March 1, 2024 - March 31, 2024







March 1, 2024 - March 31, 2024

TABLE OF CONTENTS

1.	PSAP Operations	5
	9-1-1 Call Volume Maui PSAP – March 2024	5
	Call Volume Maui PSAP Notes:	5
	9-1-1 Call Volume Maui PSAP – Calendar Year 2024	5
	9-1-1 Call Volume Molokai PSAP – March 2024	6
	Call Volume Molokai PSAP Notes:	6
	9-1-1 Call Volume Molokai PSAP – Calendar Year 2024	6
	9-1-1 Call Volume (Combined Maui & Molokai PSAPS) – March 2024	7
	9-1-1 Call Volume (Combined Maui & Molokai PSAPS) – Calendar Year 2024	7
	PSAP Operation Notes:	8
	For Your Information	8
	Text To 911 – Current Month – March 2024	9
	Note:	9
	Wireless PSAP Testing – March 2024	9
	Notes:	9
2.	MSAG (Master Street Address Guide)	10
	MSAG Transactions Current Month/Year – March 2024	10
	MSAG Current Month Notes:	11
	Telephone Record (ALI) Transactions Current Month Notes:	11
	Open Telephone Record (ALI) Discrepancy Status:	11
	TNCR (Telephone Number Change Request) Current Status – March 2024	12





March 1, 2024 - March 31, 2024

NOTE:	12
Dispatchable Location – Status As Of – March 2024	13
Narrative:	13
Spectrum (Charter) 9-1-1 VoIP Database Verification Project – March 2024	14
Bandwidth 9-1-1 VoIP Database Verification Project – March 2024	15
3. Geographic Information System (GIS) – March 2024	16
Mapping Layers Updated (Part I)	16
Mapping Layers Updated (Part II)	17
Mapping Layers Updated (Part III)	18
Mapping Layers Updated (Part IV)	19
Mapping Layers Updated (Part V)	20
Note:	21
Geographic Information System (GIS) Narratives	21
GIS Key Activities/Updates	21
GIS for 911	22
Intergraph CAD Upgrade	22
Motorola Premier One Project	23
MapFlex System	23
MapFlex Issues	23
Maui EMS (AMR)	23
4. Service Requests Transactions	24
Open Service Requests – Maui County PSAPS - March 2024	24
Note:	24
Maui PSAP Service Requests Year-To-Date (YTD) Summary – 2024	24





March 1, 2024 - March 31, 2024

5.	E9-1-1 Database Synchronization	25
	Two-way (2-way) comparision – March 2024.	25
	Three-way (3-way) comparision – March 2024	27
	Invalid MSAG Streets and Address Ranges – ESN 359 & ESN 399 MSAG & ALI Records Project Completed	31





March 1, 2024 - March 31, 2024

1. PSAP OPERATIONS

9-1-1 CALL VOLUME MAUI PSAP – MARCH 2024

Source: Intrado Viper system

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

							9-1-	1 Call V	olume								
MA	JI PSAP	Wir	eline		Wir	eless		vo	IP	Calls W		Admir	n Calls	Aband Ca	doned IIs	Other	Calls
2024	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
MAR	8,500	585	6.88%	6,768	79.62%	25.58%	74.42%	326	3.84%	78	0.92%	0	0.00%	742	8.73%	1	0.01%

CALL VOLUME MAUI PSAP NOTES:

*Calls with No ALI for March 2024 = 0.92% - Statewide average for 2023 = 0.14%

9-1-1 CALL VOLUME MAUI PSAP – CALENDAR YEAR 2024

							9-1-	1 Call V	olume								
MAL	JI PSAP	Wir	eline		Wir	eless		VO	IP	Calls w		Admir	n Calls		doned IIs	Other	Calls
2024	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	8,987	696	7.74%	7,303	81.26%	22.32%	77.68%	317	3.53%	12	0.13%	0	0.00%	658	7.32%	1	0.01%
FEB	7,714	559	7.25%	6,298	81.64%	20.96%	79.04%	308	3.99%	14	0.18%	0	0.00%	535	6.94%	0	0.00%
MAR	8,500	585	6.88%	6,768	79.62%	25.58%	74.42%	326	3.84%	78	0.92%	0	0.00%	742	8.73%	1	0.01%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	25,201	1,840		20,369				951		104		0		1,935		2	
MON AVG	8,400	613	7.29%	6,790	80.84%	22.95%	77.05%	317	3.79%	35	0.41%	0	0.00%	645	7.66%	0.67	0.01%





March 1, 2024 - March 31, 2024

9-1-1 CALL VOLUME MOLOKAI PSAP – MARCH 2024

Source: Intrado Viper system

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

							9-1-	-1 Call V	olume								
_	LOKAI PSAP	Wir	eline		Wir	eless		vo	IP	Calls W		Admir	n Calls	Aband Ca	doned Ills	Other	Calls
2024	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
MAR	696	209	30.03%	372	53.45%	40.59%	59.41%	10	1.44%	0	0.00%	0	0.00%	105	15.09%	0	0.00%

