September 1, 2023 – September 30, 2023







September 1, 2023 - September 30, 2023

TABLE OF CONTENTS

1.	PSAP Operations	4
ç	9-1-1 Call Volume – September 2023	4
ç	9-1-1 Call Volume – Calendar Year 2023	4
	PSAP Operation Notes:	5
I	For Your Information	5
7	Fext to 911 – Current Month – September 2023	6
	Note:	6
V	Vireless PSAP Testing – September 2023	6
	Notes:	6
2.	MSAG (Master Street Address Guide)	7
N	MSAG Transactions Current Month/Year – September 2023	7
	MSAG Current Month Notes:	8
	Telephone Record (ALI) Transactions Current Month Notes:	8
	Open Telephone Record (ALI) Discrepancy Status:	8
7	TNCR (Telephone Number Change Request) Current Status – September 2023	9
	Note:	9
Ι	Dispatchable Location – Status As Of – September 2023	10
	Narrative:	10
Ι	Dispatchable Location – Status As Of – September 2023 - continued	11
Ι	Dispatchable Location – Status As Of – September 2023 - continued	12



September 1, 2023 - September 30, 2023

	Spectrum (Charter) 9-1-1 VoIP Database Verification Project - September 2023	13
	Bandwidth 9-1-1 VoIP Database Verification Project – September 2023	14
3.	Geographic Information System (GIS) – September 2023	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
	Note:	19
	Geographic Information System (GIS) Narratives	19
	GIS Key Activities/Updates	19
	GIS for 911	19
	Medic 25	20
	Spillman Project	20
	MapFlex System	20
	MapFlex Issues	20
4.	Service Requests Transactions	21
	Open Service Requests – September 2023	21
	Note:	21
	Service Request Year-to-Date (YTD) Summary – 2023	21
5.	. E9-1-1 Database Synchronization	22
	Two-way (2-way) comparision— September 2023	22
	Three-way (3-way) comparision – September 2023	24
	Invalid MSAG Streets and Address Ranges – ESN 499 MSAG & ALI Records Project Completed	28



September 1, 2023 - September 30, 2023

1. PSAP OPERATIONS

9-1-1 CALL VOLUME - SEPTEMBER 2023

(Source:) Intrado Viper system

	9-1-1 Call Volume																
KAUAI PSAP		Wire	eline	Wireless		less		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	% 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	Other	% of Total Calls
Sept	4,226	301	7.12%	3,309	78.30%	14.78%	85.22%	175	4.14%	0	0.00%	0	0.00%	441	10.44%	0	0.00%

911 Calls with No Ali for September 2023 = 0.00% - Statewide average for 2022 = 0.05%

9-1-1 CALL VOLUME – CALENDAR YEAR 2023

							9-1	I-1 Call	Volum	ie							
KAUA	KAUAI PSAP		Wireline		Wireless		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	% 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	Other	% of Total Calls
JAN	5,548	350	6.31%	4,430	79.85%	17.04%	82.96%	129	2.33%	3	0.05%	0	0.00%	636	11.46%	0	0.00%
FEB	5,356	381	7.11%	4,248	79.31%	18.71%	81.29%	127	2.37%	2	0.04%	0	0.00%	598	11.17%	0	0.00%
MAR	6,314	379	6.00%	5,006	79.28%	16.46%	83.54%	265	4.20%	0	0.00%	0	0.00%	664	10.52%	0	0.00%
APR	5,979	540	9.03%	4,612	77.14%	16.65%	83.35%	188	3.14%	0	0.00%	0	0.00%	639	10.69%	0	0.00%
MAY	5,858	269	4.59%	4,843	82.67%	16.62%	83.38%	172	2.94%	1	0.02%	0	0.00%	573	9.78%	0	0.00%
JUNE	6,420	336	5.23%	5,204	81.06%	15.83%	84.17%	187	2.91%	0	0.00%	0	0.00%	693	10.79%	0	0.00%
JULY	5,146	300	5.83%	4,132	80.30%	16.51%	83.49%	170	3.30%	0	0.00%	0	0.00%	544	10.57%	0	0.00%
AUG	4,695	345	7.35%	3,633	77.38%	14.64%	85.36%	218	4.64%	1	0.02%	0	0.00%	498	10.61%	0	0.00%
SEPT	4,226	301	7.12%	3,309	78.30%	14.78%	85.22%	175	4.14%	0	0.00%	0	0.00%	441	10.44%	0	0.00%
ост																	
NOV																	
DEC																	
YTD	49,542	3,201		39,417				1631		7		0		5,286		0	
MON AVG	5,505	356	6.51%	4,380	79.48%	16.36%	83.64%	181	3.33%	1	0.01%	0	0.00%	587	10.67%	0	0.00%



