# Oahu Civilian E9-1-1

# Status Report

July 1, 2024 - July 31, 2024





July 1, 2024 - July 31, 2024

# TABLE OF CONTENTS

I.	. PSAP Operations	5
	9-1-1 Call Volume Civilian PSAPS – July 2024	5
	9-1-1 Call Volume Civilian PSAPS – Calendar Year 2024	5
	Note:	5
	9-1-1 Call Volume By Agency – July 2024	6
	9-1-1 Call Volume By Agency – Calendar Year 2024	
	PSAP Operation Notes:	7
	For Your Information	7
	Text to 911 Oahu Civilian PSAPs – Current Month – July 2024	8
	Note:	8
	911 Wireless Oahu Civilian PSAP Testing – July 2024	8
	Notes:	8
2.	. MSAG (Master Street Address Guide)	9
	Oahu Civilian MSAG Transactions Current Month/Year – July 2024	9
	Oahu Civilian Msag current month notes:	10
	Oahu Civilian Telephone Record (ALI) Transactions current month notes:	10
	Oahu Civilian Open Telephone Record (ALI) Discrepancy Status:	10
	TNCR (Telephone Number Change Request) Current Status – July 2024	11
	NOTE:	11





# July 1, 2024 - July 31, 2024

Dispatchable Location – Status as of – July 2024	12
Narrative:	12
Spectrum (Charter) 9-1-1 VoIP Database Verification Project – July 2024	13
Bandwidth 9-1-1 VoIP Database Verification Project – July 2024	14
3. Geographic Information System (GIS) – July 2024	15
Mapping Layers Updated (Part I)	15
Mapping Layers Updated (Part II)	16
Mapping Layers Updated (Part III)	17
Mapping Layers Updated (Part IV)	18
Mapping Layers Updated (Part V)	19
Mapping Layers Updated (Part VI)	20
Mapping Layers Updated (Part VII)	21
Mapping Layers Updated (Part VII)	22
Geographic Information System (GIS) Narrative	23
GIS Key Activities/Updates	23
GIS for 911	23
Honolulu Police Department TriTech CAD Project	24
MapFlex System	25
MapFlex Issues	25
Speed Limit Updates	25
Routing id Updates	25
Honolulu EMS Response Area	26
4. Service Requests Transactions	27
Open Service Requests - July 2024	27





# July 1, 2024 - July 31, 2024

Note:		.,	27
Service Request Year-to-Date (YTD) Summary	- 2024		27
5. E9-1-1 Oahu Civilian Database Synchron	ization		28
Two-way (2-way) comparision			28
Three-way (3-way) comparision			30
Invalid MSAG Streets and Address Ranges – Es	SN 199 MSAG & ALI Records	Project completed	34





July 1, 2024 - July 31, 2024

## 1. PSAP OPERATIONS

#### 9-1-1 CALL VOLUME CIVILIAN PSAPS – JULY 2024

**Source:** Intrado Viper system

	9-1-1 Primary PSAP Call Volume																
Honolul	lu City & County PSAPs	Wire	eline	Wireless			VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls		
2024	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		No. of Other Calls	% of Total Calls
July	81,843	10,140	12.39%	67,946	83.02%	13.97%	69.05%	2,914	3.56%	843	1.03%	1,603	1.96%	12,932	15.80%	1,112	1.36%

## 9-1-1 CALL VOLUME CIVILIAN PSAPS - CALENDAR YEAR 2024

		SAP Call Volume															
Honolulu City & County PSAPs		Wire	Wireline		Wireless			VOIP Calls		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2024	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 Total Call Received	% of Total Calls
JAN	83,354	10,994	13.19%	67,433	80.90%	18.49%	62.41%	3,418	4.10%	1,509	1.81%	1,700	2.04%	12,847	15.41%	1,055	1.27%
FEB	74,426	9,623	12.93%	60,784	81.67%	13.75%	67.92%	2,776	3.73%	1,243	1.67%	1,458	1.96%	11,199	15.05%	887	1.19%
MAR	78,162	10,888	13.93%	63,710	81.51%	14.37%	67.14%	2,955	3.78%	610	0.78%	1,468	1.88%	11,616	14.86%	1,034	1.32%
APR	76,192	42,340	55.57%	32,656	42.86%	7.20%	35.66%	1,471	1.93%	594	0.78%	1,787	2.35%	11,552	15.16%	899	1.18%
MAY	81,040	10,446	12.89%	66,291	81.80%	13.52%	68.28%	2,974	3.67%	1,329	1.64%	1,662	2.05%	12,322	15.20%	954	1.18%
JUNE	79,304	9,715	12.25%	65,434	82.51%	13.54%	68.97%	3,021	3.81%	1,134	1.43%	1,453	1.83%	12,830	16.18%	1,013	1.28%
JULY	81,843	10,140	12.39%	67,946	83.02%	13.97%	69.05%	2,914	3.56%	843	1.03%	1,603	1.96%	12,932	15.80%	1,112	1.36%
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	554,321	104,146		424,254				19,529		7,262		11,131		85,298		6,954	
MON AVG	79,189	14,878	19.02%	60,608	76.32%	13.55%	62.78%	2,790	3.51%	1,037	1.31%	1,590	2.01%	12,185	15.38%	993	1.25%