CALL VOLUME MOLOKAI PSAP NOTES:

* Calls with No ALI for March 2024 = 0.00% - Statewide average for 2023 = 0.14%

9-1-1 CALL VOLUME MOLOKAI PSAP - CALENDAR YEAR 2024

							9-1-	-1 Call V	olume								
	LOKAI PSAP	Wii	reline		Wir	eless		vo		Calls v	vith No LI	Admii	n Calls		doned alls	Other	Calls
2024	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	748	207	27.67%	390	52.14%	40.77%	59.23%	6	0.80%	0	0.00%	0	0.00%	145	19.39%	0	0.00%
FEB	635	261	41.10%	283	44.57%	43.11%	56.89%	6	0.94%	0	0.00%	0	0.00%	85	13.39%	0	0.00%
MAR	696	209	30.03%	372	53.45%	40.59%	59.41%	10	1.44%	0	0.00%	0	0.00%	105	15.09%	0	0.00%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	2,079	677		1,045				22		0		0		335		0	
MON AVG	693	226	32.93%	348	50.05%	41.49%	58.51%	7.33	1.06%	0	0.00%	0	0.00%	111.67	15.95%	0	0.00%





March 1, 2024 - March 31, 2024

9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) - MARCH 2024

							9-1-	1 Call V	olume								
_	COUNTY SAPs	Wir	eline		Wir	eless		VOIP	Calls	Calls W		Admir	n Calls		doned IIs	Other	Calls
2024	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
MAR	9,196	794	8.63%	7,140	77.64%	26.36%	73.64%	336	3.65%	78	0.85%	0	0.00%	847	9.21%	1	0.01%

9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) - CALENDAR YEAR 2024

							9-1-	-1 Call V	olume'								
_	COUNTY SAPs	Wir	eline		Wir	eless		vo	IP	Calls w		Admir	n Calls		doned Ills	Other	Calls
2024	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	9,735	903	9.28%	7,693	79.02%	23.25%	76.75%	323	3.32%	12	0.12%	0	0.00%	803	8.25%	1	0.01%
FEB	8,349	820	9.82%	6,581	78.82%	21.91%	78.09%	314	3.76%	14	0.17%	0	0.00%	620	7.43%	0	0.00%
MAR	9,196	794	8.63%	7,140	77.64%	26.36%	73.64%	336	3.65%	78	0.85%	0	0.00%	847	9.21%	1	0.01%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	27,280	2,517		21,414				973		104		0		2,270		2	
MON AVG	9,093	839	9.24%	7,138	78.50%	23.84%	76.16%	324	3.58%	35	0.38%	0.00	0.00%	757	8.30%	1	0.01%

*1 (911) call received with the class of service "TSP". HwnTel/Intrado informed for clarification. Received confirmation from Intrado that the class of service for "TSP" is a Telematics call.





March 1, 2024 - March 31, 2024

PSAP OPERATION NOTES:

- 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 included in the Wireline and Wireless total counts respectively.
- All VoIP (Voice over Internet Protocol) 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.
- 0 (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).
- 0 (911) call with the COS of WDL1, or WDL2 were added to the Wireless Phase I or Phase II percentage total.

FOR YOUR INFORMATION

				FYI	For You	r Informat	ion					
				ı	PSAP Opera	itions						
				State	wide 911 Ca	II Volumes						
PSAP	20	23	20	22	202	21	202	20	20	19	20	18
Oahu Civilian	988,670	68.33%	971,113	69.45%	1,052,026	68.91%	991,016	71.11%	1,075,726	69.67%	1,034,190	70.62%
RDC Pearl Harbor	36,916	2.55%	31,827	2.28%	39,253	2.58%	37,014	2.66%	37,905	2.45%	37,068	2.53%
Hawaii County	207,715	14.35%	199,811	14.29%	214,220	14.00%	188,329	13.51%	211,611	13.70%	206,648	14.11%
Maui County	152,397	10.54%	140,524	10.05%	160,241	10.51%	125,626	9.01%	157,127	10.18%	133,869	9.14%
Kauai County	61,197	4.23%	54,923	3.93%	60,986	4.00%	51,653	3.71%	61,754	4.00%	52,623	3.60%
Total	1,446,895	100.00%	1,398,198	100.00%	1,526,726	100.00%	1,393,638	100.00%	1,544,123	100.00%	1,464,398	100.00%

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

911 Calls with No ALI 9	% average for 2023
Oahu	0.47%
RDC	0.03%
Hawaii	0.04%
Maui	0.13%
Kauai	0.03%
State of Hawaii average	0.14%

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

Totals may include PSAP training, testing, and 911 Texting errors





March 1, 2024 - March 31, 2024

TEXT TO 911 - CURRENT MONTH - MARCH 2024

TEXT TO 911 Maui County PSAPs 2024				
Month	Received	Received		
WOTTETT	at Maui	at Molokai		
January	38	2		
February	21	1		
March	16	3		
April				
May				
June				
July				
August				
September				
October				
November				
December				
YTD	75	6		
Monthly Avg.	25	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.

