# Oahu Civilian E9-1-1

# Status Report

October 1, 2023 - October 31, 2023





## October 1, 2023 - October 31, 2023

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### October 1, 2023 - October 31, 2023

#### 1. PSAP OPERATIONS

#### 9-1-1 CALL VOLUME CIVILIAN PSAPS – OCTOBER 2023

#### Source: Intrado Viper system

(\*) Totals are based on calls to Primary PSAP.

	9-1-1 Primary PSAP Call Volume																
Honolul	u City & County PSAPs	Wire				eless		VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2023	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
October	81,147	10,444	12.87%	66,468	81.91%	14.84%	67.07%	2,856	3.52%	1,379	1.70%	1,925	2.37%	11,357	14.00%	952	1.17%

#### 9-1-1 CALL VOLUME CIVILIAN PSAPS - CALENDAR YEAR 2023

		Primary	PSAP Ca	ıll Volun	ne												
Honolul	u City & County PSAPs	Wireline		Wireless				VOIP Calls		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2023	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
JAN	84,014	11,930	14.20%	69,345	82.54%	16.53%	66.01%	2,688	3.20%	50	0.06%	1,601	1.91%	12,888	15.34%	987	1.17%
FEB	77,214	11,242	14.56%	63,323	82.01%	16.91%	65.10%	2,641	3.42%	8	0.01%	1,484	1.92%	12,058	15.62%	970	1.26%
MAR	87,551	13,387	15.29%	71,407	81.56%	16.98%	64.58%	2,749	3.14%	9	0.01%	1,586	1.81%	13,201	15.08%	1,015	1.16%
APR	85,169	11,327	13.30%	71,227	83.63%	17.51%	66.12%	2,606	3.06%	9	0.01%	1,573	1.85%	13,362	15.69%	992	1.16%
MAY	87,967	11,612	13.20%	73,470	83.52%	17.04%	66.48%	2,868	3.26%	18	0.02%	1,539	1.75%	13,852	15.75%	984	1.12%
JUNE	83,712	10,790	12.89%	70,000	83.62%	16.88%	66.74%	2,913	3.48%	8	0.01%	1,495	1.79%	12,889	15.40%	944	1.13%
JULY	80,974	11,361	14.03%	66,731	82.41%	15.58%	66.83%	2,883	3.56%	0	0.00%	1,634	2.02%	11,998	14.82%	967	1.19%
AUG	81,108	11,607	14.31%	66,541	82.04%	14.93%	67.11%	2,952	3.64%	8	0.01%	1,742	2.15%	9,750	12.02%	963	1.19%
SEPT	77,302	10,683	13.82%	63,233	81.80%	15.27%	66.53%	2,721	3.52%	665	0.86%	1,731	2.24%	9,659	12.50%	992	1.19%
ОСТ	81,147	10,444	12.87%	66,468	81.91%	14.84%	67.07%	2,856	3.52%	1,379	1.70%	1,925	2.37%	11,357	14.00%	952	1.17%
NOV	0	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
DEC	0	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
YTD	826,158	114,383		681,745				27,877		2,154		16,310		121,014		9,766	
MON AVG	68,847	9,532	11.54%	56,812	68.75%	13.54%	55.21%	2,323	2.82%	180	0.22%	1,359	1.65%	10,085	12.19%	814	0.98%

#### NOTE:

- \$\frac{1}{2}\$11 Calls with No ALI for October 2023 = 1.70\% Statewide average for 2022 = 0.05\%
- 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.



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#### 9-1-1 CALL VOLUME BY AGENCY - OCTOBER 2023

				9-1-1	Call Volu	me by Age	ncy						
2023		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			
October	67,241	82.86%	15,646	38,729	1,509	11,357	3,853	4.75%	122	42			

		9-1-1 Call Volume by Agency													
2023	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							
October	9,050	11.15%	246	245	51	0.06%	48	0							

#### 9-1-1 CALL VOLUME BY AGENCY - CALENDAR YEAR 2023

							9	-1-1 Cal	l Volun	ne by A	gency							
2023	Honolulu Police Department						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	70,996	84.50%	19,189	37,552	1,367	12,888	2,997	3.57%	112	36	8,970	10.68%	67	123	64	0.08%	55	0
FEB	65,766	85.17%	18,339	34,085	1,284	12,058	2,527	3.27%	122	28	7,910	10.24%	43	102	41	0.05%	35	0
MAR	74,289	84.85%	21,545	38,167	1,376	13,201	2,853	3.26%	106	46	9,341	10.67%	60	108	53	0.06%	44	0
APR	72,368	84.97%	21,154	36,503	1,349	13,362	2,757	3.24%	135	71	9,020	10.59%	62	116	32	0.04%	27	0
MAY	75,704	86.06%	21,841	38,670	1,341	13,852	2,520	2.86%	103	37	8,714	9.91%	53	120	45	0.05%	42	0
JUNE	71,632	85.57%	21,298	36,184	1,261	12,889	2,798	3.34%	125	38	8,294	9.91%	67	70	44	0.05%	42	0
JULY	68,576	84.69%	17,734	37,426	1,418	11,998	2,577	3.18%	121	31	8,828	10.90%	72	94	26	0.03%	23	0
AUG	66,290	81.73%	16,595	38,477	1,468	9,750	4,946	6.10%	155	70	8,858	10.92%	71	111	51	0.06%	48	0
SEPT	64,060	82.87%	16,032	36,804	1,565	9,659	3,439	4.45%	124	50	8,849	11.45%	11	138	32	0.04%	31	0
ост	67,241	82.86%	15,646	38,729	1,509	11,357	3,853	4.75%	122	42	9,050	11.15%	246	245	51	0.06%	48	0
NOV	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0.00%	0	0	0	0.00%	0	0
DEC	0	0.00%	0	0	0	0	0	0.00%	0	0	0	0.00%	0	0	0	0.00%	0	0
YTD	696,922		189,373	372,597	13,938	121,014	31,267		1,225	449	87,834		752	1,227	439		395	0
MON AVG	58,077	70.27%	15,781	31,050	1,162	10,085	2,606	3.17%	102	37	7,320	8.87%	63	102	37	0.04%	33	0