September 1, 2023 - September 30, 2023

PSAP OPERATION NOTES:

- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a calltaker answered.
- Abandoned Calls are included in the total Wireline and Wireless counts respectively.
- All VoIP (Voice over Internet Protocol) types of 911 calls are combined in the Call Volume statistic.
- A New Class of Service (COS): FIXD = Wireless 911 calls to the PSAP via fixed indoor antennas.
- x (911) call 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).
- 4 (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	PSAP 2022		202	2021		20	2019		2018		2017		
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%	
RDC Pearl Harbor	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 % decrease 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 ALIS	% 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 91:	1						
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							

Page 5 of 29



September 1, 2023 - September 30, 2023

TEXT TO 911 - CURRENT MONTH - SEPTEMBER 2023

TEXT TO 911 Kar	uai County 2023
Month	Total received
January	24
February	11
March	16
April	18
May	20
June	38
July	20
August	6
September	18
October	
November	
December	
YTD	171
Monthly Avg.	19.0

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.

WIRELESS PSAP TESTING - SEPTEMBER 2023

	KAUAI COUNTY - 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 month of September 2023.

Page 6 of 29



September 1, 2023 - September 30, 2023

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – SEPTEMBER 2023

	9-1-1 TRANSACTIONS											
KAUAI COUNTY	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Submitted		Disc	Customer Addresses					
2023		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	Affected			
JANUARY	326	325	1	0	0	1,429	0	0	0			
FEBRUARY	300	299	0	0	1	1,113	0	0	0			
MARCH	308	303	5	0	0	975	0	0	14			
APRIL	280	279	1	0	0	852	0	0	0			
MAY	193	192	1	0	0	778	0	0	2			
JUNE	137	136	1	0	0	715	0	0	0			
JULY	146	146	0	0	0	679	0	0	0			
AUGUST	97	97	0	0	0	639	0	0	0			
SEPTEMBER	115	115	0	0	0	556	0	0	0			
OCTOBER												
NOVEMBER												
DECEMBER												
TOTAL YTD	1,902	1,892	9	0	1				16			
AVG PER MONTH	211	210	1	0	0	860	0	0	2			

Definitions

- (A) **D**ispatchable **L**ocation is defined in the FCC 15-9 Docket as the verified or corroborated street address of the calling party plus additional information such as floor, suite, apartment or similar information that may be needed to adequately identify the location of the calling party. Please see Dispatchable Location Section for more information.
- (B) **M**aster **S**treet **A**ddress **G**uide Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (C) **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 499 attached to them which indicates the need for validation.
- (D) **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 OR a VoIP phone. These record corrections are treated with a higher priority and should be processed within 48 hours if wireline, and 72 hours if a VoIP phone, as a general guideline.



September 1, 2023 - September 30, 2023

MSAG CURRENT MONTH NOTES:

A total of **115** MSAG transactions were processed in 9-1-1 Net during the current month. There were **no** requests processed relating to the MSAG database. Changes can include: changes to high – low street ranges, combining street records, deletion of invalid records, splitting street records to align with Police, Fire, EMS, and inserting new MSAG records.

There were no customers ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

VSE (formerly Akimeka) submitted one hundred and fifteen (115) TN CRs related to the Dispatchable Location Project during the current month.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

• There are currently 556 Open TN CRs.

Five hundred and fifty-six (556) 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 currently no Open ALI-DRs as of September 30, 2023
- There are currently no Open VoIP DRs as of September 30, 2023



September 1, 2023 - September 30, 2023

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – SEPTEMBER 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							
KAUAI	556	0	358	198							

STATUS

TOTAL TNCRs SUBMITTED - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.

<u>PENDING STATUS</u> - 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.



