2025 - July 31, 2025

9-1-1 CALL VOLUME BY AGENCY – JULY 2025

		9-1-1 Call Volume by Agency														
2025		Hor	olulu Poli	ce Departn		Honolulu Fire Department										
2023	No. of Total Calls Received	% of Total Calls	Number of Emergency Calls		Number of Admin Calls	Number of Dropped Calls	No. of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls						
July	64,350	82.18%	16,951	34,712	1,141	11,546	3,854	4.92%	120	48						

			9	-1-1 Call Volu	me by Agen	су						
2025	Er	mergency M	edical Servic	es	Ocean Safety							
	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls				
July	9,004	11.50%	164	342	48	0.06%	43	0				

9-1-1 CALL VOLUME BY AGENCY – CALENDAR YEAR 2025

							9	-1-1 Cal	l Volun	ne by A	gency								
2025		Honolulu Police Department					Honol	Honolulu Fire Department				Emergency Medical Services				Ocean Safety			
	Number of Total Calls Received	% of Total Calls	No. of Emergency Calls	No. of Non Emergency Calls	No. of Admin Calls	No. of Dropped Calls	No. of Total Calls Received	% of Total Calls	No. of Admin Calls	No. of Dropped Calls	No. of Total Calls Received	% of Total Calls	No. of Admin Calls	No. of Dropped Calls	No. of Total Calls Received	% of Total Calls	No. of Admin Calls	No. of Dropped Calls	
JAN	67,216	81.48%	16,761	36,428	1,512	12,515	3,840	4.65%	108	61	9,825	11.91%	71	264	55	0.07%	49	0	
FEB	61,183	81.95%	15,453	33,690	1,275	10,765	2,950	3.95%	85	25	9,091	12.18%	40	204	43	0.06%	40	0	
MAR	66,991	82.64%	16,942	35,740	1,400	12,909	3,246	4.00%	104	57	9,446	11.65%	36	180	33	0.04%	32	0	
APR	63,932	82.60%	17,151	34,297	1,265	11,219	2,885	3.73%	66	38	9,030	11.67%	64	234	38	0.05%	31	0	
MAY	65,229	81.94%	17,074	35,560	1,276	11,319	3,093	3.89%	94	41	9,969	12.52%	223	504	33	0.04%	32	0	
JUNE	60,513	81.80%	15,679	32,958	1,287	10,589	3,218	4.35%	109	33	8,633	11.67%	112	255	36	0.05%	35	0	
JULY	64,350	82.18%	16,951	34,712	1,141	11,546	3,854	4.92%	120	48	9,004	11.50%	164	342	48	0.06%	43	0	
AUG																			
SEPT																			
ОСТ																			
NOV																			
DEC																			
YTD	449,414		116,011	243,385	9,156	80,862	23,086		686	303	64,998		710	1,983	286		262	0	
MON AVG	64,202	82.08%	16,573	34,769	1,308	11,552	3,298	4.21%	98	43	9,285	11.87%	101	283	41	0.05%	37	0	





July 1, 2025 - July 31, 2025

911 Calls with "no value"

During a meeting with representatives from HawaiianTel, Intrado, V2X, and PSAP representatives on March 27, 2025, it was determined that a classification of "no value" 911 calls may be the root cause of the reduction of 911 call volumes throughout the State of Hawaii PSAPs. These "no value" 911 calls lack information or data that determines the "Class of Service" of a 911 call. For example, a Landline, Wireless or VoIP call. The ANI (automatic number identification) may not contain a 10-digit number or other ALI data to properly determine the Class of Service. A definition from the Viper user's guide may also be a factor to consider:

"No Value" in reports:

When a trunk associated to a trunk group is not configured in Power 9-1-1, the trunk will be represented by "No Value" in a report.

The instructions below was followed, and the results are included below:

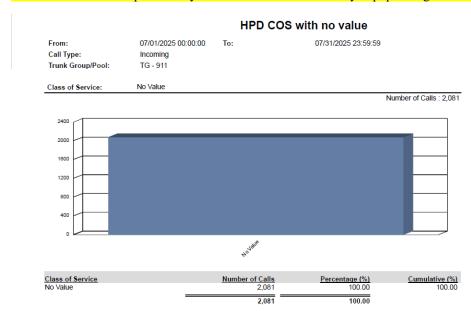
For PSAPs that have MIS_Power911_5.x data:

Calls identified with "No Value" will not appear in this report unless you specifically filter for "No Value".

No Value appears in the Others filter subcategory:

As of April 1st, 2025, the 911 Calls with "No Value" are added to the total 911 calls received at the PSAP for the month.

Call filters used to extract the number of "No value" calls are: Only incoming 911 calls on 911 Trunks with the class of service of "No Value" This is to prevent any Administrative calls that maybe populating the "No Value" totals.



The HPD 911 Center received 2,081 "No Value" calls in July which is reflected on the Monthly 911 Call Volume Report.





July 1, 2025 - July 31, 2025

PSAP OPERATION NOTES:

- A New Class of Service (COS): FIXD = Wireless 911 calls to the PSAP via fixed indoor antennas.
- x (911) calls with the COS of FIXD were added to the Wireless Phase I (WPH 1) percentage total.
- A New Class of Service (COS): WDL1/WDL2 = Wireless 911 calls to the PSAP via fixed indoor antennas with a general location i.e., pool area (WDL1) or a specific area i.e., room 101 (WDL2).
- x (911) calls with the COS of WDL1, or WDL2 were added to the Wireless Phase I or Phase II percentage total.

FOR YOUR INFORMATION

	FYIFor Your Information											
PSAP Operations												
	Statewide 911 Call Volumes											
PSAP 2024 2023 2022 2021 2020										20		
Oahu Civilian	974,278	73.07%	988,670	68.33%	971,113	69.45%	1,052,026	68.91%	991,016	71.11%		
RDC Pearl Harbor	25,072	1.88%	36,916	2.55%	31,827	2.28%	39,253	2.58%	37,014	2.66%		
Hawaii County	182,298	13.67%	207,715	14.35%	199,811	14.29%	214,220	14.00%	188,329	13.51%		
Maui County	111,385	8.35%	152,397	10.54%	140,524	10.05%	160,241	10.51%	125,626	9.01%		
Kauai County	40,310	3.03%	61,197	4.23%	54,923	3.93%	60,986	4.00%	51,653	3.71%		
Total	1,333,343	100.00%	1,446,895	100.00%	1,398,198	100.00%	1,526,726	100.00%	1,393,638	100.00%		

911 Call Volume % decrese from 2023 to 2024								
Oahu	-1.46%							
RDC	-32.08%							
Hawaii	-12.24%							
Maui	-26.91%							
Kauai	-34.13%							
State of Hawaii	-21.36%							

911 Calls with No ALI	% average for 2024
Oahu	0.99%
RDC	0.01%
Hawaii	0.15%
Maui	0.19%
Kauai	0.74%
State of Hawaii average	0.42%