WIRELESS PSAP TESTING - MARCH 2024

	MAUI COUNTY - MARCH 2024							
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:		
3/7/2024	T-Moble			T-Mobile	Pass	LBR (Location Based Routing)		
3/7/2024	T-Moble			T-Mobile	Pass	LBR (Location Based Routing)		

NOTES:

• There were two (2) scheduled Wireless 911 tests conducted in March 2024 for the Maui and Molokai PSAPs.





March 1, 2024 - March 31, 2024

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - MARCH 2024

	9-1-1 TRANSACTIONS								
MAUI COUNTY		Dispatchable Location Transactions Submitted	MSAG	ALI Submitted		Open ALI Discrepancy Records			Customer Addresses
2024		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	Affected
JANUARY	234	229	5	0	0	751	0	0	0
FEBRUARY	79	67	12	0	0	707	0	0	41
MARCH	72	71	1	0*	0	872	0	0	6
APRIL									
MAY									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	385	367	18	0	0	2,330	0	0	47
AVG PER MONTH	128	122	6	0	0	777	0	0	16

* TNCR Note

V2X submitted 314 transactions that Intrado has not processed in the month of March due to personnel issues

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 399 attached to them which indicates the need for validation.
- (D) Automatic Location Information Discrepancy Record 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.





March 1, 2024 - March 31, 2024

MSAG CURRENT MONTH NOTES:

A total of **72** MSAG transactions were processed in 9-1-1 Net during the current month. One **(1)** request was processed relating to the MSAG database. Changes 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 6 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

V2X (formerly Akimeka) submitted seventy-one (71) TN CRs related to the Dispatchable Location Project during the current month.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are currently 765 Open TN CR Transactions.
- Refer to chart in the next section "TNCR Current Status"

765 Open TN CR transactions are a direct result of the Dispatchable Location Project and are awaiting approval from Hawaiian Telcom, Inc. V2X (formerly Akimeka) continues to monitor and track the progress of the Referred records. Once a telephone number is submitted to Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado's internal process requires calling each telephone customer individually for approval to update an address in the 9-1-1 database.

- There are no open VoIP DR as of March 31, 2024
- There are no open ALI DRs as of March 31, 2024





March 1, 2024 - March 31, 2024

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS - MARCH 2024

NOTE:

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

PSAP 9-1-1 Telephone Number Location Change Request					
	(Telephone Nu	mber Change Req	uest (TNCR) Stat	us)	
County	TOTAL TNCR RECORDS SUBMITTED BY V2X FORMERLYAKIMEKA OPENED TNCRS PENDING FURTHER ACTION BY INTRADO OPENED TNCRS REFERRED TO TELCO BY INTRADO TOTAL UNOPEN TNCR RECORD				
MAUI	866	0	552	314	
MOLOKAI	6	0	6	0	
TOTAL	872	0	558	314	

STATUS

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

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 V2X formerly Akimeka on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.





March 1, 2024 - March 31, 2024

DISPATCHABLE LOCATION - STATUS AS OF - MARCH 2024

NARRATIVE:

During the August 2015 State of Hawaii 911 Board meeting, V2X (formerly Akimeka) provided a "State of Hawaii PSAPs Proposed ALI Compliancy with FCC 15-9" presentation. Based on the 9-1-1 Board's confirmation to add the "Dispatchable Location" information into the ALI database, V2X (formerly Akimeka) researched the format standards of each pertinent field and tested the delivery of the data to the PSAP. After a few configuration adjustments (eliminating the TelCo comments field from appearing on the ALI Screen), V2X (formerly Akimeka) standardized an additional information data format to proceed with this project. During the month of August 2015, V2X (formerly Akimeka) started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically, the Queen Kaahumanu Shopping Center at 275 Kaahumanu Ave. 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. Screen shots of the "Before" ALI screen, and the "After" ALI screen with the updated "Dispatchable Location" information visible, were presented to the Dispatch Supervisors. V2X (formerly Akimeka) received positive feedback from the 911 Dispatch Personnel because the information that the 911 Call Takers will receive, will certainly cut down on the process of determining the exact location of the 911 caller. In addition to this, V2X (formerly Akimeka) was informed that the Mobile Dispatch Terminals (MDTs) in the Police Vehicles, also are able to view this "Dispatchable Location" information which will reduce the response times for Public Safety. There were 71 Dispatchable Locations submitted in March 2024 and 4 were processed by Intrado.