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#### **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 2022 2021 2020 2019 2018 2017											17			
Oahu Civilian 971,113 69.45% 1,052,026 68.91% 991,016 71.11% 1,075,726 69.67% 1,034,190 70.62%									1,022,818	72.16%				
<b>RDC Pearl Harbor</b>	31,827	2.28%	39,253	2.58%	37,014	2.66%	37,905	2.45%	37,068	2.53%	27,916	1.97%		
Hawaii County	199,811	14.29%	214,220	14.00%	188,329	13.51%	211,611	13.70%	206,648	14.11%	193,166	13.62%		
Maui County	140,524	10.05%	160,241	10.51%	125,626	9.01%	157,127	10.18%	133,869	9.14%	123,685	8.73%		
Kauai County	54,923	3.93%	60,986	4.00%	51,653	3.71%	61,754	4.00%	52,623	3.60%	49,902	3.52%		
Total	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%	1,417,487	100.00%		

911 Call Volume % decrea	se from 2021 to 2022
Oahu	-7.69%
RDC	-18.92%
Hawaii	-6.73%
Maui	-12.30%
Kauai	-9.94%
State of Hawaii	-8.42%

911 Calls with No ALI 9	% average for 2022
Oahu	0.11%
RDC	0.00%
Hawaii	0.05%
Maui	0.06%
Kauai	0.04%
State of Hawaii average	0.05%

State of Hawaii 2022								
TEXT TO 911								
Oahu Civilian	3,415							
RDC Pearl Harbor	36							
Hawaii County	526							
Maui County	223							
Kauai County	153							
*Total 4,353								
*Totals may include PSAP training,								

testing, and 911 Texting errors



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#### TEXT TO 911 OAHU CIVILIAN PSAPS - CURRENT MONTH - OCTOBER 2023

	TEXT TO 911 Oahu Civilian PSAPs 2023						
Month	Total	HPD	HFD	EMS	os	911 (handled)	
January	274	204	1	4	0	65	
February	239	167	2	0	0	70	
March	238	193	1	7	0	37	
April	322	238	2	0	0	82	
May	161	136	1	2	0	22	
June	138	98	2	2	0	36	
July	223	153	5	2	0	63	
August	314	198	5	6	0	105	
September	223	172	1	3	0	47	
October	213	134	1	3	0	75	
November							
December							
YTD	2,345	1,693	21	29	0	602	
Monthly Avg.	234.5	169.3	2.1	2.9	0.0	60.2	

#### 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 - OCTOBER 2023

	OAHU CIVILIAN - SEPTEMBER 2023					
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 October 2023.



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#### 2. MSAG (MASTER STREET ADDRESS GUIDE)

#### OAHU CIVILIAN MSAG TRANSACTIONS CURRENT MONTH/YEAR - OCTOBER 2023

OAHU		•	•	9-1-1 <sup>-</sup>	TRANSA	CTIONS	•	•	
CIVILIAN	Total	MSAG	A	LI Submitte	ed	Discre	Open ALI		Customer Addresses
2023	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Affected
JANUARY	580	9	571	0	0	4,112	0	0	422
FEBRUARY	443	22	421	0	0	3,900	0	0	1,713
MARCH	201	7	194	0	0	3,825	0	0	1,337
APRIL	435	3	432	0	0	3,849	0	0	0
MAY	352	28	324	0	0	3,784	0	0	3,548
JUNE	408	9	399	0	0	3,749	0	0	767
JULY	426	36	389	1	0	3,692	0	0	2,194
AUGUST	344	20	324	0	0	3,719	0	0	1,325
SEPTEMBER	323	7	316	0	0	3,861	0	0	988
OCTOBER	513	3	510	0	0	3,759	0	0	208
NOVEMBER									
DECEMBER									
TOTAL YTD	4,025	144	3,880	1	0				12,502
AVG PER MONTH	403	14	388	0	0				1,250

#### **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) Voice over Internet Protocol Discrepancy Record 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.



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#### OAHU CIVILIAN MSAG CURRENT MONTH NOTES:

A total of **513** MSAG transactions were processed in 9-1-1 Net during the current reporting month. Three **(3)** 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 208 customer ANI/ALI (telephone/address) records updated as a direct result.

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

VSE (formerly Akimeka) processed five hundred and ten (510) TN CRs related to the Dispatchable Location Project during the current month.

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

• There are currently 3,759 Open TN CRs.

**3,759** Open TN CR transactions are a result of the Dispatchable Location project. VSE (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 October 31, 2023
- There is no Open VoIP DRs as of October 31, 2023



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#### TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – OCTOBER 2023

#### 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 VSE (formerly AKIMEKA)	OPENED TNCRS PENDING FURTHER ACTION BY INTRADO	OPENED TNCRS REFERRED TO TELCO BY INTRADO	TOTAL UNOPENED TNCR RECORDS	
OAHU CIVILIAN	3,759	0	3,427	332	

#### **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.

**TOTAL UNOPENED TNCR RECORDS STATUS** - The request is submitted by VSE (formerly Akimeka) on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.