September 1, 2023 - September 30, 2023

DISPATCHABLE LOCATION – STATUS AS OF – SEPTEMBER 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. During the month of August 2015, VSE (formerly Akimeka) started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically, the **Kukui Grove Center at 302600 Kaumualii Hwy, Lihue**. 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. 115 transactions were submitted, and 198 transactions were processed by Intrado in September 2023. (continued on next pages)

Dispatchable Location					
2023	Common Name Place	TNCR Transactions	Transactions		
Quarter 3	MSAG Address	Submitted	Processed		
Quarter 2 Carryover		14,903	13,570		
	Multi Bus, 4504 Makeke Rd, Waimea	4	4		
	Hawaii State Government, 4505 Makeke Rd, Waimea	1	0		
	Cok Pub Works Dept, 4556 Makeke Rd, Waimea	1	0		
	Hawaiian Telcom\Verizon, 4604 Makeke Rd, Waimea	17	17		
	County of Kauai, 4594 Menehune Rd, Waimea	1	0		
	West Kauai Hongwanji, 4675 Menehune Rd, Waimea	1	0		
	L&L Hawaii BBQ Inc, 4492 Moana Rd, Waimea	1	1		
September	Multi Bus, 4493 Moana Rd, Waimea	3	2		
	Waimea United Church, 4548 Ola Rd, Waimea	2	2		
	Multi Bus, 4590 Ola Rd, Waimea	6	1		
	First Hawaiian Bank, 4525 Panako Rd, Waimea	4	4		
	Umi's Store Llc, 4485 Pokole Rd, Waimea	1	0		
	Paradise Shells & Souvenirs, 4490 Pokole Rd, Waimea	1	0		
	Waimea Shingon Mission, 9770 Pule Rd, Waimea	1	1		
	Multi Bus, 9707 Tsuchiya Rd, Waimea	2	0		



September 1, 2023 - September 30, 2023

DISPATCHABLE LOCATION - STATUS AS OF - SEPTEMBER 2023 - CONTINUED

Dispatchable Location					
2023 Quarter 3	Common Name Place MSAG Address	TNCR Transactions Submitted	Transactions Processed		
Quarter 2 Carryover		14,903	13,570		
	Kauai Care Center, 9611 Waena Rd, Waimea	8	0		
	Multi Bus, 4643 Waimea Canyon Dr, Waimea	41	24		
	Aloha Boba Tea Café, 9861 Waimea Rd, Waimea	1	0		
	Aunty Lilikoi, 9875 Waimea Rd, Waimea	1	1		
	COK\Da Booze Shop, 9883 Waimea Rd, Waimea	2	0		
	J Okada Store Inc, 9895 Waimea Rd, Waimea	1	0		
	US Govt - Postal Service, 9911 Waimea Rd, Waimea	1	0		
	Leidos Inc, 9922 Waimea Rd, Waimea	3	3		
	M & H Service, 9937 Waimea Rd, Waimea	1	1		
	County of Kauai, 6542 Anahulu Rd, Wainiha	1	1		
	Waipa Foundation, 505785 Kuhio Hwywainiha	2	0		
	GTS Limited, 5806 Waipouli Rd, Waipouli	1	1		
	Celebrity Getaways, 6335 Waipouli Rd, Waipouli	1	1		
September	Raynor Kauai Overhead Door,6363 Waipouli Rd,Waipouli	2	2		
	Hawaii Pacific, 6635 Waipouli Rd, Waipouli	1	1		
	Jaa & Associates, 5700 Olohena Rd, Waipouli	1	0		
	Gani, 4531 Pouli Rd, Waipouli	1	0		
	Martin Steel Constructors, 211 Akaula St, Port Allen	0	3		
	Chevron/Island Energy Svc, 260 Akaula St, Port Allen	0	4		
	Kauai Island Utility, 261 Akaula St, Port Allen	0	1		
	Hawaiian Telcom\Verizon, 355 Miulana Pl, Wailua	0	3		
	Aston Islander on the Beach, 440 Aleka Pl, Wailua	0	1		
	Fedex Ground, 1781 Haleukana St, Puhi	0	4		
	Multi Bus, 1821 Leleiona St, Puhi	0	4		
	Regency at Puakea, 2130 Kaneka St, Puhi	0	3		
	Koloa Landing At Poipu Beach, 2641 Poipu Rd, Poipu	0	3		
	M Kawamura Farm, 2824 Wehe Rd, Lihue	0	3		