Dispatchable Location						
2024	Common Name Place	TNCR* Transactions	Transactions			
Quarter 1	MSAG Address	Submitted	Processed**			
2023 Carryover		20,179	19,456			
	Multi Bus, 1885 Main St, Wailuku	39	0			
	Multi Bus, 1900 Main St, Wailuku	16	0			
	Wailuku Prof Pharm/Pharmerica, 1900 Main St, Wailuku	11	0			
March	Maui Aids Foundation, 1935 Main St, Wailuku	3	0			
	Evolved Art Tattoo/Valley Isle Elec, 1942 Main St, Wailuku	2	0			
	Multi Bus, 210 Imi Kala St, Wailuku	0	3			
	US Govt Post Office, 250 Imi Kala St, Wailuku	0	1			
Q1		367	398			
Total		20,546	19,854			





March 1, 2024 - March 31, 2024

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

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

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

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

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

^{**} V2X (formerly Akimeka) provided VoIP Records with Latitude/Longitude coordinates

(A)	VoIP Database records submitted by Spectrum to V2X (formerly Akimeka) for research and MSAG address validation.
	V2X formerly Akimeka has researched and verified the VoIP record against an MSAG valid address and GIS data. V2X formerly Akimeka
(B)	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.





March 1, 2024 - March 31, 2024

BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT - MARCH 2024

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

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

V2X (formerly Akimeka) will update the chart below as we receive updated ALI records from Bandwidth.

	*Bandwidth							
9-1-1	9-1-1 VoIP Database Verification Project ***(Updated)							
PSAP	TOTAL RECORDS SUBMITTED BY BANDWIDTH (A)	TOTAL NO MATCHING RECORDS IDENTIFIED BY V2X (FORMERLY AKIMEKA)	BANDWIDTH FALLOUT RECORDS (B)	NON MATCHING RECORDS CORRECTED BY V2X (FORMERLY AKIMEKA) (C)	PERCENT COMPLETED			
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 V2X 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)	Verification Process Completed.



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



March 1, 2024 - March 31, 2024

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) - MARCH 2024

MAPPING LAYERS UPDATED (PART I)

MAUI COUNTY						
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks				
CRITICAI	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)					
		Next Delivery 4/3/2024 Added address for one (1) record in Lahaina				
	3/20/204	Added address for one (1) record in Kihei Spatially corrected one (1) record in Waihee				
	To 3/31/2024	Added address for one (1) record in Kula Added address for one (1) record in Hana				
		Added address for one (1) record in Waihee Spatially corrected one (1) record in Hana Spatially corrected one (4) record in Wilesia				
		Spatially corrected one (1) record in Kihei Spatially corrected one (1) record in Lahaina Delivered 3/20/2024				
Address Points		Corrected civic name for eighty-two (82) records in Haiku Added address for one (1) record in Pukalani				
		Added address for one (1) record in Makawao Spatially corrected three (3) records in Kaunakakai				
	3/6/2024 To	Added address for five (5) records in Wailea Added address for one (1) record in Waiehu				
		Added address for one (1) record in Kula Added address for three (3) records in Haiku				
		Added address for three (3) records in Kaunakakai Spatially corrected one (1) record in Lanai				
		Added address for two (2) records in Lanai Spatially corrected eight (8) records in Waiehu				





March 1, 2024 - March 31, 2024

MAPPING LAYERS UPDATED (PART II)

		MAUI COUNTY		
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks		
CRITICAI	2 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE		
	-,	(Listed Alphabetically)		
	3/6/2024	Added routing ID for ten (10) records in Wailea		
	То	Corrected street name for thirteen (13) records in Paia		
	3/19/2024	Spatially corrected two (2) records in Haiku		
		Delivered 3/6/2024		
		Added address for one (1) record in Lahaina		
Address Points		Added address for two (2) records in Wailea		
	3/1/2024 To 3/5/2024	Spatially corrected, added location name for one (1) record in Kahului		
		Updated address for one (1) record in Napili		
		Added address for three (3) records in Haiku		
		Removed location name for one (1) record in Kahului		
		Spatially corrected two (2) records in Kahului		
		Spatially corrected two (2) records in Kihei		
		Added address for one (1) record in Hana		
		Spatially corrected one (1) record in Lahaina		
		Added address for one (1) record in Waikapu		
		Added address for three (3) records in Kahului		
		Spatially corrected three (3) records in Haiku		
Airports				
Bridges				
	3/20/204	Next Delivery 4/3/2024		
Building Footprints	To	Added building footprint for fifteen (15) records in Waikapu		
	3/31/2024	Spatially corrected three (3) records in Waikapu		
Bus Stops		D. II. 1.0/2/2021		
Churches	3/1/2024 To	Delivered 3/6/2024		
Gildicites	3/5/2024	Corrected address for one (1) record in Lahaina		