State of Hawaii 2024								
TEXT TO 911								
Oahu Civilian 3,146								
RDC Pearl Harbor	39							
Hawaii County	1,186							
Maui County	408							
Kauai County	276							
*Total 5,055								
*Totals may include PSAP training,								

testing, and 911 Texting errors





July 1, 2025 - July 31, 2025

TEXT TO 911 OAHU CIVILIAN PSAPS - CURRENT MONTH - JULY 2025

	TEXT TO 911 Oahu Civilian PSAPs 2025					
Month	Total	HPD	HFD	EMS	os	911 (handled)
January	336	224	3	6	0	103
February	582	275	5	6	0	296
March	379	180	3	5	0	191
April	407	239	8	5	0	155
May	325	206	7	14	0	98
June	364	235	4	5	0	120
July	341	206	4	4	0	127
August						
September						
October						
November						
December						
YTD	2,734	1,565	34	45	0	1090
Monthly Avg.	390.6	223.6	4.9	6.4	0.0	155.7

NOTE:

- Although there is a "Text to 911" plot on the MapFlex, the location of the plot is not dependable. Text to 911 Dispatchers should use their skills to ascertain the exact location of the emergency response.
- The 9-1-1 handled texts were incidents in which the Division conducted testing or the texter texted 911 in error.

911 WIRELESS OAHU CIVILIAN PSAP TESTING - JULY 2025

	OAHU CIVILIAN - JULY 2025					
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:

NOTES:

• There were no (0) scheduled Wireless 911 Tests for the Oahu Civilian PSAP in July 2025.





July 1, 2025 - July 31, 2025

2. MSAG (MASTER STREET ADDRESS GUIDE)

OAHU CIVILIAN MSAG TRANSACTIONS CURRENT MONTH/YEAR - JULY 2025

OAHU		•	9-1-1 TRANSACTIONS						
CIVILIAN	Total	MSAG	A	LI Submitte	ed	Discre	Open ALI		Customer Addresses
2025	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Affected
JANUARY	366	8	358	0	0	3,756	0	0	78
FEBRUARY	327	1	326	0	0	3,718	0	0	0
MARCH	359	2	356	0	1	3,652	0	0	0
APRIL	328	5	322	0	1	3,275	0	0	235
MAY	247	0	247	0	0	3,299	0	0	0
JUNE	423	0	423	0	0	3,273	0	0	0
JULY	812	18	794	0	0	3,328	0	0	34
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	2,862	34	2,826	0	2				347
AVG PER MONTH	409	5	404	0	0				50

Definitions

(A) Master Street Address Guide - Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.

- (B) **T**elephone **N**umber **C**hange **R**equest Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 199 attached to them which indicates the need for validation.
- (C) **A**utomatic **L**ocation **I**nformation **D**iscrepancy **R**ecord Represents an address discrepancy discovered during a live 9-1-1 call, from a landline. These record corrections are treated with a higher priority and should be processed within 48 hours as a general guideline.
- (D) **V**oice **o**ver **I**nternet **P**rotocol **D**iscrepancy **R**ecord Represents an address discrepancy discovered during a live 9-1-1 call, from a VoIP phone. These record corrections are treated with a higher priority and should be processed within 72 hours as a general guideline per Time Warner Operations Center. MSR tracking effective April 2014.





July 1, 2025 - July 31, 2025

OAHU CIVILIAN MSAG CURRENT MONTH NOTES:

A total of **812** MSAG transactions were processed in 9-1-1 Net during the current reporting month. Eighteen **(18)** requests were processed relating to the MSAG database which include: changes to high – low street ranges, combining street records, deletion of invalid records, splitting street records to align with Police, Fire, EMS and Military response areas, and inserting new MSAG records.

There were 34 customers ANI/ALI (telephone/address) records updated as a direct result.

OAHU CIVILIAN TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

V2X processed five hundred two (502) TN CRs related to the Dispatchable Location Project during the current month.

OAHU CIVILIAN OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

• There are currently 3,328 Open TN CRs.

3,328 Open TN CR transactions are a result of the Dispatchable Location project. V2X continues to monitor and track the progress of the Referred records. Once a telephone number is submitted to Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado's internal process requires calling each telephone customer individually for approval to update an address in the 9-1-1 database.

- There are no Open ALI-DRs as of July 31, 2025
- There is no Open VoIP DRs as of July 31, 2025





July 1, 2025 - July 31, 2025

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – JULY 2025

NOTE:

- 9-1-1 NET is a secure web-based application that provides access to request changes to the MSAG, ALI, TN, and ESN/ELT data supported and maintained by Intrado for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

	PSAP 9-1-1 Telephone Number Location Change Request					
	(Telephone Number Change Request (TNCR) Status)					
PSAP	TOTAL TNCR RECORDS SUBMITTED BY V2X	OPENED TNCRS PENDING FURTHER ACTION BY INTRADO	OPENED TNCRS REFERRED TO TELCO BY INTRADO	TOTAL UNOPENED TNCR RECORDS		
OAHU CIVILIAN	3,328	39	3,289	0		

STATUS

TOTAL TNCRs SUBMITTED - The total number of TNCR requests for modification that have been submitted in 9-1-1 **PENDING STATUS** - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and are pending investigation whether the request is valid or invalid, and/or whether the request requires additional information to validate.

REFERRED STATUS - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and the request requires additional information to validate. The Intrado Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.

<u>TOTAL UNOPENED TNCR RECORDS STATUS</u> - The request is submitted by V2X on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.





July 1, 2025 - July 31, 2025

DISPATCHABLE LOCATION - STATUS AS OF - JULY 2025

NARRATIVE:

During the August 2015 State of Hawaii 911 Board meeting, V2X provided a "State of Hawaii PSAPs Proposed ALI Compliancy with FCC 15-9" presentation. Based on the 9-1-1 Board's confirmation to add the "Dispatchable Location" information into the ALI database, V2X researched the format standards of each pertinent field and tested the delivery of the data to the PSAP. After a few configuration adjustments (eliminating the TelCo comments field from appearing on the ALI Screen), V2X standardized an additional information data format to proceed with this project.

The "Dispatchable Location" data is entered into the "Driving Directions" field in the 9-1-1 Net system and will display on the Viper Power 911 ALI Screen in the "Exact" field should a 911 call be received from that telephone number. The Windward Mall will be the pilot location starting in July 2018. There were 528 transactions submitted and 502 processed in July 2025.