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#### DISPATCHABLE LOCATION - STATUS AS OF - OCTOBER 2023

#### NARRATIVE:

During the August 2015 State of Hawaii 911 Board meeting, VSE (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, VSE (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), VSE (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 332 transactions submitted and 424 processed in October 2023. (see next pages)

Dispatchable Location					
2023 Quarter 4	Common Name Place  MSAG Address  Sul		Transactions Processed**		
Quarter 3 Carryover		35,547	21,086		
	Kalele Kai Condo, 1 Keahole Pl, Hawaii Kai	0	101		
	Hanauma Bay, 100 Hanauma Bay Rd, Hawaii Kai	0	14		
	Yacht Harbor Towers, 1650 Ala Moana Blvd, Ala Moana	0	25		
	Mount Terrance Condos, 250 Kawaihae St, Hawaii Kai	0	48		
	Hawaii Kai Retirement, 428\446 Kawaihae St, Hawaii Kai	0	155		
	Kapiolani Community College, 4303 Diamond Head Rd, Kahala	0	38		
October	Atkinson Plaza, 475 Atkinson Dr, Ala Moana	0	4		
October	Hawaii Nation Bank, 266 Lunalilo Home Rd, Hawaii Kai	0	12		
	Hawaii Kai Church, 265 Lunalilo Home Rd, Hawaii Kai	0	4		
	Hawaii Kai Public Library, 249 Lunalilo Home Rd, Hawaii Kai	0	5		
	Gateway Peninsula, 201/215 Kawaihae St, Hawaii Kai	0	9		
	Koko Marina 76 Station, 234 Lunalilo Home Rd, Hawaii Kai	0	3		
	Aloha Island Mart, 249 Keahole St, Hawaii Kai	0	3		
	Commodore Apt, 1868 Kahakai Dr, Ala Moana	0	3		



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#### DISPATCHABLE LOCATION - STATUS AS OF - OCTOBER 2023 - CONTINUED

	Dispatchable Location				
2023 Quarter 4	Common Name Place MSAG Address	TNCR* Transactions Submitted	Transactions Processed**		
Quarter 3 Carryover		35,547	21,086		
	Koko Marina Center, 7192 Kalanianaole Hwy, Hawaii Kai	138	0		
	US Dept of Agriculture, 410650 Ahiki St, Waimanalo	14	0		
	Rocky Rd Products, 410520 Hihimanu St, Waimanalo	7	0		
October	Hui Malama O Ke Kai Foundation, 410477 Hihimanu St, Waimanalo	3	0		
	Hawaii Job Corps, 410467 Hihimanu St, Waimanalo	163	0		
	Hawaiian Sunshine Nursery, 410436 Hihimanu St, Waimanalo	4	0		
	Waste Treatment Plant, 411060 Kalanianaole Hwy, Waimanalo	3	0		
November					
December					
Q4		332	424		
Total		35,879	21,510		



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#### SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT – OCTOBER 2023

VSE (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 VSE (formerly Akimeka) has access to these ALI Records, VSE (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 VSE (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> VSE (formerly Akimeka) provided VoIP Records with Latitude/Longitude coordinates

(A)	VoIP Database records submitted by Spectrum to VSE (formerly Akimeka) for research and MSAG address validation.
	VSE (formally Akimeka) has researched and verified the VoIP record against an MSAG valid address and GIS data. VSE (formerly
(B)	Akimeka) 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.



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#### BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT - OCTOBER 2023

VSE (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 VSE (formerly Akimeka) has access to these ALI Records, VSE (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.

VSE (formerly Akimeka) 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 VSE (formerly AKIMEKA)	BANDWIDTH FALLOUT RECORDS (B)	NON MATCHING RECORDS CORRECTED BY VSE (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 VSE (formerly Akimeka) 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.

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



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## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – OCTOBER 2023

MAPPING LAYERS UPDATED (PART I)

OAHU CIVILIAN PSAPS				
Type of Layer	VSE (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 11/3/2023		
		Added new address point for two (2) records in Nuuanu		
		Corrected civic street for two (2) records in Kalaeloa		
		Added prefix for one (1) record in Downtown		
		Corrected spatial for one (1) record in Kalihi		
		Added new address point for one (1) record in Kaaawa		
		Corrected routing ID, corrected house number, corrected apartment for		
		nine (9) records in Kaneohe		
		Added new address point for three (3) records in Aiea		
		Corrected spatial for nineteen (19) records in Downtown		
	10/20/2023	Added new address point for three (3) records in Kailua		
Address Points	To	Corrected spatial for one (1) record in Makiki		
	10/31/2023	Added new address point for four (4) records in Kalihi		
		Corrected civic street for three (3) records in Sunset		
		Added new address point for one hundred and seven (107) records in		
		Punchbowl (12)		
		Corrected civic street for forty-three (43) records in Makakilo		
		Added new address point for three (3) records in Kaimuki		
		Corrected civic street for two (2) records in Makaha		
		Added new address point for one (1) record in Wahiawa		
		Corrected routing ID, added routing ID for one (1) record in Kaneohe  Added new address point for one (1) record in Mililani		
		Corrected spatial for seventeen (17) records in Kaneohe		
		Added new address point for one (1) record in Honolulu		
		raded her address point for one (1) record in honoraid		



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## MAPPING LAYERS UPDATED (PART II)