March 1, 2024 - March 31, 2024

MAPPING LAYERS UPDATED (PART III)

	MAUI COUNTY					
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks				
CRITICAL	L 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE				
		(Listed Alphabetically)				
Coastal Names						
Coastline						
Common Places						
Correctional Facilities						
Emergency Callboxes						
Emergency Operation						
Centers						
Emergency Shelters						
ESZ/ESN						
Fire Beats						
Fire Districts						
Fire Response Areas						
Fire Stations						
	3/1/2024	Delivered 3/6/2024				
Food & Beverage	То	Updated cafe name for one (1) record in Kahului				
	3/5/2024	Added cafe for one (1) record in Kahului				
Gas Stations						
Gate Codes	3/6/2024 To	Delivered 3/20/2024				
Gate Codes	3/19/2024	Added gate code for one (1) record in Kula				
Government Buildings						
Harbors						
Helipads						
Hiking Trails						
Hospitals						





March 1, 2024 - March 31, 2024

MAPPING LAYERS UPDATED (PART IV)

MAUI COUNTY						
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks				
CRITICAI	L 9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE				
		(Listed Alphabetically)				
Hydrants						
Hyrdology Layers						
Incident Response Areas						
Lodging						
Major Roads						
Medic Beats						
Medic Districts						
Medic Response Areas						
Medic Stations						
Medical Facilities						
Milepost Markers						
MSAG Communities	3/1/2024 To	Delivered 3/6/2024				
WISAG Communities	3/5/2024	Modified boundary for one (1) record in Kula				
Net Junctions	0,0,202	Modified boundary for one (1) record in Wailea				
Ocean Rescue Boundaries						
Ocean Safety						
Parcels						
Parks						
Parks Polygon						
1 ams 1 orygon		Delivered 3/6/2024				
	3/1/2024	Spatially corrected one (1) record in Napili				
Points of Interest	To	Added address for one (1) record in Kahului				
	3/5/2024	Updated POI name for one (1) record in Kahului				
		Added POI for one (1) record in Kahului				





March 1, 2024 - March 31, 2024

MAPPING LAYERS UPDATED (PART V)

MAUI COUNTY						
Type of Layer	V2X formerly Akimeka GIS Server Date Created/ Edits Performed	Other/Remarks				
CRITICAL	9-1-1 PUBLIC	SAFETY LAYERS FOR DISPATCH & RESPONSE				
		(Listed Alphabetically)				
Police Beats						
Police Districts						
Police Response Areas						
Police Stations						
Post Offices						
Schools						
	3/20/204 To 3/31/2024	Next Delivery 4/3/2024 Updated ESN for one (1) record in Waikapu				
	3/6/2024 To 3/19/2024 3/1/2024 To	Delivered 3/20/2024				
		Corrected civic name for nine (9) records in Haiku				
Street Centerlines		Updated street name for four (4) records in Paia				
		Added street centerline for nine (9) records in Wailea				
		Delivered 3/6/2024				
	3/5/2024	Added street centerline for three (3) records in Wailea				
Subdivisions						
Tow Jurisdictions						
Tsunami Evacuation Zones						
Tsunami Heights						
Waste Water Plants						
WSP Cell Sectors	3/20/204 To	Next Delivery 4/3/2024				
war den aectors	3/31/2024	Added one (1) sector per AT&T CRS				
WSP Cell Towers	3/20/204 To	Next Delivery 4/3/2024				
WOI CON TOWERS	3/31/2024	Added one (1) tower per AT&T CRS				





March 1, 2024 - March 31, 2024

NOTE:

The Parcels layer is provided by Maui County. V2X (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
3/4/2024	Delivered AP, ST, and POI to Ildico Kovacs for crime mapping, per Gregg Okamoto request.
3/6/2024	Delivered updated data for MapFlex which included Address Points, Churches, Food and Beverage, MSAG Communities, Points Of Interest, Street Centerlines, Subdivisions, WSP Cell Sectors, and WSP Cell Towers.
3/6/2024	Delivered .map, .ply, .rte, and .str files for Intergraph CAD 9.4 with updated data which included Address Points, Cell Towers, Common Places Lookup table, Points Of Interest, Street Centerlines, Subdivisions, and RMS files.
3/19/2024	Delivered a supplementary data containg civic address fields (CivicNumber, CivicStreet, and PostalCommunity) to Intrado for the SCC application.
3/20/2024	Delivered updated data for MapFlex which included Address Points, Churches, Food and Beverage, MSAG Communities, Points Of Interest, Street Centerlines, Subdivisions, WSP Cell Sectors, and WSP Cell Towers.
3/20/2024	Delivered .map, .ply, .rte, and .str files for Intergraph CAD 9.4 with updated data which included Address Points, Cell Towers, Common Places Lookup table, Points Of Interest, Street Centerlines, Subdivisions, and RMS files.