## NOTE:

- 911 Calls with No ALI for July 2024 = 1.03% Statewide average for 2023 = 0.14%
- 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, 2024 - July 31, 2024

## 9-1-1 CALL VOLUME BY AGENCY - JULY 2024

		9-1-1 Call Volume by Agency														
2024		Hor	olulu Poli	ce Departn	Honolulu Fire Department											
2024	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	68,011	83.10%	16,501	37,281	1,297	12,932	3,219	3.93%	121	67						

			9	-1-1 Call Volu	me by Agen	су						
2024	Er	nergency 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	9,442	11.54%	134	301	59	0.07%	51	0				

## 9-1-1 CALL VOLUME BY AGENCY - CALENDAR YEAR 2024

		9-1-1 Call Volume by Agency																
2024	Honolulu Police Department					Honol	ulu Fire	Depart	ment	Emergency Medical Services			cal	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	69,341	83.19%	15,763	39,205	1,526	12,847	3,078	3.69%	102	32	9,841	11.81%	33	224	39	0.05%	39	0
FEB	62,284	83.69%	14,711	35,072	1,302	11,199	2,692	3.62%	102	32	8,518	11.44%	16	145	45	0.06%	38	0
MAR	65,155	83.36%	15,163	37,155	1,221	11,616	2,799	3.58%	140	27	9,129	11.68%	64	230	45	0.06%	43	0
APR	64,048	84.06%	15,025	35,877	1,594	11,552	2,709	3.56%	112	44	8,489	11.14%	41	230	47	0.06%	40	0
MAY	68,010	83.92%	16,791	37,489	1,408	12,322	2,757	3.40%	147	39	9,284	11.46%	75	214	35	0.04%	32	0
JUNE	65,948	83.16%	15,571	36,321	1,226	12,830	3,043	3.84%	136	38	9,274	11.69%	74	221	26	0.03%	17	0
JULY	68,011	83.10%	16,501	37,281	1,297	12,932	3,219	3.93%	121	67	9,442	11.54%	134	301	59	0.07%	51	0
AUG																		
SEPT																		
ост																		
NOV																		
DEC																		
YTD	462,797		109,525	258,400	9,574	85,298	20,297		860	279	63,977		437	1,565	296		260	0
MON AVG	66,114	83.50%	15,646	36,914	1,368	12,185	2,900	3.66%	123	40	9,140	11.54%	62	224	42	0.05%	37	0





July 1, 2024 - July 31, 2024

## **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 2023 2022 2021 2020 2019 2018										18			
Oahu Civilian	Oahu Civilian 988,670 68.33% 971,113 69.45% 1,052,026 68.91%						991,016	71.11%	1,075,726	69.67%	1,034,190	70.62%	
RDC Pearl Harbor	36,916	2.55%	31,827	2.28%	39,253	2.58%	37,014	2.66%	37,905	2.45%	37,068	2.53%	
Hawaii County	207,715	14.35%	199,811	14.29%	214,220	14.00%	188,329	13.51%	211,611	13.70%	206,648	14.11%	
Maui County	152,397	10.54%	140,524	10.05%	160,241	10.51%	125,626	9.01%	157,127	10.18%	133,869	9.14%	
Kauai County	61,197	4.23%	54,923	3.93%	60,986	4.00%	51,653	3.71%	61,754	4.00%	52,623	3.60%	
Total	1,446,895	100.00%	1,398,198	100.00%	1,526,726	100.00%	1,393,638	100.00%	1,544,123	100.00%	1,464,398	100.00%	

911 Call Volume % ir	ncrease from 2022 to 2023
Oahu	1.80%
RDC	15.99%
Hawaii	3.95%
Maui	8.44%
Kauai	11.42%
State of Hawaii	8.32%

911 Calls with No ALI	% average for 2023
Oahu	0.47%
RDC	0.03%
Hawaii	0.04%
Maui	0.13%
Kauai	0.03%
State of Hawaii average	0.14%

State of Hawaii	2023								
TEXT TO 911									
Oahu Civilian 2,724									
RDC Pearl Harbor	66								
Hawaii County 689									
Maui County	581								
Kauai County	211								
*Total	4,271								

<sup>\*</sup>Totals may include PSAP training, testing, and 911 Texting errors





July 1, 2024 - July 31, 2024

## TEXT TO 911 OAHU CIVILIAN PSAPS - CURRENT MONTH - JULY 2024

	TEXT TO 911 Oahu Civilian PSAPs 2024					
Month	Total	HPD	HFD	EMS	os	911 (handled)
January	279	221	1	6	0	51
February	292	227	4	1	0	60
March	272	199	5	6	0	62
April	293	201	5	6	0	81
May	308	221	3	3	0	81
June	262	175	6	7	0	74
July	239	187	4	10	0	38
August						
September						
October						
November						
December						
YTD	1,945	1,431	28	39	0	447
Monthly Avg.	277.9	204.4	4.0	5.6	0.0	63.9

## 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 2024

	OAHU CIVILIAN - JULY 2024					
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 2024.