Dispatchable Location					
2025 Quarter 3	Common Name Place MSAG Address	Transactions			
Quarter 2 Carryover		1,854	1,872		
	Poincina Manor Condos, 1015 Aoloa Pl, Kailua	65	65		
	Windward Cove Condos, 1020 Aoloa Pl, Kailua	40	40		
	Windward Harbour Condos, 1030 Aoloa Pl, Kailua	32	31		
	Kaohao School, 140 Alala Rd, Kailua	17	17		
	Kainalua Elementary School, 165 Kaiholu St, Kailua	20	20		
	AP Power Systems, 201 Kapaa Quarry Rd, Kailua	97	97		
July	Hawaiian Telcom, 253 Iliaina St, Kailua	44	43		
	Aikahi Elementary School, 281 Ilihau St, Kailua	8	8		
	Windward Passage Condos, 322 Aoloa St, Kailua	91	91		
	Gardenia Manor Condos, 333 Aoloa St, Kailua	28	28		
	Kailua Assembly of God Church, 699 Iliaina St, Kailua	2	2		
	Kalaheo High School, 730 Iliaina St, Kailua	36	36		
	Pali Palms Plaza, 970 N Kalaheo Ave, Kailua	48	24		
August		·			
September					
Q3		528	502		
Total		2,382	2,374		





July 1, 2025 - July 31, 2025

SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT – JULY 2025

V2X received the Automatic Location Identification (ALI) records from Spectrum (formally known as Charter Communications) which is the predominant Voice over Internet Protocol (VoIP) provider in the State of Hawaii. As V2X has access to these ALI Records, V2X is researching and verifying the VoIP records against an MSAG valid address and the GIS data. This research is a validation of the ALI Record to ensure that the location provided by the VoIP provider matches the GIS Information utilized by the Public Safety Agencies within their specific County 9-1-1 Service Area. This validation reduces the potential of address or location dispute during a 9-1-1 call.

The analysis of the database records indicates that there are invalid MSAG addresses utilized by the VoIP Provider. These records are being identified and will be sent back to Spectrum for corrective action.

	*Spectrum (Charter)				
	9-1-1 VoIP I	Database Veri	fication P	Project	
PSAP	TOTAL RECORDS SUBMITTED BY SPECTRUM (A)	TOTAL RECORDS MATCHING & VERIFIED WITH 911 DATABASES (B)	TOTAL RECORDS NOT MATCHING	BY V2X FORMERLY	PERCENT COMPLETED
				AKIMEKA (C)	
HAWAII County	22,044	21,638 (98%)	406	406	100.00%
KAUAI County	8,936	8,695 (97%)	241	241	100.00%
MAUI County	18,256	17,517 (96%)	739	739	100.00%
OAHU Cilivian	87,414	85,329 (98%)	2,085	2,085	100.00%
OAHU Military	3,663	710 (19%)	2,953	2,953	100.00%
TOTAL	140,313	**133,889	6,424	6,424	100.00%

^{*} Spectrum VoIP Database received on June 21st, 2017

^{**} V2X provided VoIP Records with Latitude/Longitude coordinates

(A)	VoIP Database records submitted by Spectrum to V2X for research and MSAG address validation.
(D)	V2X has researched and verified the VoIP record against an MSAG valid address and GIS data. V2X is tracking corrections needed to be performed by Spectrum. Addressing data will be updated or added in the GIS if the VoIP record is determined to be valid.
(C)	Verifcation Process Completed.





July 1, 2025 - July 31, 2025

BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT – JULY 2025

V2X received the Automatic Location Identification (ALI) records from Bandwidth which is a Voice over Internet Protocol (VoIP) provider in the State of Hawaii. As V2X has access to these ALI Records, V2X researched and verified the VoIP records against an MSAG valid address and the GIS data. This research is a validation of the ALI Record to ensure that the location provided by the VoIP provider matches the GIS Information utilized by the Public Safety Agencies within their specific County 9-1-1 Service Area. This validation reduces the potential of address or location dispute during a 9-1-1 call.

The analysis of the database records indicates that there were invalid MSAG addresses utilized by the VoIP Provider. These records were identified and sent back to Bandwidth for corrective action.

V2X will update the chart below as we receive updated ALI records from Bandwidth.

	*Bandwidth					
9-1-1	VoIP Databa	ase Verificatio	n Project *	**(Updated	l)	
PSAP	TOTAL RECORDS SUBMITTED BY BANDWIDTH (A)	TOTAL NO MATCHING RECORDS IDENTIFIED BY V2X (FORMERLY AKIMEKA)	BANDWIDTH FALLOUT RECORDS (B)	NON MATCHING RECORDS CORRECTED BY V2X (FORMERLY AKIMEKA) (C)	PERCENT COMPLETED	
HAWAII County	2,126	97	16	106	93.81%	
KAUAI County	555	75	3	73	93.59%	
MAUI County	1,794	60	14	69	93.24%	
OAHU Cilivian	12,898	1,556	44	1,590	99.38%	
OAHU Military	173	156	11	163	97.60%	
TOTAL	17,546	1,944	88	2,001	95.52%	

^{*}Bandwidth VoIP Database received on April 5th, 2018

^{***} Updated Bandwidth VoIP Database received on October 1st, 2021

(A)	VoIP Database records submitted by Bandwidth to V2X for research and MSAG address validation.
(B)	VoIP records identified by Bandwidth as fallout records. These records contain invalid MSAG addressing information which can include house number, street name/suffix, or MSAG community.
(C)	Verifcation Process Completed.



^{**}Updated Bandwidth VoIP Database received on September 6th, 2018



July 1, 2025 - July 31, 2025

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JULY 2025

MAPPING LAYERS UPDATED (PART I)

OAHU CIVILIAN PSAPS				
	V2X GIS Server			
Type of Layer	Date Created/ Edits Performed	Other/Remarks		
CRITICAI	9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE		
		(Listed Alphabetically)		
		Next Delivery 8/8/2025		
		Corrected routing ID, added location name, location type, corrected		
		spatial for twenty-eight (28) records in Waipio		
		Added new address point for one (1) record in Kaneohe		
		Corrected routing ID, added location name, location type, building,		
		apartment, corrected spatial for one (1) record in Waipio		
		Added apartment for one (1) record in Kaneohe		
	7/25/2025	Added new address point for one (1) record in Kahaluu		
		Corrected spatial for one (1) record in Kaneohe		
		Added new address point for one (1) record in Aiea		
	7/25/2025 To	Corrected TMK for one (1) record in Waimanalo		
	7/31/2025	Added new address point for one (1) record in Kailua		
Address Points		Corrected spatial for one (1) record in Makiki		
		Corrected spatial for one (1) record in Kaaawa		
		Corrected routing ID for one (1) record in Waipio		
		Added location name, location type for one (1) record in Mokuleia		
		Corrected spatial for one (1) record in Punaluu		
		Added new address point for one hundred and thirty-one (131) records in		
		Punaluu		
		Added new address point for one (1) record in Aina Haina		
		Added new address point for two hundred and thirty-six (236) records in		
		Waipio		
	7/11/2025	Delivered 7/25/2025		
	То	Added location type for one (1) record in Hawaii Kai		
	7/24/2025	Added new address point for one (1) record in Waianae		





July 1, 2025 - July 31, 2025

MAPPING LAYERS UPDATED (PART II)