September 1, 2023 - September 30, 2023

DISPATCHABLE LOCATION – STATUS AS OF – SEPTEMBER 2023 - CONTINUED

Dispatchable Location				
2023 Quarter 3	Common Name Place MSAG Address	TNCR Transactions Submitted	Transactions Processed	
		14,903	13,570	
Quarter 2 Carryover	First Incompanies 2074 Due New Ct. Libra	•	•	
	First Impression, 2871 Pua Nani St, Lihue	0	1	
	City Cab, 2979 Ohiohi St, Lihue	0	2	
	Pahio At Ka'Eo Kai, 3970 Wyllie Rd, Princeville	0	6	
	Island Beauty Supply, 4100 Rice St, Lihue	0	1	
	Freitas & Freitas, 4180 Lahi Pl, Lihue	0	1	
	Garden Island BBQ/Wisteria Lane, 4252 Rice St, Lihue	0	1	
	Multi Bus, 4268 Rice St, Lihue	0	3	
	USG/TSR/GSA-Transportion Security, 4280 Rice St, Lihue	0	2	
	Target/Longs Drug Stores, 4303 Nawiliwili Rd, Lihue	0	1	
	Multi Bus, 4310 Waialo Rd, Port Allen	0	5	
	Multi Bus, 4337 Rice St, Lihue	0	2	
	Multi Bus, 4347 Rice St, Lihue	0	3	
	Aloha Kia, 4359 Pahee St, Lihue	0	1	
September	T Designs By Cindra, 4361 Rice St, Lihue	0	1	
September	Shear Image, 4363 Rice St, Lihue	0	1	
	Kauai Medical Clinic, 4382 Waialo Rd, Port Allen	0	6	
	Lihue Missionary Church, 4383 Rice St, Lihue	0	1	
	Kauai Museum, 4428 Rice St, Lihue	0	2	
	Kauai Island Utility/HTI, 4392 Waialo Rd, Port Allen	0	4	
	County of Kauai, 4440 Waialo Rd, Port Allen	0	3	
	Cool Cuts/CVS Pharmacy, 4469 Waialo Rd, Port Allen	0	5	
	Chaneybrooks, 4463 Pahee St, Lihue	0	1	
	Multi Bus, 5380 Honoiki Rd, Princeville	0	8	
	Waimea Shell, 9862 Kaumualii Hwy, Waimea	0	5	
	Multi Bus, 40484 Kuhio Hwy, Wailua	0	18	
	Pioneer Hi-Bred, 100385 Kaumualii Hwy, Pakala	0	3	
	U S Govt-Post Office, 101110 Kaumualii Hwy, Pakala	0	3	
	Multi Bus, 503541 Kuhio Hwy, Princeville	0	12	
Q3		358	513	
Total		15,261	14,083	



September 1, 2023 - September 30, 2023

SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT - SEPTEMBER 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%

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

^{**} 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.
(B)	VSE (formally Akimeka) has researched and verified the VoIP record against an MSAG valid address and GIS data. VSE (formerly 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.



September 1, 2023 - September 30, 2023

BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT - SEPTEMBER 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	
WAII County	2,126	97	16	106	93.81%	
AUAI County	555	75	3	73	93.59%	
AUI County	1,794	60	14	69	93.24%	
AHU Cilivian	12,898	1,556	44	1,590	99.38%	
AHU Military	173	156	11	163	97.60%	
TOTAL	17,546	1,944	88	2,001	95.52%	

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

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

(A)	VoIP Database records submitted by Bandwidth to 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.