July 1, 2024 - July 31, 2024

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

## OAHU CIVILIAN MSAG TRANSACTIONS CURRENT MONTH/YEAR - JULY 2024

OAHU		•		9-1-1	ΓRANSA	CTIONS	•	•	
CIVILIAN	Total	MSAG	A	LI Submitte	ed	Discre	Open ALI epancy Re		Customer Addresses
2024	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Affected
JANUARY	729	5	724	0	0	4,098	0	0	175
FEBRUARY	319	2	317	0	0	3,690	0	0	0
MARCH	160	0	160	0	0	4,062	0	0	0
APRIL	232	0	232	0	0	4,094	0	0	0
MAY	233	11	222	0	0	4,404	0	0	5
JUNE	232	4	228	0	0	4,370	0	0	75
JULY	435	0	435	0	0	3,725	0	0	0
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	2,340	22	2,318	0	0				255
AVG PER MONTH	334	3	331	0	0				36

#### **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) Automatic Location Information Discrepancy Record 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, 2024 - July 31, 2024

#### OAHU CIVILIAN MSAG CURRENT MONTH NOTES:

A total of **435** MSAG transactions were processed in 9-1-1 Net during the current reporting month. No 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 zero customer ANI/ALI (telephone/address) records updated as a direct result.

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

V2X (formerly Akimeka) processed four hundred thirty-five (435) TN CRs related to the Dispatchable Location Project during the current month.

#### OAHU CIVILIAN OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

• There are currently 3,725 Open TN CRs.

**3,725** Open TN CR transactions are a result of the Dispatchable Location project. V2X (formerly Akimeka) 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, 2024
- There is no Open VoIP DRs as of July 31, 2024





July 1, 2024 - July 31, 2024

## TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS - JULY 2024

## 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 FORMERLYAKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY INTRADO	OPENED TNCRS REFERRED TO TELCO BY INTRADO	TOTAL UNOPENED TNCR RECORDS
OAHU CIVILIAN	3,725	3	3,424	298

#### **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 formerly Akimeka on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.





July 1, 2024 - July 31, 2024

## DISPATCHABLE LOCATION - STATUS AS OF - JULY 2024

## NARRATIVE:

During the August 2015 State of Hawaii 911 Board meeting, V2X (formerly Akimeka) 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 (formerly Akimeka) 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 (formerly Akimeka) 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 May 2018. There were  $\frac{0}{0}$  transactions submitted and  $\frac{326}{0}$  processed in July 2024.

Dispatchable Location					
2024 Quarter 3	Common Name Place MSAG Address	TNCR* Transactions Submitted	Transactions Processed**		
Quarter 2 Carryover		38,099	22,764		
	Star of the Sea Church, 4470 Aliikoa St, Waialae	0	55		
	Kahala Towers, 4300 Waialae Ave, Waialae	0	53		
	Locations Bldg, 614 Kapahulu Ave, Kapahulu	0	129		
	YMCA, 4835 Kilauea Ave, Waialae	0	21		
	Zippy's, 4134 Waialae Ave, Waialae	0	1		
July	Kahala Mall, 4211 Waialae Ave, Kaimuki	0	10		
July	Central Pacific Bank Kaimuki Plaza, 3465 Waialae Ave, Kaimuki	0	5		
	The Regency At Kahala, 4340 Pahoa Ave, Kaimuki	0	16		
	US Post Office, 4354 Pahoa Ave, Kaimuki	0	4		
	Outrigger Reef Hotel, 2169 Kalia Rd, Waikiki	0	25		
	Kahala Atrium, 4819 Kilauea Ave, Waialae	0	6		
	Waikiki Sunset, 229 Paoakalani Ave, Waikiki	0	1		
August					
September					
Q3		0	326		
Total		38,099	23,090		





July 1, 2024 - July 31, 2024

## SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT - JULY 2024

V2X (formerly Akimeka) 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 (formerly Akimeka) has access to these ALI Records, V2X (formerly Akimeka) 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 as 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 Database Verification Project					
PSAP	TOTAL RECORDS SUBMITTED BY SPECTRUM (A)	TOTAL RECORDS MATCHING & VERIFIED WITH 911 DATABASES (B)	TOTAL RECORDS NOT MATCHING	NON MATCHING RECORDS CORRECTED BY V2X FORMERLY AKIMEKA (C)	PERCENT COMPLETED
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%