		OAHU CIVILIAN PSAPS
Type of Layer	V2X GIS Server Date Created/	Other/Remarks
	Edits Performed	
CRITICAL	2 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE
		(Listed Alphabetically)
		Corrected location name, spatial for one (1) record in Kaaawa
		Added new address point for nine (9) records in Kailua
		Corrected spatial, apartment for five (5) records in McCully
		Corrected spatial for one (1) record in Makiki
		Corrected spatial, added location type for one (1) record in Manoa
		Corrected house number for one (1) record in Airport
		Corrected spatial, location type for one (1) record in McCully
		Corrected spatial for one (1) record in Pearl City
		Added new address point for thirty-eight (38) records in Kalihi
		Added location type, corrected spatial for two (2) records in Makiki
		Added new address point for three (3) records in Kaimuki
	7/11/2025	Added location type for one (1) record in Kaimuki
Address Points	То	Corrected spatial, added location name, location type for one (1) record
	7/24/2025	in McCully
		Added new address point for two (2) records in Wahiawa
		Added new address point for twenty-four (24) records in Kapahulu
		Added new address point for one (1) record in Mililani
		Added new address point for one (1) record in Waialae
		Corrected street name for one (1) record in Waipio
		Added new address point for eighty-six (86) records in Kaaawa
		Added location type, corrected apartment, spatial for one (1) record in
		Makiki
		Corrected house number for one (1) record in Haleiwa
		Corrected location name, spatial, removed apartment for one (1) record
		in Kaaawa





July 1, 2025 - July 31, 2025

MAPPING LAYERS UPDATED (PART III)

		OAHU CIVILIAN PSAPS
Type of Layer	V2X GIS Server Date Created/	Other/Remarks
	Edits Performed	
CRITICAI	2 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE
		(Listed Alphabetically)
		Added new address point for four hundred and eighty-three (483) records in McCully
		Added location type for one (1) record in Kalihi
		Corrected spatial, location name for one (1) record in Kaaawa
		Added location name, location type, corrected spatial for one (1) record in McCully
		Added new address point for thirty-six (36) records in Kaneohe
		Added new address point for one (1) record in Makakilo
		Added new address point for one (1) record in Mokuleia
		Added new address point for one (1) record in Ewa Beach
	7/11/2025	Added apartment for one (1) record in Waipio
Address Points	7/11/2025 To	Added location type for one (1) record in Waialae
Address I office	7/24/2025	Added location type for one (1) record in Waipio
		Corrected spatial, added location type for one (1) record in McCully
		Corrected spatial, routing ID for two (2) records in Kalihi
		Corrected house number, added Alias1 for fifty-six (56) records in Waikiki
		Corrected routing ID for one hundred and seventeen (117) records in Kalihi
		Corrected spatial, apartment, added floor for three (3) records in McCully
		Added new address point for two hundred and eighty-seven (287)
		records in Makiki
		Corrected spatial, added location type for one (1) record in Makiki
		Corrected spatial for two (2) records in Ewa Beach
		Added new address point for twenty-four (24) records in Pearl City





July 1, 2025 - July 31, 2025

MAPPING LAYERS UPDATED (PART IV)

	OAHU CIVILIAN PSAPS					
Type of Layer	V2X GIS Server Date Created/ Edits Performed	Other/Remarks				
CDITICAL		CAPPENIA AVEDO DOD DICDATICIA A DECRONGE				
CRITICAL	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)					
	7/11/2025	Added new address point for three (3) records in Manoa				
	То	Corrected spatial for four (4) records in McCully				
	7/24/2025	Corrected spatial for two (2) records in Kapahulu				
		Delivered 7/11/2025				
		Added new address point for one (1) record in Hawaii Kai				
		Added new address point for one (1) record in Kaimuki				
		Added new address point for one (1) record in Kahala				
		Added new address point for one (1) record in Laie				
		Added new address point for three (3) records in Kaneohe				
		Added new address point for two (2) records in Makaha				
Address Points	7/4/2025	Corrected spatial for one (1) record in Manoa				
	7/1/2025 To	Corrected spatial for nine (9) records in Moanalua V				
	7/10/2025	Added new address point for one (1) record in Kahaluu				
		Added new address point for eight (8) records in Moanalua V				
		Added new address point for two (2) records in Ewa Beach				
		Added new address point for four (4) records in Kailua				
		Added new address point for one (1) record in Kahuku				
		Added new address point for two (2) records in Manoa				
		Added new address point for three (3) records in Kalihi				
		Added new address point for one (1) record in Waipahu				
		Added new address point for one (1) record in Waipio				
Airports						
AMR Response Areas						
Bridges						
Building Footprints						
Bus Stops						





July 1, 2025 - July 31, 2025

MAPPING LAYERS UPDATED (PART V)

OAHU CIVILIAN PSAPS						
	V2X GIS Server					
Type of Layer	Date Created/ Edits Performed	Other/Remarks				
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE						
		(Listed Alphabetically)				
Churches						
Coastal Names						
Coastline						
Common Places						
Correctional Facilities						
Emergency Callboxes						
Emergency Operation						
Centers						
Emergency Shelters						
ESZ/ESN						
Fire Beats						
Fire Districts						
Fire Response Areas						
Fire Stations						
Food & Beverage						
Gas Stations						
Gate Codes						
Government Buildings						
Harbors						
Helipads						
Hiking Trails						
Hospitals						
Hydrants						
Hyrdology Layers						
Incident Response Areas						





July 1, 2025 - July 31, 2025

MAPPING LAYERS UPDATED (PART VI)

OAHU CIVILIAN PSAPS							
	V2X GIS Server	0.4 /0 1					
Type of Layer	Date Created/ Edits Performed	Other/Remarks					
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE							
	(Listed Alphabetically)						
Lodging							
Major Roads							
Medic Beats							
Medic Districts							
Medic Response Areas							
Medic Stations							
Medical Facilities							
Milepost Markers							
Military Response Areas							
MSAG Communities							
Net Junctions							
Ocean Rescue Boundaries							
Ocean Safety							
Parcels							
Parks							
Parks Polygon							
	7/11/2025	Delivered 7/25/2025					
Points of Interest	То	Corrected spatial for one (1) record in Haleiwa					
	7/24/2025	Corrected spatial for ten (10) records in Ewa Beach					
Police Beats							
Police Districts							
Police Response Areas							
Police Stations							
Post Offices							
Schools							





July 1, 2025 - July 31, 2025

MAPPING LAYERS UPDATED (PART VII)

OAHU CIVILIAN PSAPS				
Type of Layer	V2X GIS Server	Other/Remarks		
Type of Layer	Date Created/	Other/Remarks		
	Edits Performed			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE				
		(Listed Alphabetically)		
		Next Delivery 8/8/2025		
	7/25/2025	Flipped segment two (2) records in Waipio		
	To	Flipped, split segment, corrected range for two (2) records in Waipio		
	7/31/2025	Corrected speed limit for one (1) record in Ewa Beach		
		Added ingress for eighteen (18) records in Waipio		
		Split segment, corrected range for two (2) records in Waipio		
		Delivered 7/25/2025		
		Removed MSAG no 1 for one (1) record in Waikiki		
		Corrected range for one (1) record in Hokulani		
		Corrected MSAG communtiy, removed MSAG no 1 for one (1) record in		
	7/11/2025 To 7/24/2025	Kaneohe		
Street Centerlines		Corrected range for one (1) record in Hale Moku		
Street Centermies		Split segment, corrected range for five (5) records in Kalihi		
		Removed MSAG no 1 for twenty-seven (27) records in Airport		
		Corrected range for seventeen (17) records in Ewa Beach		
		Removed MSAG no 1 for two (2) records in Kalaeloa		
		Removed MSAG no 1 for two (2) records in Kalihi		
		Removed MSAG no 1 for three (3) records in Mililani		
		Added ingress for four (4) records in Kalihi		
		Removed MSAG no 1 for one (1) record in Kunia		
	7/4/2025	Delivered 7/11/2025		
	7/1/2025 To	Added new segment for thirty-one (31) records in Ewa Beach		
	7/10/2025	Corrected oneway for nine (9) records in Kapolei		
		Corrected range, split segment for two (2) records in Ewa Beach		