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



September 1, 2023 - September 30, 2023

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – SEPTEMBER 2023

MAPPING LAYERS UPDATED (PART I)

KAUAI COUNTY				
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)		
	9/21/2023	Next Delivery 10/5/2023		
	То	Spatially corrected four (4) records in Lihue		
	9/30/2023	Added address for one (1) record in Lihue		
		Delivered 9/21/2023		
		Updated address for one (1) record in Moloaa		
		Added street name for one (1) record in Kilauea		
Address Points	0/7/0000	Added address for four (4) records in Kilauea		
	9/7/2023 To 9/20/2023	Spatially corrected four (4) records in Kapaa		
		Added address for one (1) record in Kapaa		
		Added address for one (1) record in Lihue		
		Spatially corrected one (1) record in Numila		
		Added address for one (1) record in Kalaheo		
		Updated address for one (1) record in Kilauea		
Airports				
Bridges				
	9/21/2023	Next Delivery 10/5/2023		
Building Footprints	9/21/2023 To	Spatially corrected sixteen (16) records in Lihue		
Dunding 1 ootpinits	9/30/2023	Added building footprints for one (1) record in Lihue		
		Added building footprint for three (3) records in Lihue		
Bus Stops				
Churches				
Coastal Names				
Coastline				
Common Places				
Correctional Facilities				



September 1, 2023 - September 30, 2023

MAPPING LAYERS UPDATED (PART II)

		KAUAI COUNTY		
Type of Layer	VSE (formerly Akimeka) GIS Server Date Created/ Edits Performed	Other/Remarks		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE				
	T	(Listed Alphabetically)		
Emergency Callboxes				
Emergency Operation				
Centers				
Emergency Shelters				
ESZ/ESN	9/21/2023 To 9/30/2023	Next Delivery 10/5/2023 Modified boundary for four (4) records		
Fire Beats				
Fire Districts				
Fire Response Areas				
Fire Stations				
Food & Beverage				
Gas Stations				
Gate Codes				
Government Buildings				
Harbors				
Helipads				
Hiking Trails				
Hospitals				
Hydrants				
Hyrdology Layers				
Incident Response Areas				
Lodging				
Major Roads				
Medic Beats				
Medic Districts				



September 1, 2023 - September 30, 2023

MAPPING LAYERS UPDATED (PART III)

		KAUAI COUNTY
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)
Medic Response Areas		
Medic Stations		
Medical Facilities		
Milepost Markers		
MSAG Communities		
Net Junctions		
Ocean Rescue Boundaries		
Ocean Safety		
Parcels		
Parks		
Parks Polygon		
	9/7/2023	Delivered 9/21/2023
Points of Interest	То	Added POI for one (1) record in Lihue
	9/20/2023	Verified address for one (1) record in Lihue
	9/7/2023 To	Delivered 9/21/2023
Police Beats	9/20/2023	Modified boundary for two (2) records
Tonce Beats	9/1/2023 To	Delivered 9/7/2023
	9/6/2023	Modified boundary for two (2) records
Police Beats_C3	9/7/2023 To	Delivered 9/21/2023
Tonce Beats_C3	9/20/2023	Modified boundary for four (4) records
Police Response Areas	9/7/2023 To	Delivered 9/21/2023
Toffee Response Aleas	9/20/2023	Modified boundary for two (2) records
Police Stations		
Post Offices		
Schools		



September 1, 2023 - September 30, 2023

MAPPING LAYERS UPDATED (PART IV)

KAUAI COUNTY				
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 10/5/2023		
	9/21/2023 To	Spatially corrected eight (8) records in Lihue		
	9/30/2023	Partial spatial correction for one (1) record in Lihue		
	0/00/2020	Spatially corrected nine (9) records in Lihue		
		Delivered 9/21/2023		
		Spatially corrected seven (7) records in Lihue		
	9/7/2023 To 9/20/2023	Spatially corrected one (1) record in Lihue		
		Split centerline, modified range for two (2) records in Numila		
Street Centerlines		Split centerline, modified range for two (2) records in Olokele		
Street dentermies		Partial spatial correction for one (1) record in Numila		
		Partial spatial correction for seven (7) records in Lihue		
		Spatially corrected one (1) record in Hanamaulu		
		Delivered 9/7/2023		
	9/1/2023	Partial spatial correction for one (1) record in Koloa		
	9/1/2023 To	Spatially corrected one (1) record in Hanalei		
	9/6/2023	Spatially corrected one (1) record in Wailua		
		Split centerline, modified range for two (2) records in Omao		
		Split centerline, modified range for one (1) record in Koloa		
Subdivisions				
Tow Jurisdictions				
Tsunami Evacuation Zones				
Tsunami Heights				
Waste Water Plants				
WSP Cell Sectors				
WSP Cell Towers				



September 1, 2023 - September 30, 2023

NOTE:

• The Parcels layer is provided by Kauai County. VSE (formerly Akimeka) performs edits on the spatial information of the layer for 9-1-1 purposes. Changes to the attribute table are made when needed. The Parcels layer uploaded to the PSAP GIS server is intended for 9-1-1 purposes only and should not be disseminated to other county agencies.