	OAHU CIVILIAN PSAPS			
Type of Layer	VSE (formerly Akimeka) GIS Server Date Created/ Edits Performed	Other/Remarks		
CRITICAI	9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE		
		(Listed Alphabetically)		
		Corrected civic street for one (1) record in Pearl City		
		Added new address point for one (1) record in Aina Haina		
		Added new address point for one (1) record in Haleiwa		
		Added new address point for one (1) record in Moanalua		
		Added new address point for two (2) records in Aliamanu		
		Added new address point for ninety-six (96) records in Kaneohe		
		Corrected civic street for two (2) records in Maili		
		Corrected routing ID for one hundred and four (104) records in Kaneohe		
		Corrected civic house for one (1) record in Waialua		
	10/20/2023	Corrected apartment, corrected spatial for one (1) record in Makiki		
	To	Corrected civic street for four (4) records in Kahaluu		
Address Points	10/31/2023	Corrected routing ID, corrected spatial for one (1) record in Kaneohe		
		Corrected spatial for four (4) records in Sunset		
		Corrected civic street for seventy-eight (78) records in Waipio		
		Corrected routing ID, corrected apartment for ninety-three (93) records		
		in Kaneohe		
		Added new address point for one hundred and eleven (111) records in		
		Makiki		
		Added new address point for four (4) records in Downtown		
		Corrected civic street for two (2) records in Mokuleia		
		Corrected routing ID, added routing ID, corrected spatial for eight (8)		
	40/0/0555 =	records in Kaneohe		
	10/6/2023 To 10/19/2023	Delivered 10/20/2023		
	10/13/2023	Added new address point for one (1) record in Nuuanu		



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## MAPPING LAYERS UPDATED (PART III)

OAHU CIVILIAN PSAPS					
Type of Layer	VSE (formerly Akimeka) GIS Server Date Created/ Edits Performed	Other/Remarks			
CRITICAI	2 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE			
		(Listed Alphabetically)			
		Corrected ESN for one (1) record in Kailua			
		Corrected civichouse for one (1) record in Waialua			
		Added new address point for three (3) records in Kailua			
		Added prefix direction for three hundred and thirty (330) records in			
		Honolulu			
		Corrected ESN for one (1) record in Kailua  Added new address point for three hundred and thirty (330) records in Honolulu  Corrected routing ID, added prefix for one (1) record in Kailua  Added new address point for three (1) record in Kailua  Added new address point for three hundred and thirty (330) records in Honolulu  Corrected routing ID, added prefix for one (1) record in Kailua  Added new address point for one (1) record in Kailui  Corrected ESN for one hundred and eighty-four (184) records in Aiea  Added new address point for one (1) record in Punchbowl  Added new address point for two (2) records in Aina Haina			
Address Points					
		• • • • • • • • • • • • • • • • • • • •			
	10/6/2023	Added new address point for two (2) records in Aina Haina Added new address point for two hundred and eighteen (218) record Hawaii Kai			
	То				
	10/19/2023				
		C SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)  Corrected ESN for one (1) record in Kailua Corrected civichouse for one (1) record in Waialua Added new address point for three (3) records in Kailua Added prefix direction for three hundred and thirty (330) records in Honolulu Corrected routing ID, added prefix for one (1) record in Kailua Added new address point for one (1) record in Kailini Corrected ESN for one hundred and eighty-four (184) records in Aiea Added new address point for one (1) record in Punchbowl Added new address point for two (2) records in Aina Haina Added new address point for two hundred and eighteen (218) records Hawaii Kai Corrected ESN for sixty-eight (68) records in Honolulu Added new address point for one (1) record in Wahiawa Added new address point for one (1) record in Manoa Added new address point for one (1) record in McCully Corrected ESN one (1) record in Aiea Added new address point for one hundred and seventy-four (174) records in Waikiki Corrected routing ID for one (1) record in McCully Corrected spatial for six (6) records in Kaimuki Added new address point for six (6) records in Kaimuki			
		SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)  Corrected ESN for one (1) record in Kailua Corrected civichouse for one (1) record in Waialua Added new address point for three (3) records in Kailua Added prefix direction for three hundred and thirty (330) records in Honolulu Corrected routing ID, added prefix for one (1) record in Kailua Added new address point for one (1) record in Kailia Corrected ESN for one hundred and eighty-four (184) records in Aiea Added new address point for one (1) record in Punchbowl Added new address point for two (2) records in Aina Haina Added new address point for two hundred and eighteen (218) records i Hawaii Kai Corrected ESN for sixty-eight (68) records in Honolulu Added new address point for one (1) record in Wahiawa Added new address point for one (1) record in Maialae Added prefix direction for eleven (11) record in McCully Corrected ESN one (1) record in Aiea Added new address point for one hundred and seventy-four (174) records in Waikiki Corrected routing ID for one (1) record in McCully Corrected spatial for six (6) records in Kaimuki Added new address point for six (6) records in Kaimuki			
		Added new address point for three (3) records in Kailua Added prefix direction for three hundred and thirty (330) records in Honolulu Corrected routing ID, added prefix for one (1) record in Kailua Added new address point for one (1) record in Kalihi Corrected ESN for one hundred and eighty-four (184) records in Aiea Added new address point for one (1) record in Punchbowl Added new address point for two (2) records in Aina Haina Added new address point for two hundred and eighteen (218) records Hawaii Kai Corrected ESN for sixty-eight (68) records in Honolulu Added new address point for one (1) record in Wahiawa Added new address point for one (1) record in Waialae Added prefix direction for eleven (11) records in Manoa Added new address point for one (1) record in McCully Correcteed ESN one (1) record in Aiea Added new address point for one hundred and seventy-four (174) records in Waikiki Corrected routing ID for one (1) record in McCully Corrected spatial for six (6) records in Kaimuki Added new address point for six (6) records in Kaimuki			
		Cisted Alphabetically)  Corrected ESN for one (1) record in Kailua  Corrected civichouse for one (1) record in Waialua  Added new address point for three (3) records in Kailua  Added prefix direction for three hundred and thirty (330) records in Honolulu  Corrected routing ID, added prefix for one (1) record in Kailua  Added new address point for one (1) record in Kailua  Added new address point for one (1) record in Kailua  Added new address point for one (1) record in Italia  Corrected ESN for one hundred and eighty-four (184) records in Aiea  Added new address point for two (2) records in Aina Haina  Added new address point for two hundred and eighteen (218) records in Hawaii Kai  Corrected ESN for sixty-eight (68) records in Honolulu  Added new address point for one (1) record in Wahiawa  Added new address point for one (1) record in Manoa  Added new address point for one (1) record in McCully  Correcteed ESN one (1) record in Aiea  Added new address point for one hundred and seventy-four (174) records in Waikiki  Corrected routing ID for one (1) record in McCully  Corrected spatial for six (6) records in Kaimuki  Added new address point for six (6) records in Kaimuki			
		Corrected routing ID, added prefix for one (1) record in Kailua  Added new address point for one (1) record in Kalihi  Corrected ESN for one hundred and eighty-four (184) records in Aiea  Added new address point for one (1) record in Punchbowl  Added new address point for two (2) records in Aina Haina  Added new address point for two hundred and eighteen (218) records in Hawaii Kai  Corrected ESN for sixty-eight (68) records in Honolulu  Added new address point for one (1) record in Wahiawa  Added new address point for one (1) record in Wahiaea  Added prefix direction for eleven (11) records in Manoa  Added new address point for one (1) record in McCully  Corrected ESN one (1) record in Aiea  Added new address point for one hundred and seventy-four (174) records in Waikiki  Corrected routing ID for one (1) record in McCully  Corrected spatial for six (6) records in Kaimuki  Added new address point for six (6) records in Kaimuki			
		-			
		· · · · · · · · · · · · · · · · · · ·			
		Corrected prefix direction for five (5) records in Downtown			