July 1, 2025 - July 31, 2025

MAPPING LAYERS UPDATED (PART VIII)

OAHU CIVILIAN PSAPS				
	V2X GIS Server			
Type of Layer	Date Created/ Edits Performed	Other/Remarks		
CRITICAL	2 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
	7/1/2025	Corrected range for seven (7) records in Ewa Beach		
Street Centerlines	То	Corrected oneway for five (5) records in Makakilo		
	7/10/2025	Corrected oneway for ten (10) records in Ewa Beach		
Subdivisions				
Tow Jurisdictions				
Tsunami Evacuation Zones				
Tsunami Heights				
Waste Water Plants				
	7/25/2025	Next Delivery 8/8/2025		
	То	Added forty-one (41) sectors per Verizon Wireless CRS		
	7/31/2025	Updated thirty-four (34) sectors per Verizon Wireless CRS		
		Delivered 7/25/2025		
WSP Cell Sectors	7/11/2025	Added twenty-two (22) sectors per AT&T CRS		
wor cen sectors	То	Added thirty-nine (39) sectors per Verizon Wireless CRS		
	7/24/2025	Updated one hundred and sixty-eight (168) sectors per Verizon Wireless		
		CRS		
	7/1/2025 To	Delivered 7/11/2025		
	7/10/2025	Added twenty-two (22) sectors per AT&T CRS		
WSP Cell Towers				





July 1, 2025 - July 31, 2025

GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVE

GIS KEY ACTIVITIES/UPDATES

• GIS Key activities include the events such as GIS deliverables, meetings, agreements, etc. (see chart on next page)

Date	Key Activities/Updates
7/11/2025	Delivered data update for Central Square including Streets, Police Beats, and Address Points (with and without the apartment records).
7/11/2025	Delivered Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD.
7/11/2025	Delivered Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety.
7/11/2025	Delivered address points with civic addresses and postal communities to Intrado, for upload to SCC.
7/14/2025	Delivered full schema (all columns) for address points and points of interest to ITD, for potential changes to the deliverable format
7/25/2025	Delivered data update for Central Square including Streets, Police Beats, and Address Points (with and without the apartment records).
7/25/2025	Delivered Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD.
7/25/2025	Delivered Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety.
7/25/2025	Delivered address points with civic addresses and postal communities to Intrado, for upload to SCC.





July 1, 2025 - July 31, 2025

GIS FOR 911

As part of ensuring GIS data compatibility with 911 CAD systems, V2X removed certain spatial characteristics of street centerlines known as "true curves". True, or geometric, curves are sometimes used in the street centerline layer to depict a road that curves in a circular (or semi-circular) fashion, like a round-about or a cul-de-sac. These features can cause processing issues in CAD and GIS software and therefore were replaced with a series of points that depict the same geometry without the use of a geometric, or true curve.

HONOLULU POLICE DEPARTMENT TRITECH CAD PROJECT

On October 10, 2018, V2X participated along with the CAD project team of the Honolulu Police Department on a teleconference GIS kickoff meeting with the TriTech CAD Company. Items that were discussed were GIS requirements for the CAD and RMS systems.

On October 25, 2018, V2X's initial delivery of 11 GIS layers to the TriTech FTP site included: Address Points, Airports, Coastline, Fire Response Areas, Medic Response Areas, MSAG Communities, Parks, Police Beats, State Boundary, Streams, and Street Centerlines.

Two spreadsheets describing the layers were also provided on the FTP site.

During the month of July 2022, the Honolulu Police Department (HPD) requested an updated map of the Police Sectors and Police Beats for District 8. The updates for District 8 have been loaded into the CAD as of July 22, 2022.

- 1. District 8 now consists of 4 sectors. Sector 3 was divided in two to create a new Sector 4.
 - Sector 1 includes Beats 850, 852, 854, 856.
 - Sector 2 includes Beats 857, 858, 860, 861, 863.
 - Sector 3 includes Beats 865, 867, 870, 871, 872.
 - Sector 4 includes Beats 874, 875, 876, 877, 878, 879.
- 2. The boundaries for the following beats were updated:
 - Beats 850 and 852 was updated to follow the south boundary of Makaha Valley Country Club instead of Noholio Rd and Makaha Valley Rd. Beat 852 takes care of everything north of Noholio Rd up to the south boundary of Makaha Valley Country Club.
 - Beats 857 and 858 was updated to follow Saint Johns Road down to Farrington Highway and to the shoreline of Maili Beach Park instead of following Mailiili Stream. Beat 857 takes care of everything west of Saint Johns Road and Beat 858 takes care of everything east of Saint Johns Road.
 - Beats 861 and 863 was updated to follow Nanakuli Avenue south to Farrington Highway then along the west fence line of Nanakuli Beach Park. Beat 861 takes care of everything west of Nanakuli Ave and Beat 863 takes care of everything east of Nanakuli Ave.
 - Beat 863 was updated to take care of Waimanalo Gulch. Everything east of Waimanalo Gulch up to Palailai Gulch has been assigned to Beat 865.
 - Ka Makana Alii mall in Kapolei has been assigned to Beat 871 instead of Beat 872.
 - Honouliuli Water Treatment has been assigned to Beat 874 instead of Beat 871.
 - Beats 872 and 879 has been updated to follow Kualakai Parkway as their division boundary instead of cutting through the newly developed area that continues to be developed.
 - Beat 874 has been updated to follow Kualakai Parkway instead of the western fence line along the Ewa Villages Golf Course.
 - Beats 877 and 878 has been updated to follow the NAVMAG West Loch fence line instead of cutting through the agriculture area near Iroquois Road.





July 1, 2025 - July 31, 2025

MAPFLEX/SCC SYSTEM

July 2025

V2X delivered GIS data to the MapFlex/SCC system on the following dates in July 2025

Hawaii County – July 8, 2025, and July 22, 2025 **Maui County** – July 9, 2025, July 23, 2025 **Kauai County** – July 10, and July 24, 2025 **Honolulu** – July 11, 2025, and July 25, 2025

MAPFLEX ISSUES

The MapFlex issues are archived in the 2021 Monthly Status Report. Should the existing issues be addressed, this report will be reopened and tracked.

SPEED LIMIT UPDATES

Beginning in April 2017, and now that the Street Centerline data has achieved not only an above 98% synchronization rating but also a high degree of accuracy in the spatial accuracy, a new project to correct speed limits has begun. The project is beginning in Waimanalo and continuing in a counterclockwise patter around the island of Oahu. The initial focus is on Highways, Freeways, and other major roads, but also not limited to additional corrections, especially those which are immediately identified to positively impact vehicle routing, etc.