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
9/21/2023	Delivered updated data for Spillman which included Address Points, Points Of Interest, Police Beats, and Street Centerlines.
9/21/2023	Delivered updated data for MapFlex which included Address Points, ESN, Points Of Interest, Police Response Areas, Street Centerlines, WSP Cell Sectors, and WSP Cell Towers.
9/7/2023	Delivered a supplementary data containg civic address fields (CivicNumber, CivicStreet, and PostalCommunity) to Intrado for go-live prep for the SCC application.
9/7/2023	Delivered updated data for Spillman which included Address Points, MSAG Communities, Points Of Interest, Police Beats, Police Beats C3, and Street Centerlines.
9/7/2023	Delivered updated data for MapFlex which included Address Points, ESN, MSAG Communities, Points Of Interest, Police Response Areas, Street Centerlines, WSP Cell Sectors, and WSP Cell Towers.
9/7/2023	Topology Checks on Polygon and Street Centerline layers
9/6/2023	Topology Checks on Polygon and Street Centerline layers

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.



September 1, 2023 - September 30, 2023

MEDIC 25

The Kauai PSAP activated a new Medic Station in Lihue. The new medic beat was created in the GIS Medic Beat Boundaries layer and all associated layers that includes the new ESNs (Emergency Service Numbers) were updated accordingly. The new medic beat was also programed into the CAD (Spillman) system to update the unit recommendation function. The 2 new ESNs 454 and 455 were also updated in 911Net for MSAG updates. ESN 454 required 89 MSAG transactions which affected 4,015 customers and, ESN 455 required 12 transactions which affected 209 customers.

SPILLMAN PROJECT

The Kauai County Spillman project is considered consistent and has not had any significant issues reported.

MAPFLEX SYSTEM

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

Hawaii County – September 5, 2023, and September 19, 2023 **Maui County** – September 6, 2023, and September 20, 2023 **Kauai County** – September 7, 2023, and September 21, 2023 **Honolulu** – September 8, 2023, and September 22, 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.



September 1, 2023 - September 30, 2023

4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – SEPTEMBER 2023

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

NOTE:

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

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

ŀ	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	1	1	0	0	0	0	0	1	1
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									
November									
December									
TOTAL	1	1	0	0	0	0	0	1	1

	* 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



September 1, 2023 - September 30, 2023

5. E9-1-1 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 Kauai Police Department (KPD) 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. 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 Emergency Service Zones (ESZs) by the Telephone Company for their 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 Kauai Police Department. They are conducted in March, June, September, and December of each Calendar Year while under contract with VSE (Formerly Akimeka).

The results of the **September 11**, **2023**, database synchronization audits are presented below.

TWO-WAY (2-WAY) COMPARISION—SEPTEMBER 2023

Akimeka's two-way database comparison service provides for comparing the Local Exchange Carriers (LECs) MSAG Database to the Kauai 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 KPD 9-1-1 GIS layers.

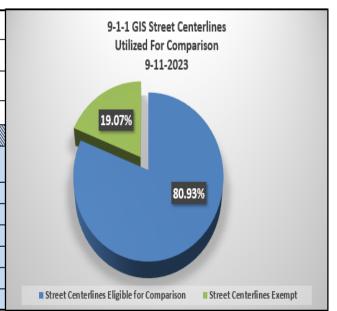


September 1, 2023 - September 30, 2023

9-1-1 GIS Street Centerlines Utilized For Comparison

A total number of **1,694** GIS Street Centerline Records are maintained for the Kauai Police Department's 9-1-1 GIS database by Akimeka. For this comparison, **323** GIS street records were excluded as database exemptions. 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 **1,371** GIS street records called "Valid 9-1-1 GIS Street Centerline records" and are compared against the Valid MSAG Records. The results of the GIS to MSAG Records comparison analysis are provided below:

	As of September 11, 2023 GIS Update 8-31-2023 9-1-1 MSAG Dated 9-01-23		
9-1-1 MSAG TO GIS STREET CENTERLINE			
AUDIT COMPARISON RESULTS			
	# of Records	Match %	
Total 9-1-1 GIS Records Reviewed	1,694		
9-1-1 GIS Records Exempt for Comparison (Subtract 9-1-1 MSAG Exempt and GIS number 1 Exempt)	323	19.07%	
Subtotal 9-1-1 GIS Records Eligible for Comparison	1,371	80.93%	
Subtotal 9-1-1 GIS Records Utilized for Comparison	1,371	100%	
Total 9-1-1 GIS Records That Do Not Match MSAG Records	1	0%	
9.1.1 GIS Records with No Matching MSAG Record	0	0%	
Total 9-1-1 GIS Records Requiring Minor Correction	1	0%	
Total 9-1-1 GIS Street Centerline Match Rate Percentage	1,370	99.93%	



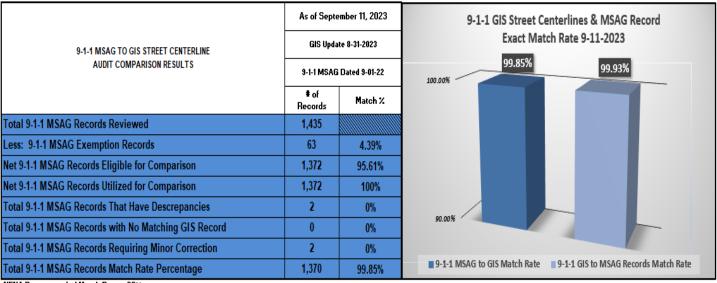
9-1-1 GIS Street Centerline to MSAG Record Comparison

A total of **1,435 9-1-1 MSAG records** are maintained for the Kauai Police Department's 9-1-1 GIS database by Akimeka. Akimeka removed **63 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 **1,372 MSAG records**.



September 1, 2023 - September 30, 2023

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 – SEPTEMBER 2023

(<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 KPD'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%.



September 1, 2023 - September 30, 2023

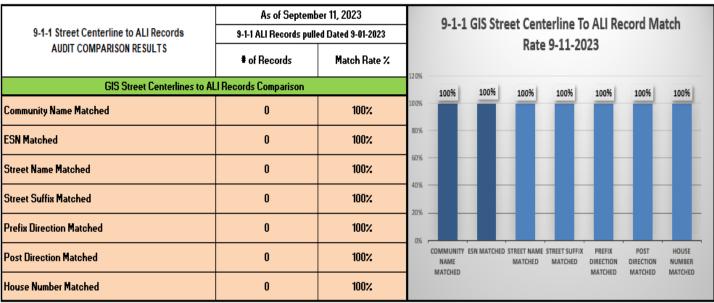
9-1-1 GIS Street Centerline To ALI Record Attribute Match Rate

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:



NENA Recommended Match Rate = 98%

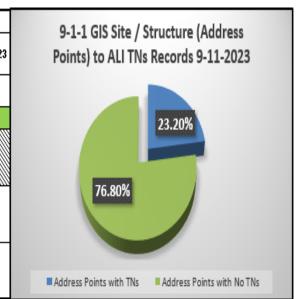


September 1, 2023 - September 30, 2023

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 Kauai County Jurisdiction has approximately **32,567** total **Site Structure Points** with approximately **7,555 Site Structure Points** that have exact matching ALI telephone records. See chart below:

	As of Septeml	9-1-1 GIS S	
9-1-1 ALI RECORDS TO GIS RECORDS AUDIT COMPARISON RESULTS	9-1-1 GIS Structure Point F	Points) to AL	
	# of Records	Match Rate %	
GIS Structure Points to AL	l Records Comparison		
9–1–1 GIS Address Points Reviewed	32,567		
9-1-1 GIS Address Points With a Matching ALI Record	7,555	23.20%	76.8
9-1-1 GIS Address Points Without a Matching ALI Record	25,012	76.80%	■ Address Points w



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.