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## MAPPING LAYERS UPDATED (PART IV)

OAHU CIVILIAN PSAPS				
Type of Layer	VSE (formerly Akimeka) GIS Server Date Created/ Edits Performed	Other/Remarks		
CRITICAI	2 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE		
		(Listed Alphabetically)		
Added new address point for one (1) record in Kaneohe				
		Added new address point for one (1) record in Haleiwa		
		Corrected house number for one (1) record in Kahala		
		Corrected spatial, added location name for two (2) records in Hawaii Kai		
		Corrected civic house for two (2) records in Waialua		
		Other/Remarks  d  CC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)  Added new address point for one (1) record in Kaneohe Added new address point for one (1) record in Haleiwa Corrected house number for one (1) record in Kahala Corrected spatial, added location name for two (2) records in Hawaii Corrected civic house for two (2) records in Waialua Added new address point for one (1) record in Waipio Added new address point for one (1) record in Waialua Corrected routing ID for five (5) records in Manoa Corrected spatial for one (1) record in Waikiki Added new address point for one (1) record in Punaluu Added new address point for one (1) record in Kailua Added new address point for one (1) record in Fearl City Added new address point for one (1) record in Hawaii Kai Added new address point for four (4) records in Manoa Corrected spatial, corrected house number, corected street type for (1) record in Kaneohe  Delivered 10/6/2023  Added prefix direction for one hundred and ninety-three (193) record Nuuanu		
		Added new address point for one (1) record in Waialua		
	10/6/2023			
	To	Other/Remarks  C SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)  Added new address point for one (1) record in Kaneohe Added new address point for one (1) record in Kahala Corrected house number for one (1) record in Kahala Corrected spatial, added location name for two (2) records in Hawaii k Corrected civic house for two (2) records in Waialua Added new address point for one (1) record in Waipio Added new address point for one (1) record in Waialua Corrected routing ID for five (5) records in Manoa Corrected spatial for one (1) record in Waikiki Added new address point for one (1) record in Punaluu Added new address point for one (1) record in Kailua Added new address point for one (1) record in Kailua Added new address point for one (1) record in Rahaluu Added new address point for one (1) record in Hawaii Kai Added new address point for four (4) records in Manoa Corrected spatial, corrected house number, corected street type for one (1) record in Kaneohe  Delivered 10/6/2023  Added prefix direction for one hundred and ninety-three (193) records Hawaii Kai  Added new address point for two hundred and fifty-five (255) records Hawaii Kai		
	10/19/2023			
Address Points				
		,		
		C SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)  Added new address point for one (1) record in Kaneohe Added new address point for one (1) record in Haleiwa Corrected house number for one (1) record in Kahala  Corrected spatial, added location name for two (2) records in Hawaii Ka Corrected civic house for two (2) records in Waialua Added new address point for one (1) record in Waipio Added new address point for one (1) record in Waialua Corrected routing ID for five (5) records in Manoa Corrected spatial for one (1) record in Waikiki Added new address point for one (1) record in Punaluu Added new address point for one (1) record in Kahaluu Added new address point for one (1) record in Kahaluu Added new address point for one (1) record in Hawaii Kai Added new address point for one (1) record in Hawaii Kai Added new address point for four (4) records in Manoa Corrected spatial, corrected house number, corected street type for on (1) record in Kaneohe  Delivered 10/6/2023  Added prefix direction for one hundred and ninety-three (193) records Nuuanu Added new address point for two hundred and fifty-five (255) records in Hawaii Kai		
	10/1/2023	Other/Remarks  C SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)  Added new address point for one (1) record in Kaneohe Added new address point for one (1) record in Haleiwa Corrected house number for one (1) record in Kahala Corrected spatial, added location name for two (2) records in Hawaii Kai Corrected civic house for two (2) records in Waialua Added new address point for one (1) record in Waipio Added new address point for one (1) record in Waialua Corrected routing ID for five (5) records in Manoa Corrected spatial for one (1) record in Waikiki Added new address point for one (1) record in Punaluu Added new address point for one (1) record in Iaie Corrected routing ID for two (2) records in Kailua Added new address point for one (1) record in Pearl City Added location name for one (1) record in Hawaii Kai Added new address point for four (4) records in Manoa Corrected spatial, corrected house number, corected street type for one (1) record in Kaneohe  Delivered 10/6/2023  Added prefix direction for one hundred and ninety-three (193) records in Hawaii Kai Added new address point for two hundred and fifty-five (255) records in Hawaii Kai		
	То			
	10/5/2023			