All updates are shared directly with the PSAPs and the agency most affected (positively) is HFD since they actively use vehicle routing, and this will assist in better CAD unit recommendations. During each GIS delivery, a list of updates is being provided.

1. During July 2025, one street segment was updated to reflect posted speed limit restrictions along H-1 West Freeway.

ROUTING ID UPDATES

Beginning in July 2019, all Address Points and Points of Interests will be assigned a Routing ID to ensure that routing to these addresses are correct. The project begins in Waimanalo and continuing in a counterclockwise pattern around the island of Oahu.

All updates are shared directly with the PSAPs and the agency most affected (positively) is HFD since they actively use vehicle routing, and this will assist in better CAD unit recommendations. During each GIS delivery, a list of updates is being provided.

1. During the month of October 2024, there were no Routing IDs added. As of May 2024, the Routing ID updates has been completed for all address points and points of interest. Any new address points and points of interest will be assigned with a Routing ID.





July 1, 2025 - July 31, 2025

HONOLULU EMS RESPONSE AREA

During the month of December 2017, EMS requested a high-resolution map of the Honolulu Response Area which will be divided into 5 separate response areas to better support the EMS operations and ambulance response times.

- 1. With HPD's approval, V2X prepared a map of the requested area and provided to EMS on December 12, 2017.
- 2. Considering the additional response areas will certainly require the creation of additional ESZ/ESNs; HPD, EMS, and V2X will be coordinating so that the project can be mapped out on a timeline so that the changes can take place while maintaining an above 99% synchronization level between GIS, MSAG, and ALI.
- 3. An operational consideration has already begun to have a discussion, in that the military ESNs will be reallocated to a new numbering so that both civilian and military responses will have enough ESNs to support their individual operations.
- 4. During the first half of 2018, there will be further discussion on the creation of the new Response Areas, allocation of military ESNs, and creation of new ESZs/ESNs.
- 5. During the month of October 2019, EMS requested an updated map of the Honolulu Medic Response Area which was divided based on drive time analysis. There are now 21 (twenty-one) Medic Response Areas in Oahu.
- 6. During the month of August 2021, EMS requested an updated map of the Honolulu Medic District and Honolulu Medic Response Area which were extended out from the coastline. A Medic District was also added. There are now three (3) Medic Districts.
- 7. During the month of January 2022, there was a quarterly update to the Honolulu Medic Response Area.
- 8. During the month of May 2022, there was a quarterly update to the Honolulu Medic Response Area.
- 9. During the month of November 2022, there was a quarterly update to the Honolulu Medic Response Area.
- 10. During the month of May 2023, there was a quarterly update to the Honolulu Medic Response Area.
- 11. During the month of August 2023, there was a quarterly update to the Honolulu Medic Response Area.
- 12. During the month of January 2024, EMS requested an additional EMS District (District 4). The new boundaries include EMS Station Response Areas Kahuku, Waialua, Wahiawa, Waipio, and Aiea. There are now four (4) Medic Districts





July 1, 2025 - July 31, 2025

4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS - JULY 2025

#	Date	Description	Category	Comments
		None		

NOTE:

There are no (0) open service requests for July 2025.

SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY – 2025

Oahu PSAPs			MSAG SERVICE REQUEST CATEGORIES							
2025	TOTAL	ΓAL	0	WIRE	WIRELINE		WIRELESS		VolP	
2025	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed	
2024 Carryover*			1							
January	5	5	1	0	0	0	0	6	5	
February	0	0	0	0	0	0	0	0	1	
March	17	17	0	0	0	0	0	17	17	
April	18	18	0	0	0	0	0	18	18	
May	11	11	0	0	0	0	0	11	11	
June	1	1	0	0	0	0	0	1	1	
July	0	0	0	0	0	0	0	0	0	
August										
September										
October										
November										
December										
TOTAL	52	52	0	0	0	0	0	53	53	
Note:	* The 2024 Carryover row indicates the number of Service Requests that were opened in 2024; however, were brought forward into 2025 in an effort to track the service request until completion.									

	Category	Description
	Wireline	Telephone Number (ALI) Discrepancies from land line phones that have been submitted to Intrado via 9-1-1 Net for correction.
<u>Definitions:</u>	Wireless	Telephone Number (ALI) Discrepancies from phones that were land lines at one time, and were ported out to a wireless carrier. However, the phone number was never removed from the MSAG database.
	VoIP	Received 911 (ALI) Discrepancies from VoIP providers and returned with a valid MSAG address for 911.





July 1, 2025 - July 31, 2025

5. E9-1-1 OAHU CIVILIAN DATABASE SYNCHRONIZATION

(<u>Reference:</u> NENA 71-501, Version 1.1 – NENA Information Document for Synchronizing Geographic Information System databases with MSAG & ALI)

The database synchronization process is an essential ongoing and continuous process to ensure the E9-1-1 databases used in the Selective Router (SR), and the Honolulu Police Department (HPD) 9-1-1 GIS layers used for location determination are exactly matched. This process ensures that the 9-1-1 databases and the GIS data remain current, exactly matched, and are synchronized and useful for 9-1-1 purposes. This process also prepares the GIS data for use in Next Generation 9-1-1 (NG911) systems, operations, and applications.

In 9-1-1, Public Safety Agencies (PSAs) are allocated and assigned Emergency Service Zones (ESZs) identified by their respective Emergency Service Numbers. These ESZs and ESNs are maintained by the Primary PSAP for Selective Router (SR) programming use. The entire County Jurisdiction Zone is referred to as an Administrative ESZ. Each PSA is required by Tariff to assign their Response Areas (RAs) based on their operational requirements and assignments within the ESZ. Smaller and more accurate ESZs are created for the geographic areas that have the same PSAs and assigned an Emergency Service Number (ESNs) which are known as a Routing ESNs, or ESNs.

The street names and associated addresses within the ESNs must be translated into a data format that is useful to the SR, the public safety agencies, and their 9-1-1 systems. Translated addresses for 9-1-1 must include the house numbers, street names, street name suffixes, MSAG Communities and are assigned to each of the PSA response areas. These translated addresses are referred to as "valid MSAG addresses" and are applied to both the MSAG and GIS databases. The data must be formatted to traverse throughout 9-1-1 networks & systems. This must also be done for the Public Safety Agencies to ensure there is no loss of data characters or data truncation for their internal and external 9-1-1 systems.

These MSAG street names and MSAG Communities might not be recognized in the County's authoritative addressing Agency and are intended for Public Safety Agency use only. Since neither database is static in nature, the synchronization process will never remain at a 100 percent match rate. It can be expected that the match rate percentage will fluctuate by a small degree each month. As such, NENA's recommended match rate between these critical databases is minimum 98%.

As part of V2X's value added services, V2X conducts four quarterly, in-depth 9-1-1 Database Synchronization audits per year for the Honolulu Police Department. They are conducted in January, April, July, and October of each Calendar Year (CY) while under contract with V2X. The database synchronization process is an essential process to ensure the level of accuracy and synchronization of the E9-1-1 databases in preparation for Next Generation 9-1-1 (NG9-1-1) applications.

The results of July 1, 2025, database synchronization audit are reported below.