March 1, 2024 - March 31, 2024

GIS FOR 911

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

INTERGRAPH CAD UPGRADE

From April through June 2014, the Maui Police Department worked to upgrade their Intergraph CAD system to the more recent 2014 version. Through this upgrade process, new improvements were identified and the overall functionality of the system from the Map Build process to the Production workstation made significant enhancements in order to streamline the deliverables and continue providing accurate data to the PSAP.

- 1. March 6th, 2024 V2X delivered an updated Intergraph CAD map which included:
 - a. .map, .ply, .rte, and .str
 - b. Address Points, Common Name Lookup Table, Points Of Interest, Street Centerlines, Subdivisions, and WSP Cell Towers.
 - c. RMS files
- 2. V2X delivered an updated Intergraph CAD map March 20th, 2024, which included:
 - a. .map, .ply, .rte, and .str
 - Address Points, Common Name Lookup Table, Points Of Interest, Street Centerlines, Subdivisions, and WSP Cell Towers
 - c. RMS files

During April 2024, the Intergraph CAD map will continue to be delivered every other week, which has been coordinated with all mapping system updates and synchronizations with other 911 databases.





March 1, 2024 - March 31, 2024

MOTOROLA PREMIER ONE PROJECT

On Wednesday, February 15, 2023, and Thursday, February 16th, 2023, V2X (formerly Akimeka) participated in the GIS workshop with Motorola GIS staff. V2X will provide the first Motorola CAD GIS deliverable in mid-March, and work with Motorola to make any necessary updates to the schema and data, to ensure a successful implementation.

On Thursday, April 20th, 2023 V2X (formerly Akimeka) delivered GIS data updates for Motorola for the Premiere One CAD implementation.

On Wednesday, May 24, 2023, V2X (formerly Akimeka) met with the Maui Fire Department's executive staff along with the Maui Police Department Dispatch Director and Supervisor to discuss future growth of new Fire Stations in Maui County. New projected Fire Boundaries maps were provided my V2X (formerly Akimeka) to both agencies for review. Delivered to the Fire Department were also street intersection maps that poses a discrepancy with the Motorola CAD. The Fire Department will determine which jurisdiction they prefer to cover each intersection. V2X (formerly Akimeka) will adjust the maps according as determined by the Maui Fire Department.

MAPFLEX SYSTEM

March 2024

VSE (formerly Akimeka) delivered GIS data to the MapFlex system on the following dates in March 2024.

Hawaii County – March 5, 2024, and March 19, 2024 **Maui County** – March 6, 2024, and March 20, 2024 **Kauai County** – March 7, 2024, and March 21, 2024 **Honolulu** – March 8, 2024, and March 22, 2024

MAPFLEX ISSUES

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

MAUI EMS (AMR)

On May 23, 2023, The Maui EMS Director contacted V2X (formerly Akimeka) to discuss new Medic boundaries for Molokai. AMR is planning to add a new Medic Station in Hoolehua in the near future. A projected new boundary map was provided to the AMR director for review.





March 1, 2024 - March 31, 2024

4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - MARCH 2024

	MAUI COUNTY						
#	Date	Ticket #	Description	PSAP	Urgency	Comments	
			None				

NOTE:

There are no (0) Open Service Request for the Maui County PSAPs for March 2024.

MAUI PSAP SERVICE REQUESTS YEAR-TO-DATE (YTD) SUMMARY – 2024

MAUI COUNTY				MSAG SERVICE REQUEST CATEGORIES						
0004	TO	ΓAL	0	WIRELINE		WIRE	WIRELESS		VoIP	
2024	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed	
2023 Carryover*			0							
January	0	0	0	0	0	0	0	0	0	
February	0	0	0	0	0	0	0	0	0	
March	0	0	0	0	0	0	0	0	0	
April										
Мау										
June										
July										
August										
September										
October										
November										
December			_		_	_	_	_	_	
TOTAL	0	0	0	0	0	0	0	0	0	

	*The 2023 Carry Over row indicates the number of Service Requests that were opened in 2023;
<u>Note:</u>	however, were brought forward into 2024 in an effort to track the service request until completion.

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





March 1, 2024 - March 31, 2024

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 MPD 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 Selective Router (SR) programming use. The entire County Jurisdiction Zone is referred to as an Administrative ESZ. Each PSA is required by Tariff to assign their Response Areas (RAs) based on their operational requirements and assignments within the ESZ. Smaller and more accurate ESZs are created for the geographic areas that have the same PSAs and assigned an Emergency Service Number (ESNs) which are known as a Routing ESNs, or ESNs.