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## MAPPING LAYERS UPDATED (PART V)

OAHU CIVILIAN PSAPS					
Type of Layer	VSE (formerly Akimeka) GIS Server Date Created/ Edits Performed	Other/Remarks			
CRITICAI	2 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE			
		(Listed Alphabetically)			
		Added new address point for one (1) record in Aiea			
		Added prefix direction for one (1) record in Kailua			
	40/4/0000	Added new address point for three (3) records in Kailua			
Address Points	10/1/2023 To	Added location name for nine (9) records in Hawaii Kai			
Address I onits	10/5/2023	Added new address point for one (1) record in Waipio			
		Added new address point for one (1) record in Nanakuli			
		Added new address point for one (1) record in Nuuanu			
		Corrected routing ID for three (3) records in Hawaii Kai			
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					



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#### MAPPING LAYERS UPDATED (PART VI)

OAHU CIVILIAN PSAPS					
Type of Layer	VSE (formerly Akimeka) GIS Server Date Created/	Other/Remarks			
	Edits Performed				
CRITICAI	L 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE			
		(Listed Alphabetically)			
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					
Lodging					
Major Roads					
Medic Beats					
Medic Districts					
Medic Response Areas					
Medic Stations					
Medical Facilities					
Milepost Markers					
Military Response Areas					
MSAG Communities					



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## MAPPING LAYERS UPDATED (PART VII)

OAHU CIVILIAN PSAPS							
Type of Layer	VSE (formerly Akimeka) GIS Server Date Created/ Edits Performed	Other/Remarks					
CRITICAI	9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE					
		(Listed Alphabetically)					
Net Junctions							
Ocean Rescue Boundaries							
Ocean Safety							
Parcels							
Parks							
Parks Polygon							
Points of Interest	10/20/2023 To 10/31/2023	Next Delivery 11/3/2023					
n trans	10/31/2023	Corrected spatial for three (3) records in Downtown					
Police Beats							
Police Districts							
Police Response Areas							
Police Stations							
Post Offices							
Schools		Nov4 Dolivery 44/0/000					
	10/20/2023	Next Delivery 11/3/2023  Split segment, corrected range for ten (10) records in Kaneohe					
	То	Added ingress for twenty-four (24) records in Kaneohe					
Street Centerlines	10/31/2023	Corrected oneway for one (1) record in Honolulu					
		Delivered 10/20/2023					
officer deliterinies	10/6/2023	Added ingress for four (4) records in Manoa					
	To	Corrected spatial for eight (8) records in Kalihi					
	10/19/2023	Corrected spatial for one (1) record in Ala Moana					
		Corrected zipcode for four (4) records in Manoa					
		· · · · · · · · · · · · · · · · · · ·					



## October 1, 2023 - October 31, 2023

#### MAPPING LAYERS UPDATED (PART VIII)

	OAHU CIVILIAN PSAPS					
Type of Layer	VSE (formerly Akimeka) GIS Server Date Created/ Edits Performed	Other/Remarks				
CRITICAI	29-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Street Centerlines	10/6/2023 To 10/19/2023 10/1/2023 To 10/5/2023	Corrected spatial for one (1) record in Honolulu  Corrected spatial for two (2) records in Waikiki  Corrected range for one (1) record in Nuuanu  Delivered 10/6/2023  Added ingress for four (4) records in Hawaii Kai  Split segment, corrected range for two (2) records in Hawaii Kai				
Subdivisions						
Tow Jurisdictions						
Tsunami Evacuation Zones						
Tsunami Heights						
Waste Water Plants		New ( De l'en me 44/0/0000				
	10/20/2023 To 10/31/2023	Next Delivery 11/3/2023  Added six (6) sectors per Verizon Wireless CRS  Updated twelve (12) sectors per Verizon Wireless CRS				
WSP Cell Sectors	10/6/2023 To 10/19/2023 10/1/2023 To	Added two hundred and two (202) sectors per Verizon Wireless CRS  Added twenty-six (26) sectors per Verizon Wireless audt  Updated fifty-nine (59) sectors per Verizon Wireless audit  Updated thirteen (13) sectors per Verizon Wireless CRS  Delivered 10/6/2023  Added twenty-eight (28) sectors per AT&T audit  Added six (6) sectors per T-Mobile CRS				
	10/5/2023	Added four (4) sectors per AT&T audit Updated ninety-six (96) sectors per AT&T audit				



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#### MAPPING LAYERS UPDATED (PART IX)