<sup>\*</sup> Spectrum VoIP Database received on June 21st, 2017

<sup>\*\*</sup> V2X (formerly Akimeka) provided VoIP Records with Latitude/Longitude coordinates

(A)	VoIP Database records submitted by Spectrum to V2X (formerly Akimeka) for research and MSAG address validation.
	V2X formerly Akimeka has researched and verified the VoIP record against an MSAG valid address and GIS data. V2X formerly Akimeka
( <b>B</b> )	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, 2024 - July 31, 2024

#### BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT – JULY 2024

V2X (formerly Akimeka) 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 (formerly Akimeka) has access to these ALI Records, V2X (formerly Akimeka) 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 as 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 (formerly Akimeka) will update the chart below as we receive updated ALI records from Bandwidth.

*Bandwidth 9-1-1 VoIP Database Verification Project ***(Updated)					
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%

<sup>\*</sup>Bandwidth VoIP Database received on April 5th, 2018

<sup>\*\*\*</sup> Updated Bandwidth VoIP Database received on October 1st, 2021

(A)	VoIP Database records submitted by Bandwidth to V2X formerly Akimeka for research and MSAG address validation.
<b>(B)</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.



<sup>\*\*</sup>Updated Bandwidth VoIP Database received on September 6th, 2018



July 1, 2024 - July 31, 2024

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JULY 2024

MAPPING LAYERS UPDATED (PART I)

		OAHU CIVILIAN PSAPS		
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks		
CRITICAI	2 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE		
		(Listed Alphabetically)		
	Next Delivery 8/9/2024			
		Added new address point for one (1) record in Kaimuki		
		Added new address point for one (1) record in Nuuanu		
		Added new address point for three (3) records in Laie		
		Corrected spatial for three (3) records in Ewa Beach		
		Corrected spatial for five (5) records in Haleiwa		
	7/26/2024 To 7/31/2024	Added new address point for seventy-four (74) records in Makiki		
		Corrected spatial for seven (7) records in Punchbowl		
		Corrected spatial for five (5) records in Honolulu		
		Corrected spatial for three (3) records in Makiki		
		Added new address point for one (1) record in Honolulu		
		Corrected spatial for seven (7) records in Waikiki		
Address Points		Added new address point for four (4) records in Haleiwa		
		Added new address point for thirty (30) records in Manoa		
		Added new address point for seven hundred and eighty-one (781)		
		records in Waikiki		
		Added new address point for two (2) records in Kailua		
		Corrected spatial, corrected location type for one (1) record in Manoa		
		Delivered 7/26/2024		
		Corrected ESN for three hundred and five (305) records in Waikiki		
	7/12/2024	Corrected spatial for one (1) record in Kalihi		
	To 7/25/2024	Added new address point for one hundred and forty-eight (148) records		
	1123/2024	in Kailua		
		Added new address point for four hundred and one (401) records in		
		Kakaako		





July 1, 2024 - July 31, 2024

## MAPPING LAYERS UPDATED (PART II)

OAHU CIVILIAN PSAPS					
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks			
CDITICAL		CAREERY I AVERGEOR DIGRATICITY & RECRONGE			
CRITICAL	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
		Corrected spatial, added location name, added location type for one (1)			
		record in Waikiki			
		Added new address point for one (1) record in Sunset			
		Added new address point for two hundred and fifty-one (251) records in Kalihi			
		Corrected spatial for one (1) record in Kakaako			
		Corrected spatial, added location name for twelve (12) records in Kailua			
		Removed location name for one (1) record in Kapolei			
		Corrected spatial, corrected location type for one (1) record in Waikiki			
		Added new address point for one (1) record in Waimanalo			
	7/12/2024	Corrected spatial, corrected location name for one (1) record in Kailua			
Address Points	7/12/2024 To 7/25/2024	Added new address point for six hundred and seventy-four (674) records in Waikiki			
	1/25/2024	Corrected routing ID, corrected spatial, added location name for fourteen (14) records in Kailua			
		Added new address point for four (4) records in Kaneohe			
		Added location name, added location type for one (1) record in Kakaako			
		Added new address point for one (1) record in Ewa Beach			
		Corrected routing ID for forty-six (46) records in Kaneohe			
		Corrected spatial for two (2) records in Waikiki			
		Corrected spatial, added location name for one (1) record in Waikiki			
		Corrected spatial, corrected location name for one (1) record in Waikiki			
		Corrected spatial for seven (7) records in Ewa Beach			
		Added new address point for one (1) record in Downtown			