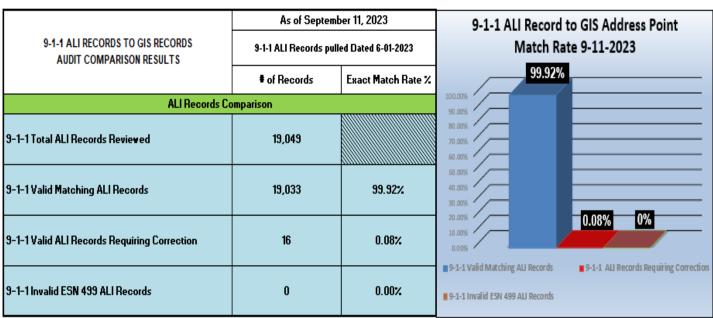
September 1, 2023 - September 30, 2023

There are 19,049 total Automatic Location Identification (ALI) Records with the Wireline Provider. There are 19,033 Valid ALI records that have an exact match with a GIS Site Structure Point. There are a total of 16 Valid ALI Records that require reviewed and/or correction to achieve an exact match. This does not mean the Valid ALI Records and Site Structure Point do not possess sufficient information that will impact a 9-1-1 call. It indicates that these records require additional research and update to exactly match the two different database records. The are 0 ESN 499 Invalid ALI Records remaining that are in the process of determining a verified valid address. ESN 499 ALI records are records that the 9-1-1 Database Maintenance Service Provider (DBMSP) could not determine an actual address for the Telephone Company.

Attributes from the two Databases that were compared during this audit include:

- 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%



September 1, 2023 - September 30, 2023

INVALID MSAG STREETS AND ADDRESS RANGES – ESN 499 MSAG & ALI RECORDS PROJECT COMPLETED

At the request of the Kauai County Chief of Police, Hawaiian Telcom, Inc. (HTI) provided Akimeka LLC, with access to the Kauai County ESN 499 MSAG and ALI records. The ESN 499 MSAG Street Records represented and identified all the "known" invalid streets in the MSAG Database.

The ESN 499 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.

Akimeka LLC has completed the necessary investigation and required correction of the 147 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 499 MSAG Records

The ESN 499 MSAG Street Records represented the number of invalid MSAG Streets Records in Kauai County that were on file with Hawaiian Telcom and their Database Maintenance Service Provider. The ESN 499 MSAG Records represented invalid MSAG Street Records that still had a valid telephone number that needs to be reassigned to a valid address. 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 499 MSAG Street Records that require attention in Kauai County. Please see the chart below:

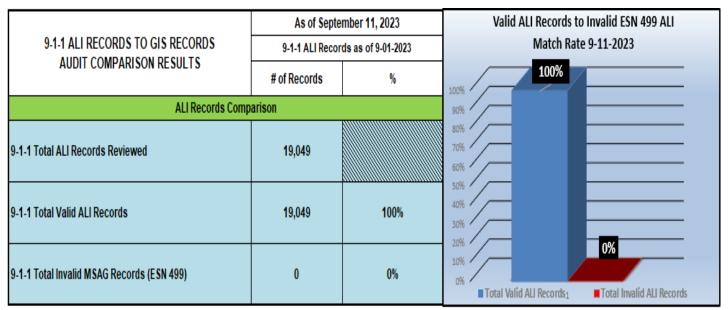
	As of Septe	mber 11, 2023	Valid MSAG Record to Invalid ESN 499 MSAG Records 9-11-2023		
9-1-1 MSAG RECORDS TO GIS RECORDS AUDIT COMPARISON RESULTS	9-1-1 MSAG Reco	ords as of 6-01-2023			
AUDIT COMPARISON RESULTS	# of Records	%			
MSAG Street Records C	0%				
9-1-1 Total MSAG Records Reviewed	1,435				
9-1-1 Total Valid MSAG Records Reviewed	1,435	100%	100%		
9-1-1 Total Invalid MSAG Records (ESN 499) Reviewed	0	0%	■ Valid MSAG Street Records ■ Invalid MSAG Street Records		



September 1, 2023 - September 30, 2023

Valid ALI Records to Invalid ESN 499 ALI Records

The ESN 499 Automatic Location Identification (ALI) Records represent the number of invalid TNs associated with the invalid ESN 499 MSAG Records. There are Zero (0) ESN 499 ALI Records which represent 0.00% of the Total ALI records in Kauai County. Akimeka has completed this project.



NENA Recommended Match Rate = 98%