	OAHU CIVILIAN PSAPS					
Type of Layer	VSE (formerly Akimeka) GIS Server	Other/Remarks				
	Date Created/ Edits Performed					
CRITICAI	SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)					
	· • • • • • • • • • • • • • • • • • • •					
		Delivered 10/20/2023				
		Updated two (2) towers per Verizon Wireless CRS				
	10/6/2023 To 10/19/2023	Updated one hundred and forty-three (143) towers per Verizon Wireles				
WSP Cell Towers	10/19/2023	Added one (1) tower per Verizon Wireless CRS				
	l	Added four (4) towers per Verizon Wireless audit				
		Delivered 10/6/2023				
	10/1/2023	Other/Remarks  SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)  Next Delivery 11/3/2023  Updated two (2) towers per Verizon Wireless CRS  Delivered 10/20/2023  Updated two (2) towers per Verizon Wireless CRS  Updated one hundred and forty-three (143) towers per Verizon Wireless audit  Added one (1) tower per Verizon Wireless CRS  Added four (4) towers per Verizon Wireless audit  Delivered 10/6/2023  Added one (1) tower per AT&T CRS  Updated twenty-three (23) towers per AT&T audit  Added one (1) tower per AT&T audit				
	То	Updated twenty-three (23) towers per AT&T audit				
	10/5/2023	Added one (1) tower per AT&T audit				
		Added two (2) towers per T-Mobile CRS				



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#### GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVES

#### GIS KEY ACTIVITIES/UPDATES

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

Date	Key Activities/Updates
10/20/2023	MapFlex Civilian Deliverable: 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.
10/20/2023	TriTech Deliverable: Delivered Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD.
10/19/2023	HPD TriTech Deliverable: Delivered data update for Central Square including Streets, Police Beats, and Address Points (with and without the apartment records). Updated the export process for the upgraded version of Mobile, per instructions from Central Square.
10/17/2023	Assisted HPD with the data load to the Production CAD.
10/6/2023	HPD TriTech Deliverable: Delivered data update for Central Square including Streets, Police Beats, and Address Points (with and without the apartment records).
10/6/2023	TriTech Deliverable: Delivered Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD.
10/6/2023	MapFlex Civilian Deliverable: 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.
10/3/2023	Assisted HPD with the data load to the Production and Test CAD.



### October 1, 2023 - October 31, 2023

#### GIS FOR 911

As part of ensuring GIS data compatibility with 911 CAD systems, VSE (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.

#### HONOLULU POLICE DEPARTMENT TRITECH CAD PROJECT

On October 10, 2018, VSE (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, VSE (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
  - 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.



### October 1, 2023 - October 31, 2023

#### MAPFLEX SYSTEM

VSE (formerly Akimeka) delivered GIS data to the MapFlex system on the following dates in October 2023

**Hawaii County** – October 3, 2023, October 17, 2023, and October 31, 2023 **Maui County** – October 4, 2023, and October 18, 2023

Kauai County - October 5, 2023, and October 19, 2023

Honolulu – October 6, 2023, and October 20, 2023

#### **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 October 2023.

#### **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 October 2023, there were no Routing IDs added. As of August 2023, 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.



### October 1, 2023 - October 31, 2023

#### 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, VSE (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 VSE (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.

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.

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.

During the month of January 2022, there was a quarterly update to the Honolulu Medic Response Area.

During the month of May 2022, there was a quarterly update to the Honolulu Medic Response Area.

During the month of November 2022, there was a quarterly update to the Honolulu Medic Response Area.

During the month of May 2023, there was a quarterly update to the Honolulu Medic Response Area.

During the month of August 2023, there was a quarterly update to the Honolulu Medic Response Area.



October 1, 2023 - October 31, 2023

## 4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS - OCTOBER 2023

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

#### NOTE:

There are no (0) open service requests for October 2023.

SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY – 2023

	Oahu PSAPs				MSAG SERVICE REQUEST CATEGORIES					
2022	TOTAL		0	WIRELINE		WIRELESS		VoIP		
2023	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed	
2022 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	0	0	0	0	0	0	0	0	0	
September	0	0	0	0	0	0	0	0	0	
October	0	0	0	0	0	0	0	0	0	
November										
December										
TOTAL	0	0	0	0	0	0	0	0	0	

	* The 2022 Carryover row indicates the number of Service Requests that were opened in 2022;
Note:	however, were brought forward into 2023 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



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#### 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 VSE (formerly Akimeka)'s value added services, VSE (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 VSE (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 **OCTOBER 17, 2023,** database synchronization audit are reported below.

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

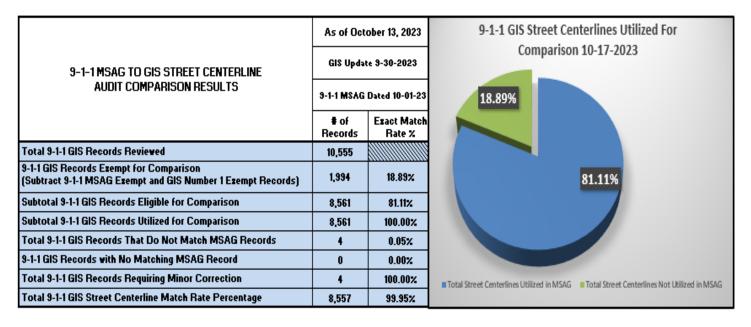
VSE Corporation (formerly Akimeka LLC)'s two-way database comparison service provides for comparing the Local Exchange Carriers (LECs) MSAG Database to the Honolulu Police Department's 9-1-1 GIS Street Centerline layer. This ensures the Telephone or VoIP Telephone Company device information is accurate 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.