July 1, 2024 - July 31, 2024

## MAPPING LAYERS UPDATED (PART III)

	OAHU CIVILIAN PSAPS				
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks			
CRITICAI	2 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE			
	(Listed Alphabetically)				
		Delivered 7/12/2024			
		Added location name, added location type, added building, added floor, corrected spatial, added apartment, corrected census tract for one (1) record in Waikiki			
		Corrected spatial for four (4) records in Kapolei			
		Corrected spatial for two (2) records in Aina Haina			
		Added new address point for fifteen (15) records in Aiea			
		Added new address point for one (1) record in Kailua			
		Corrected TMK for four hundred and thirty-five (435) records in Hawaii Kai			
		Corrected spatial for eight (8) records in Pearl City			
	7/1/2024	Added new address point for twelve (12) records in Aina Haina			
Address Points	То	Corrected spatial, added location name, added location type, added			
	7/11/2024	building, added floor, corrected apartment, corrected house number for six (6) records in Waikiki			
		Corrected spatial, added location name, added location type, added building, added floor, added apartment, corrected house number for seven (7) records in Waikiki			
		Added location name, added location type, added building, added floor,			
		corrected spatial, added apartment, added apartment, corrected house			
		number for two (2) records in Waikiki			
		Corrected spatial for two (2) records in Kalaeloa			
		Corrected spatial for eighty-seven (87) records in Waipio			
		Added new address point for one thousand, three hundred and thirty-			
		five (1335) records in Waikiki			





July 1, 2024 - July 31, 2024

## MAPPING LAYERS UPDATED (PART IV)

OAHU CIVILIAN PSAPS				
Type of Layer	V2X formerly Akimeka GIS Server  Date Created/ Edits Performed	Other/Remarks		
CRITICAI	. 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE		
		(Listed Alphabetically)		
Address Points	7/1/2024 To 7/11/2024	Added location name, added location type, added building, added floor, corrected spatial, added apartment, corrected census tract for one (1) record in Waikiki  Added new address point for two (2) records in Waipio  Added new address point for one (1) record in Makakilo  Added location name, added location type, added building, added floor, corrected spatial, added apartment, corrected apartment, corrected census tract for three (3) records in Waikiki  Added new address point for nine (9) records in Ewa Beach  Added location name, added location type, added building, added floor, corrected spatial, added apartment, added apartment, corrected census tract for one (1) record in Waikiki  Added location name, added location type, added building, added floor, corrected spatial, added apartment, corrected house number for eleven (11) records in Waikiki  Corrected spatial for three (3) records in Waikiki  Corrected spatial for three (3) records in Pearl City  Corrected spatial for one (1) record in Hawaii Kai  Corrected spatial for two (2) records in Ewa Beach  Added new address point for nine (9) records in Pearl City  Added location name, added location type, added building, added floor, corrected spatial, added apartment, corrected house number for three (3) records in Waikiki		





July 1, 2024 - July 31, 2024

## MAPPING LAYERS UPDATED (PART V)

OAHU CIVILIAN PSAPS				
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks		
CRITICAI	L 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE		
		(Listed Alphabetically)		
Address Points	7/1/2024 To 7/11/2024	Added location name, added location type, added building, added floor, corrected spatial, added apartment, corrected apartment, corrected house number for eight (8) records in Waikiki  Corrected spatial for two (2) records in Aiea  Corrected spatial, added location name, added location type, added building, added floor, corrected house number for three (3) records in Waikiki		
Airports				
AMR Response Areas				
Bridges				
Building Footprints				
Bus Stops				
Churches				
Coastal Names				
Coastline				
Common Places				
Correctional Facilities				
Emergency Callboxes				
Emergency Operation				
Centers				
Emergency Shelters				
ESZ/ESN				
Fire Beats				
Fire Districts				





July 1, 2024 - July 31, 2024

## MAPPING LAYERS UPDATED (PART VI)

OAHU CIVILIAN PSAPS				
Type of Layer	V2X formerly Akimeka GIS Server  Date Created/ Edits Performed	Other/Remarks		
CRITICAI	SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Fire Response Areas				
Fire Stations				
Food & Beverage				
Gas Stations				
Gate Codes				
Government Buildings				
Harbors				
Helipads				
Hiking Trails				
Hospitals				
Hydrants				
Hyrdology Layers				
Incident Response Areas				
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				