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

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

As part of V2X (Formally Akimeka LLC's) value added services, V2X conducts four quarterly, in-depth 9-1-1 Database Synchronization audits per year for the Maui Police Department. They are conducted in March, June, September, and December of each Calendar Year while under contract with V2X (Formally Akimeka LLC).

The results of the March 30, 2024, database synchronization audits are presented below.

TWO-WAY (2-WAY) COMPARISION - MARCH 2024

V2X's (Formally Akimeka LLC) two-way database comparison service provides for comparing the Local Exchange Carriers (LECs) MSAG Database to the Maui 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 MPD 9-1-1 GIS layers.



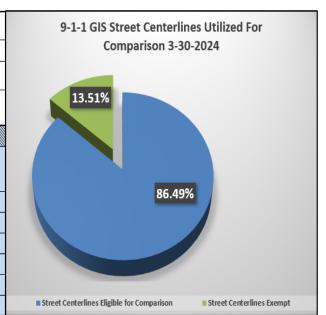


March 1, 2024 - March 31, 2024

9-1-1 GIS Street Centerlines Utilized For Comparison

A total number of **3,722** GIS Street Centerline Records are maintained for the Maui Police Department's 9-1-1 GIS database by V2X (Formally Akimeka LLC). For this comparison, **503** GIS street records were excluded as database exemptions. V2X (Formally Akimeka LLC) 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 **3,219** 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 Ma	arch 30, 2024	9-1-1 GIS Street Cent Comparison	
GIS Upda	ite 2-29-2024		
9-1-1 MSAG	Dated 3-01-2024		
# of Records	Exact Match Rate %	13.51%	
3,722			
503	13.51%		
3,219	86.49%	86	
3,219	100%		
0	0%		
0	0%		
0	0%		
3,219	100%	■ Street Centerlines Eligible for Compariso	
	GIS Upda 9-1-1 MSAG # of Records 3,722 503 3,219 0 0	Records Rate % 3,722 503 13.51% 3,219 86.49% 3,219 100% 0 0% 0 0% 0 0%	



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

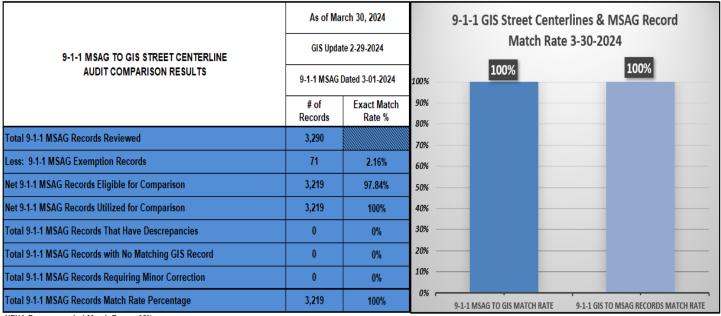
A total of **3,290 9-1-1 MSAG Records** are maintained for the Maui Police Department's 9-1-1 GIS database by V2X (Formally Akimeka LLC). V2X (Formally Akimeka LLC) removed **71** MSAG street records from this comparison as exemptions These exemptions are the MSAG Records utilized for wireless 9-1-1 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". 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 9-1-1 Service Provider for Public Safety Agencies 9-1-1 use. The total number of MSAG records utilized for this comparison audit was **3,219 MSAG Records**.





March 1, 2024 - March 31, 2024

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



NENA Recommended Match Rate = 98%

THREE-WAY (3-WAY) COMPARISION – MARCH 2024

(<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 MPD's 9-1-1 GIS Site Structure Points layer and the 9-1-1 Road Network or 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 match rate is 98%.





March 1, 2024 - March 31, 2024

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

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

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

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

See chart below:

	As of March 30, 2024		9-1-1 GIS Street Centerline To ALI Record Match				
9-1-1 Street Centerline to ALI Records	9-1-1 ALI Records pulled Dated 3-01-2024		Rate 3-30-2024				
AUDIT COMPARISON RESULTS	# of Records with Discrepancies	Match %	100% 100% 100% 100% 100% 100% 100%				
GIS Street Centerlines to AL	Records Comparison		99%				
Community Name Matched	0	100%	98% —				
ESN Matched	0	100%	96% —				
Street Name Matched	0	100%	94% —				
Street Suffix Matched	0	100%	93% — 92% — — — — — — — — — — — — — — — — — — —				
Prefix Direction Matched	0	100%	91% —				
Post Direction Matched	0	100%	COMMUNITY ESN MATCHED STREET NAME STREET SUFFIX PREFIX POST HOUSE NAME MATCHED MATCHED DIRECTION DIRECTION NUMBER				
House Number Matched	0	100%	MATCHED MATCHED MATCHED MATCHED				

NENA Recommended Match Rate = 98%





March 1, 2024 - March 31, 2024

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

The **9-1-1 Site/Structure Points** (Address Points) GIS records with Matching ALI Records comparison identifies the total number of Site/Structure Points (Address Points) that reside within the jurisdiction against how many of those Site/Structure Points (Address Points) have been matched against a matching ALI record. The Maui Jurisdiction has approximately **73,014 total Site Structure Points** with approximately **16,847** Site Structure Points that have a matching ALI telephone record. These locations with a matching ALI record indicate a potential location from which a wireline 9-1-1 call may originate as provided by the Communication Service Provider (CSP).