### October 1, 2023 - October 31, 2023

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

A total number of **10,555** GIS Street Centerline Records are maintained for the Honolulu Police Department's 9-1-1 GIS database by VSE (formerly Akimeka). For this comparison, **1,994** GIS street records were excluded as database exemptions. VSE (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 **8,561** 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 **8,557** GIS Street Centerline Records that exactly match the MSAG Database. The results of the GIS to MSAG Records comparison analysis are provided below:



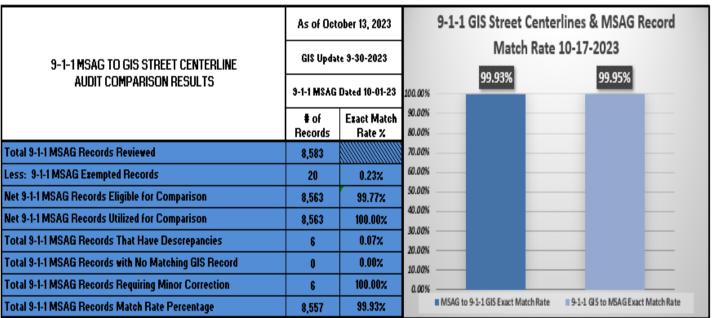
#### 9-1-1 GIS Street Centerline to MSAG Record Comparison

A total of **8,583 9-1-1 MSAG records** are maintained for the Honolulu Police Department's 9-1-1 GIS database by VSE (formerly Akimeka). VSE (formerly Akimeka) removed **20 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 **8,557** MSAG Records that exactly match the 9-1-1 Street Centerline GIS Database.



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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%.



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#### 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 October 17, 2023		9-1-1 GIS Street Centerline To ALI
9-1-1 Street Centerline to ALI Records AUDIT COMPARISON RESULTS	9-1-1 ALI Records pulled Dated 10-01-2023		Record Match Rate 10-17-2023
	# of Records Decrepancies	GIS to ALI Exact Match Rate %	120% 100% 100% 100% 100% 100% 100% 100%
GIS Street Centerlines to ALI 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 and and and and and and
Prefix Direction Did Not Match	0	100%	.0, .0, .0, .0, .0, .0,
Post Direction Did Not Match	0	100%	Springer and the design of the second
House Number Did Not Match	0	100%	Spile is the to the

NENA Recommended Match Rate = 98%

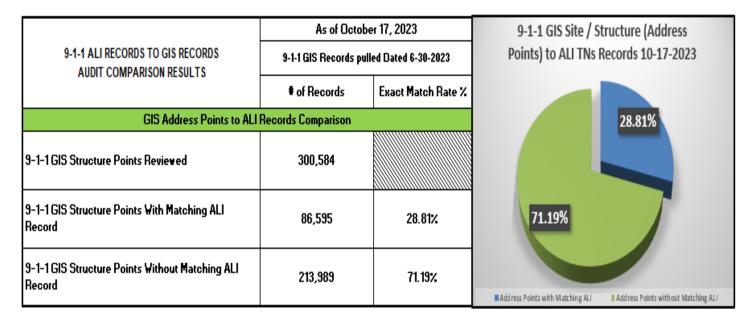


## October 1, 2023 - October 31, 2023

#### 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 300,584 total Site Structure Points with approximately 86,595 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.



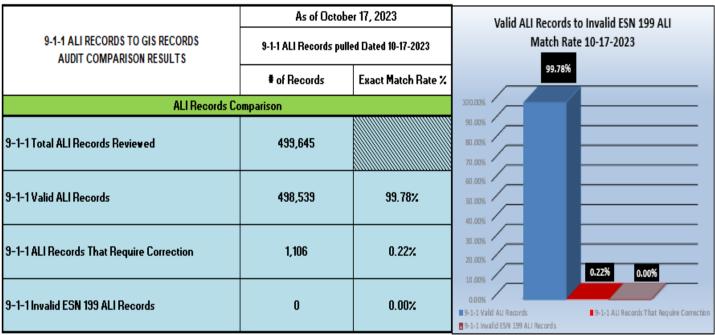
## October 1, 2023 - October 31, 2023

There are a total of **499,645** Automatic Location Identification (ALI) Records with the Wireline Provider. There are **498,539** ALI records that have an exact match with a GIS Site Structure Point. There are a total of **1,106** 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:



NENA Recommended Match Rate = 98%



#### October 1, 2023 - October 31, 2023

## 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 VSE (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.

VSE (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. VSE (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:

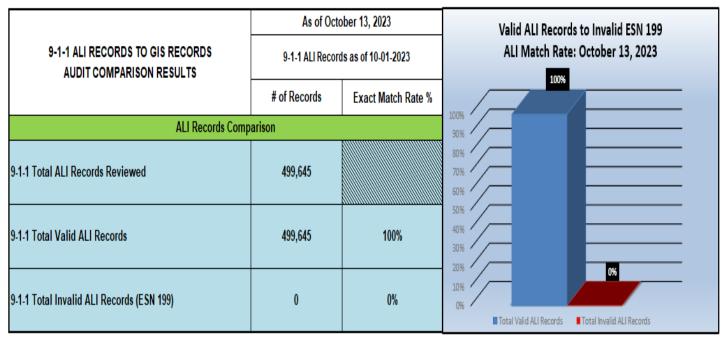
9-1-1 MSAG RECORDS TO GIS RECORDS AUDIT COMPARISON RESULTS	As of October 13, 2023 9-1-1 MSAG Records as of 10-1-2023		Valid MSAG Record to Invalid ESN 199 MSAG Records 10-13-2023
	# of Records	Exact Match Rate %	
MSAG Street Records Comparison			100%
9-1-1 Total MSAG Street Records Reviewed	8,586		
9-1-1 Total Valid MSAG Street Records Reviewed	8,586	100%	0%  ■ Valid MSAG Street Records  ■ Invalid MSAG Street Records
9-1-1 Total Invalid MSAG Street Records (ESN 199) Reviewed	0	0%	



### October 1, 2023 - October 31, 2023

#### 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%