TWO-WAY (2-WAY) COMPARISION

V2X's two-way database comparison service provides for comparing the Local Exchange Carriers (LECs) MSAG Database to the Honolulu Police Department's 9-1-1 GIS Street Centerline layer. This ensures the Telephone or VoIP Telephone Company device information is accurate and correct. This information is utilized to route the 9-1-1 call to the PSAP, and the associated location information delivered ALI Datastream is used to dispatch appropriate emergency responders. This also ensures the necessary data elements for 9-1-1 caller location based on street name, MSAG Community, and Emergency Service Numbers (ESNs) are delivered to the PSAP, in the exact format that matches the HPD 9-1-1 GIS layers.



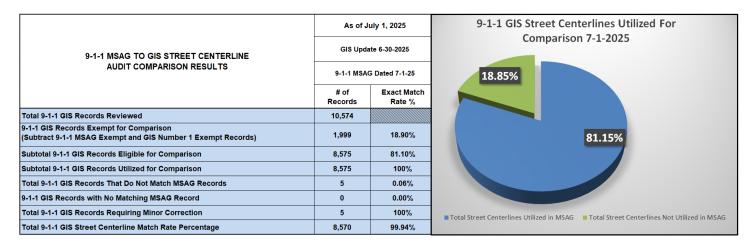


July 1, 2025 - July 31, 2025

9-1-1 GIS Street Centerlines Utilized For Comparison

A total number of **10,574** GIS Street Centerline Records are maintained for the Honolulu Police Department's 9-1-1 GIS database by V2X. For this comparison, **1,999** GIS street records were excluded as database exemptions. V2X excludes GIS Street Centerlines records from the comparison that do not have the possibility of generating a telephone company 9-1-1 wireline call. Those would include roadways that do not have an MSAG address such as, Freeways, Ramps, and alleys. The remaining **8,575** GIS street records called "Valid 9-1-1 GIS Street Centerline records" and are compared against the Valid MSAG Records. There are a total of **8,570** GIS Street Centerline Records that exactly match the MSAG Database.

The results of the GIS to MSAG Records comparison analysis are provided below:



9-1-1 GIS Street Centerline to MSAG Record Comparison

A total of **8,579 9-1-1 MSAG records** are maintained for the Honolulu Police Department's 9-1-1 GIS database by V2X. V2X removed **6 MSAG records** from the comparison as exemptions. These exemptions are the MSAG Records utilized for wireless 9-1-1 Call routing, 9-1-1 VoIP Call Routing, and 9-1-1 GIS Street Centerline record that are known and approved exemptions such as Freeways or Roadways with no chance of generating a 9-1-1 call. These MSAG Records are known as "Valid MSAG records". The remaining valid MSAG Records are Street Names that have undergone a 9-1-1 Street translation process to ensure they can be utilized in the 9-1-1 system. These translated street names, MSAG Communities, and their assigned Emergency Service Numbers (ESNs) are provided to the telephone company and other 9-1-1 Service Provider for Public Safety Agencies 9-1-1 addressing use. The total number of MSAG records utilized for this comparison audit was **8,573 MSAG records**. Of those Valid MSAG Records, there are a total of **8,568** MSAG Records that exactly match the 9-1-1 Street Centerline GIS Database.

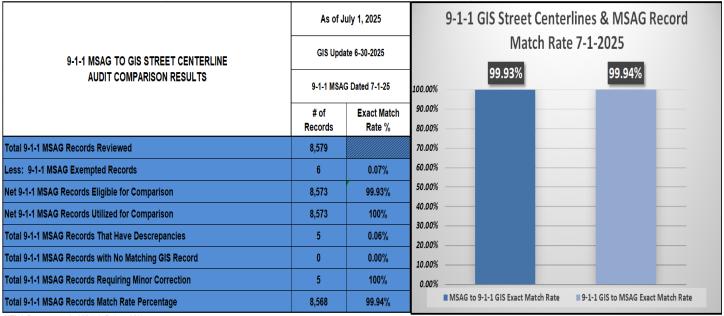




July 1, 2025 - July 31, 2025

The street name and MSAG Community translation process ensures that the full data characters within the delivered ALI datastream can transverse between the different systems in the 9-1-1 network without loss of data characters.

The results of the MSAG comparison analysis are provided below:



NENA Recommended Match Rate = 98%

THREE-WAY (3-WAY) COMPARISION

(<u>Reference:</u> NENA 71-501, Version 1.1 – NENA Information Document for Synchronizing Geographic Information System databases with MSAG & ALI)

The three-way database comparison services compare the Local Exchange Carriers (LECs) Automatic Location Identification (ALI) Database to the HPD's 9-1-1 GIS Site Structure Points layer and the 9-1-1 Road Network (or 9-1-1 Street Centerline) layers.

This process ensures PSAP's internal 9-1-1 equipment (i.e... the Computer Aided Dispatch systems (CADs), Records Management Systems (RMS), Automatic Vehicle Location (AVL) systems, and the Voice Recording Systems) will be able to display an accurate location on their GIS-enabled systems. The internal PSAP 9-1-1 equipment will also log-in the delivered location data information as either a civic address or in a Geodetic (Lat/Long) format for 9-1-1 Dispatch and Response. It can be expected that the match rate percentage will fluctuate by a small degree. As such, NENA's recommended minimum exact match rate is 98%.





July 1, 2025 - July 31, 2025

9-1-1 GIS Street Centerline To ALI Record Attribute Match Rate

The 9-1-1 GIS Street Centerline to ALI records attribute comparison is used to identify the "course location", or main MSAG valid address that will geocode to the street centerline data. Geocoding is the process of assigning a geographic coordinate for a location and converting it to a valid address utilizing the tabular address information to geographic reference information. This is a proactive way to identify any inconsistencies and enhance the accuracy of all associated 9-1-1 databases, and to ensure the proper operation of the PSAP 9-1-1 systems such as Automatic Vehicle Location (AVL). There are seven (7) GIS and ALI Record attributes that are compared for an exact match.

Items from the Databases that will be compared and audited will include these attributes:

- MSAG Community Name
- ESNs
- Street Names
- Street Name Suffix
- Prefix Direction
- Post Direction
- House Number

See the chart below:

	As of July	1, 2025	9-1-1 GIS Street Centerline To ALI	
9-1-1 Street Centerline to ALI Records AUDIT COMPARISON RESULTS	9-1-1 ALI Records pull	ed Dated 7-1-2025	Record Match Rate 7-1-2025	
ASSIT COMM ANGON (12522)	# of Records Decrepancies	GIS to ALI Exact Match Rate %	120% 100% 100% 100% 100% 100% 100% 100%	
GIS Street Centerlines to AL	I Records Comparison		80%	
Community Name Did Not Match	0	100%	60% — — — — — —	
ESN Did Not Match	0	100%	40% — — — — — — —	
Street Name Did Not Match	0	100%	20%	
Street Suffix Did Not Match	0	100%	and the states that the states that the states that the states the states that	
Prefix Direction Did Not Match	0	100%	The state of the s	
Post Direction Did Not Match	0	100%	Comments to the first that the state of the	
House Number Did Not Match	2	99.99%	Owen, s. s. beft, bo ho	