July 1, 2024 - July 31, 2024

## MAPPING LAYERS UPDATED (PART VII)

OAHU CIVILIAN PSAPS				
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks		
CRITICAI	, 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE		
011110111		(Listed Alphabetically)		
Ocean Safety				
Parcels				
Parks				
Parks Polygon				
, o	7/26/2024	Delivered 7/12/2024		
Points of Interest	То	Corrected spatial for one (1) record in Aiea		
	7/31/2024	Corrected spatial for one (1) record in Hawaii Kai		
Police Beats				
Police Districts				
Police Response Areas				
Police Stations				
Post Offices				
Schools				
	7/26/2024	Next Delivery 8/9/2024		
	7/20/2024 To	Split segment, corrected range for fourteen (14) records in Waikiki		
	7/31/2024	New street ingress five (5) records in Waikiki		
		New street segment two (2) records in Waikiki		
	7/12/2024	Delivered 7/26/2024		
Street Centerlines	To	Split segment, corrected range for five (5) records in Kaneohe		
	7/25/2024	Added ingress for five (5) records in Kaneohe		
	7/1/2024	Delivered 7/12/2024		
	To	Corected range for one (1) record in Ewa Beach		
	7/11/2024	Corrected MSAG community for forty-seven (47) records in Ewa Beach		
		Added civic street names for one (1) record in Ewa Beach		





July 1, 2024 - July 31, 2024

## MAPPING LAYERS UPDATED (PART VII)

OAHU CIVILIAN PSAPS				
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Subdivisions				
Tow Jurisdictions				
Tsunami Evacuation Zones				
Tsunami Heights				
Waste Water Plants				
		N . B II		
		Next Delivery 8/9/2024		
	7/26/2024	Updated one (1) sector per AT&T CRS		
	То			
	.,,	Updated one (1) sector per AT&T CRS		
	То	Updated one (1) sector per AT&T CRS Added eighteen (18) sectors per AT&T CRS		
WSP Cell Sectors	To 7/31/2024	Updated one (1) sector per AT&T CRS  Added eighteen (18) sectors per AT&T CRS  Added two (2) sectors per T-Mobile CRS  Updated one (1) sector per T-Mobile CRS  Delivered 7/26/2024		
WSP Cell Sectors	To 7/31/2024 7/12/2024	Updated one (1) sector per AT&T CRS  Added eighteen (18) sectors per AT&T CRS  Added two (2) sectors per T-Mobile CRS  Updated one (1) sector per T-Mobile CRS		
WSP Cell Sectors	To 7/31/2024	Updated one (1) sector per AT&T CRS  Added eighteen (18) sectors per AT&T CRS  Added two (2) sectors per T-Mobile CRS  Updated one (1) sector per T-Mobile CRS  Delivered 7/26/2024		
WSP Cell Sectors	To 7/31/2024 7/12/2024 To	Updated one (1) sector per AT&T CRS  Added eighteen (18) sectors per AT&T CRS  Added two (2) sectors per T-Mobile CRS  Updated one (1) sector per T-Mobile CRS  Delivered 7/26/2024  Added fifteen (15) sectors per Verizon Wireless CRS		
WSP Cell Sectors	To 7/31/2024  7/12/2024  To 7/25/2024  7/1/2024 To	Updated one (1) sector per AT&T CRS  Added eighteen (18) sectors per AT&T CRS  Added two (2) sectors per T-Mobile CRS  Updated one (1) sector per T-Mobile CRS  Delivered 7/26/2024  Added fifteen (15) sectors per Verizon Wireless CRS  Added nineteen (19) sectors per AT&T CRS		
WSP Cell Sectors	To 7/31/2024 7/12/2024 To 7/25/2024	Updated one (1) sector per AT&T CRS  Added eighteen (18) sectors per AT&T CRS  Added two (2) sectors per T-Mobile CRS  Updated one (1) sector per T-Mobile CRS  Delivered 7/26/2024  Added fifteen (15) sectors per Verizon Wireless CRS  Added nineteen (19) sectors per AT&T CRS  Updated six (6) sectors per Verizon Wireless CRS		





July 1, 2024 - July 31, 2024

## GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVE

GIS KEY ACTIVITIES/UPDATES

GIS Key activities include the events such as GIS deliverables, meetings, agreements, etc.

Date	Key Activities/Updates
7/12/2024	Delivered data update for Central Square including Streets, Police Beats, and Address Points (with and without the apartment records).
7/12/2024	Delivered Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD.
7/12/2024	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.
7/26/2024	Delivered data update for Central Square including Streets, Police Beats, and Address Points (with and without the apartment records).
7/26/2024	Delivered Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD.
7/26/2024	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.
7/31/2024	Provided address points and street centerlines layers to State of Hawaii Department of Law Enforcement for their upcoming CAD implementation.

## GIS FOR 911

As part of ensuring GIS data compatibility with 911 CAD systems, V2X (formerly Akimeka) 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.





July 1, 2024 - July 31, 2024

#### HONOLULU POLICE DEPARTMENT TRITECH CAD PROJECT

On October 10, 2018, V2X (formerly Akimeka) 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 (formerly Akimeka)'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, 2024 - July 31, 2024

### MAPFLEX SYSTEM

July 2024

V2X (formerly Akimeka) delivered GIS data to the MapFlex system on the following dates in July 2024

**Hawaii County** – July 9, 2024, and July 23, 2024 **Maui County** – July 10, 2024, July 24, 2024 **Kauai County** – July 11, and July 23, 2024 **Honolulu** – July 12, 2024, and July 26, 2024

#### **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 deliverable, a list of updates is being provided.

1. No updates received in July 2024.

#### 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 is beginning 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 deliverable, a list of updates is being provided.