NENA Recommended Match Rate = 98%



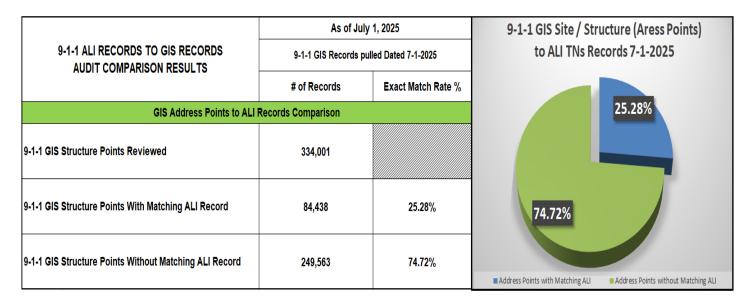


July 1, 2025 - July 31, 2025

Total GIS Site/Structure (Address) Points and those with Matching ALI Records

The 9-1-1 Site/Structure Points (Address Points) GIS records with Matching ALI Records comparison identifies the total number of Site/Structure Points (Address Points) that reside within the jurisdiction against the Wireline or VoIP Telephone Company's ALI records. The Honolulu City & County Jurisdiction has approximately 334,001 total Site Structure Points with approximately 84,438 Site Structure Points that have exact matching attributes with the ALI telephone records.

See the chart below:



9-1-1 Site/Structure (Address) Points with Exact Matching ALI Records

The 9-1-1 Site/Structure (Address Points) GIS records with ALI Records comparison represents the total number of Site/Structure (Address Points) GIS records that have exact matching ALI records at that location. The matching 9-1-1 GIS Site Structure (Address) Points with Exact Matching ALI Database comparison is used to identify the "dispatchable Location" that can be utilized to send 9-1-1 responders to locate a 9-1-1 caller's exact location, or at least to the front of the property until a Dispatchable Location can be determined. The objective is to ensure that attributes between the ALI Records and the 9-1-1 Site /Structure Points ae exactly matched and accurate.

There are a total of **487,969** Automatic Location Identification (ALI) Records with the Wireline Provider. There are **487,069** ALI records that have an exact match with a GIS Site Structure Point. There are a total of **900** ALI Records that require reviews to determine why they do not exactly match. This does not mean the ALI Records and Site Structure Point do not possess sufficient information to affect a 9-1-1 call. It indicates that these records require additional research and update to exactly match the two different database records.



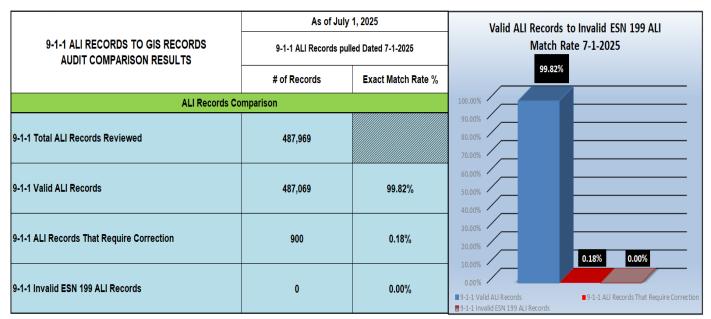


July 1, 2025 - July 31, 2025

Items from the Databases that will be compared ed during this audit will include these attributes:

- House Number
- House Number Suffix
- Prefix Direction
- Street Name
- Street Name Suffix
- Post Direction
- MSAG Community Name
- Postal Community Name
- ESNs
- Zip Codes

See the chart below:



NENA Recommended Match Rate = 98%





July 1, 2025 - July 31, 2025

INVALID MSAG STREETS AND ADDRESS RANGES – ESN 199 MSAG & ALI RECORDS PROJECT COMPLETED

At the request of the Honolulu Police Department Chief of Police in 2016, Hawaiian Telcom, Inc. (HTI) provided V2X, with access to the Honolulu City & County ESN 199 MSAG and ALI records. The ESN 199 MSAG Street Records represented and identified all the "known" invalid streets in the MSAG Database and their corresponding ALI Records.

The ESN 199 ALI Records represent all "known" invalid streets telephone device/home or office addresses in the ALI Database that were associated with the known invalid MSAG Street Records. These ALI records were required to be corrected to avoid dispatching 9-1-1 resources to erroneous address/locations.

V2X has completed the necessary investigation and required correction of the **339** MSAG Street Records identified at the start of the project. This service was provided without interruption of 9-1-1 service to the owners of the telephone devices while simultaneously producing temporary locations until the records were investigated and corrected accurately.

Valid MSAG Records to Invalid ESN 199 MSAG Records

The ESN 199 MSAG Street Records represented the number of invalid MSAG Streets Records in Honolulu City & County that were on file with Hawaiian Telcom and their Database Maintenance Service Provider. The ESN 199 MSAG Records represented invalid MSAG Street Records that still had a valid telephone number that needs to be reassigned to a valid address. V2X conducted the research and corrected the MSAG Street Records to a valid location. This may have included moving any or all associated Automatic Location Identification (ALI) Records to an MSAG valid location. There are 0 ESN 199 MSAG Street Records that require attention in Honolulu City & County. Please see the chart below:

9-1-1 MSAG RECORDS TO GIS RECORDS		uly 1, 2025 cords as of 7-1-2025	Valid MSAG Record to Invalid ESN 199 MSAG Records 7-1-2025
AUDIT COMPARISON RESULTS	# of Records	Exact Match Rate %	
MSAG Street Records C	omparison		100%
9-1-1 Total MSAG Street Records Reviewed	8,579		
9-1-1 Total Valid MSAG Street Records Reviewed	8,579	100%	0%
9-1-1 Total Invalid MSAG Street Records (ESN 199) Reviewed	0	0%	■ Valid MSAG Street Records ■ Invalid MSAG Street Records

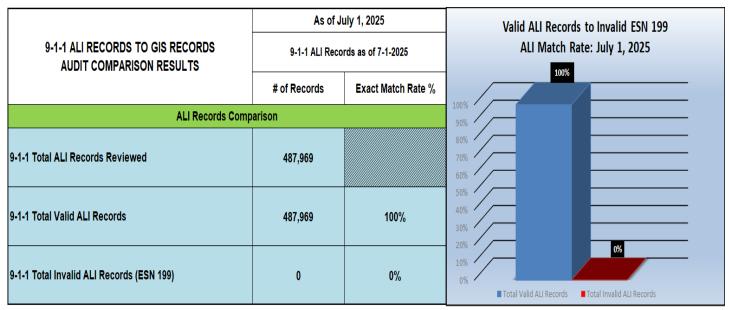




July 1, 2025 - July 31, 2025

Valid ALI Records to Invalid ESN 199 ALI Records

The ESN 199 Automatic Location Identification (ALI) Records represent the number of invalid TNs associated with the invalid ESN 199 MSAG Records. There are 0 ESN 199 ALI Records which represent 0.00% of the Total ALI records in Honolulu City & County.



NENA Recommended Match Rate = 98%