1. During the month of July 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 a Routing ID.





July 1, 2024 - July 31, 2024

#### 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 (formerly Akimeka) 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 (formerly Akimeka) 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 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, 2024 - July 31, 2024

## 4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS - JULY 2024

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

## NOTE:

There are no (0) open service requests for July 2024.

## SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY – 2024

Oahu PSAPs				MSAG SERVICE REQUEST CATEGORIES					
2024	TOT	ΓAL	•	WIRELINE		WIRELESS		VoIP	
2024	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed
2023 Carryover*			0						
January	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0
August									
September									
October									
November									
December									
TOTAL	0	0	0	0	0	0	0	0	0

	* The 2023 Carryover row indicates the number of Service Requests that were opened in 2023;
<u>Note:</u>	however, were brought forward into 2024 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	Telephone Number (ALI) Discrepancies from VoIP phones that have been submitted to Time Warner Cable (TWCBL) or other VoIP providers for correction





July 1, 2024 - July 31, 2024

## 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 (formerly Akimeka)'s value added services, V2X (formerly Akimeka) 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 (formerly Akimeka). The database synchronization process is 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 the JULY 08, 2024, database synchronization audit are reported below.

#### TWO-WAY (2-WAY) COMPARISION

V2X Corporation (formerly Akimeka LLC)'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.



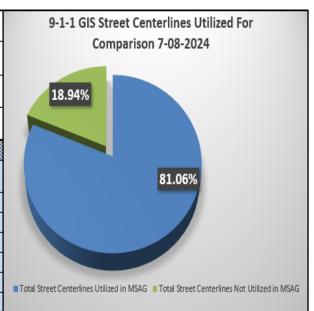


July 1, 2024 - July 31, 2024

#### 9-1-1 GIS Street Centerlines Utilized For Comparison

A total number of **10,571** GIS Street Centerline Records are maintained for the Honolulu Police Department's 9-1-1 GIS database by V2X (formerly Akimeka). For this comparison, **2,002** GIS street records were excluded as database exemptions. V2X (formerly Akimeka) 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 **8,569** 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 **8,556** GIS Street Centerline Records that exactly match the MSAG Database. The results of the GIS to MSAG Records comparison analysis are provided below:

	As of Ju		
9-1-1 MSAG TO GIS STREET CENTERLINE	GIS Update 6-30-2024 9-1-1 MSAG Dated 7-01-24		
AUDIT COMPARISON RESULTS			
	# of Records	Exact Match Rate %	
Total 9-1-1 GIS Records Reviewed	10,571		
9-1-1 GIS Records Exempt for Comparison (Subtract 9-1-1 MSAG Exempt and GIS Number 1 Exempt Records)	2,002	18.94%	
Subtotal 9-1-1 GIS Records Eligible for Comparison	8,569	81.06%	
Subtotal 9-1-1 GIS Records Utilized for Comparison	8,569	100%	
Total 9-1-1 GIS Records That Do Not Match MSAG Records	13	0.15%	
9.1.1 GIS Records with No Matching MSAG Record	0	0.00%	
Total 9-1-1 GIS Records Requiring Minor Correction	13	100%	■Total
Total 9-1-1 GIS Street Centerline Match Rate Percentage	8,556	99.85%	



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

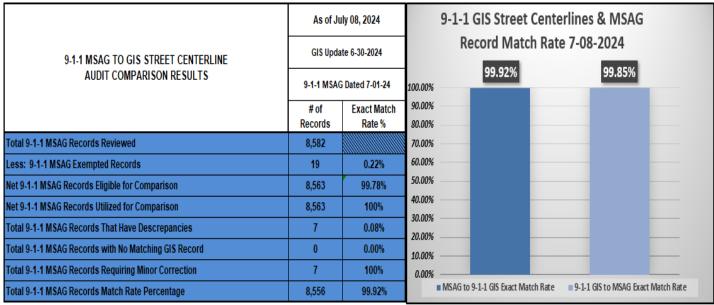
A total of **8,582 9-1-1 MSAG records** are maintained for the Honolulu Police Department's 9-1-1 GIS database by V2X (formerly Akimeka). V2X (formerly Akimeka LLC) removed **19 MSAG records** from the comparison as exemptions. These exemptions are the MSAG Records utilized for wireless 9-1-1 Call routing, 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 **8,563 MSAG records**. Of those Valid MSAG Records, there are a total of **8,556** MSAG Records that exactly match the 9-1-1 Street Centerline GIS Database.





## July 1, 2024 - July 31, 2024

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, 2024 - July 31, 2024

## 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 chart below:

	As of July (	08, 2024	9-1-1 GIS Street Centerline To ALI Record Match Rate 7-08-2024		
9-1-1 Street Centerline to ALI Records AUDIT COMPARISON RESULTS	9-1-1 ALI Records pull	ed Dated 6-30-2024			
AUDIT COMPARISON RESULTS	# of Records Decrepancies	GIS to ALI Exact Match Rate %	100% 100% 100% 100% 100% 100% 100%		
GIS Street Centerlines to Al	I Records Comparison		100%		
Community Name Did Not Match	0	100%	100%		
ESN Did Not Match	0	100%	100% 99,99%		
Street Name Did Not Match	0	100%	100% —		
Street Suffix Did Not Match	0	100%	sector sector sector sector sector sector sector		
Prefix Direction Did Not Match	0	100%	Company of the field of the fie		
Post Direction Did Not Match	0	100%	State Berger to the first of th		
House Number Did Not Match	26	99.99%	defent a series of the series		

NENA Recommended Match Rate = 98%



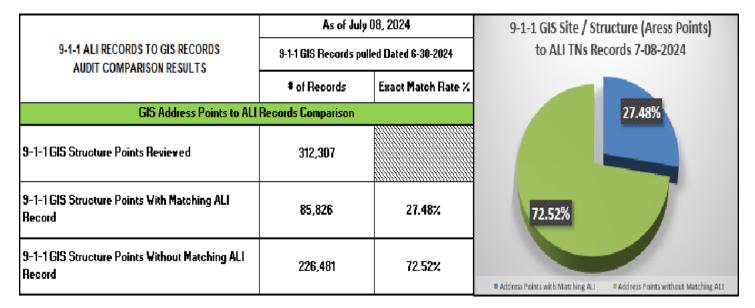


July 1, 2024 - July 31, 2024

## 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 312,307 total Site Structure Points with approximately 85,826 Site Structure Points that have exact matching attributes with the ALI telephone records.

#### See 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.





## July 1, 2024 - July 31, 2024

There are a total of **489,043** Automatic Location Identification (ALI) Records with the Wireline Provider. There are **488,077** ALI records that have an exact match with a GIS Site Structure Point. There are a total of **966** ALI Records that require reviewed 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.

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 chart below:

	As of July 08, 2024		Valid ALI Records to Invalid ESN 199 ALI
9-1-1 ALI RECORDS TO GIS RECORDS AUDIT COMPARISON RESULTS	9-1-1 ALI Records pulled Dated 7-01-2024		Match Rate 7-08-2024
	# of Records	Exact Match Rate %	99.80%
ALI Records Comparison			100.00%
9-1-1 Total ALI Records Reviewed	489,043		90.00% 80.00% 70.00%
9-1-1 Valid ALI Records	488,077	99.80%	60.00% 50.00% 40.00%
9-1-1 ALI Records That Require Correction	966	0.20%	30.00% 20.00% 0.20%
9-1-1 Invalid ESN 199 ALI Records	0	0.00%	0.00%  0.00%  9-1-1 Valid AU Records  9-1-1 Invalid ESN 199 ALI Records  19-1-1 Invalid ESN 199 ALI Records

NENA Recommended Match Rate = 98%





July 1, 2024 - July 31, 2024

# 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 (formerly Akimeka), 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 (formerly Akimeka) 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 (formerly Akimeka) 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 AUDIT COMPARISON RESULTS	As of July 08, 2024		Valid MSAG Record to Invalid ESN 199 MSAG Records 7-08-2024
	9-1-1 MSAG Records as of 7-01-2024		
	# of Records	Exact Match Rate %	
MSAG Street Records Comparison			100%
9-1-1 Total MSAG Street Records Reviewed	8,582		
9-1-1 Total Valid MSAG Street Records Reviewed	8,582	100%	0%  ■ Valid MSAG Street Records  ■ Invalid MSAG Street Records
9-1-1 Total Invalid MSAG Street Records (ESN 199) Reviewed	0	0%	

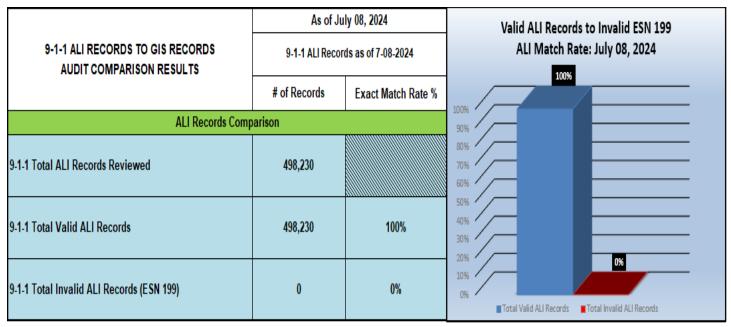




July 1, 2024 - July 31, 2024

## 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%