See chart below:

9-1-1 ALI RECORDS TO GIS RECORDS	As of March 9.1.1 ALI Records pull	<u>'</u>	GIS Site / Structure (Address Points) To	
AUDIT COMPARISON RESULTS	# of Records %		ALI TN Records 3-30-2024	
GIS Address Points to ALI I	Records Comparison			
Total Site / Structure (Address) Points Reviewed	73,014		23.07%	
Site / Structure (Address) Points With a Matching ALI Record	16,847	23.07%	76.93%	
Site / Structure (Address) Points Without a Matching ALI Record	56,167	76.93%	■ Address Points with TNs ■ Address Points with No TNs	

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.





March 1, 2024 - March 31, 2024

There are **54,093 total Automatic Location Identification (ALI) Records** with the Wireline Provider. There are **54,065 Valid ALI records** that have an exact match with a GIS Site Structure Point. There are a total of **28 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 or its location information. It indicates that these records require additional research and update to exactly match the two different database records. There are zero **0 ESN 359 & ESN 399 Invalid ALI Records** remaining that are in the process of determining a verified valid address. ESN 359 & ESN 399 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:

	As of March 30, 2024		9-1-1 ALI Record to GIS Address Point	
9-1-1 ALI RECORDS TO GIS RECORDS AUDIT COMPARISON RESULTS	9-1-1 ALI Records pulled Dated 3-01-2024		Match Rate 3-30-2024	
AUDIT COMI ARTOUR RESULTS	# of Records	Exact Match Rate %	99.95%	
ALI Records Co	mparison	100.00%		
9-1-1 Total ALI Records Reviewed	54,093		90.00% 80.00% 70.00%	
9-1-1 Valid Matching ALI Records	54,065	99.95%	50.00% 50.00% 40.00%	
9-1-1 Valid ALI Records Requiring Correction	28	0.05%	30.00% 20.00% 10.00% 0.00%	
9-1-1 Invalid ESN 359 & 399 ALI Records	0	0.00%	■ 9-1-1 Valid Matching ALI Records ■ 9-1-1 ALI Records Requiring Correction ■ 9-1-1 Invalid ESN 359 & 399 ALI Records	

NENA Recommended Match Rate = 98%





March 1, 2024 - March 31, 2024

INVALID MSAG STREETS AND ADDRESS RANGES – ESN 359 & ESN 399 MSAG & ALI RECORDS **PROJECT COMPLETED**

At the request of the Maui Chief of Police, Hawaiian Telcom, Inc. (HTI) provided V2X (formerly Akimeka) LLC, with access to the Maui County ESN 359 and ESN 399 MSAG and ALI records. The ESN 359 and ESN 399 MSAG Street Records represented the and identified all the "known" invalid streets in the MSAG Database.

The ESN 359 and ESN 399 ALI Records represented the and identified all the "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 ensure no 9-1-1 emergencies were dispatched to erroneous address/locations.

V2X (formerly Akimeka) LLC has completed the necessary investigation and required correction of the **378** 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 359 & ESN 399 MSAG Records

The ESN 359 and ESN 399 MSAG Street Records represented the number of invalid MSAG Streets Records in Maui County that were on file with Hawaiian Telcom and their Database Maintenance Service Provider. The ESN 359 (on Molokai), and ESN 399 MSAG Records represented invalid MSAG Street Records that still had a valid telephone number that needs to be reassigned to a valid address.

V2X (Formally Akimeka LLC) 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 359 and ESN 399 MSAG Street Records that require attention in Maui County. Please see the chart below:

9-1-1 MSAG RECORDS TO GIS RECORDS AUDIT COMPARISON RESULTS	As of March 30, 2024 9-1-1 MSAG Records as of 3-30-2024		Valid MSAG Record to Invalid ESN
			359 & 399 MSAG Records 3-30-2024
	# of Records	Exact Match %	
MSAG Street Records C	Comparison		
9-1-1 Total MSAG Records Reviewed	3,290		0%
9-1-1 Total Valid MSAG Records Reviewed	3,290	100%	100%
9-1-1 Total Invalid MSAG Records (ESN 359 & 399) Reviewed	0	0%	■ Valid MSAG Street Records ■ Invalid MSAG Street Record

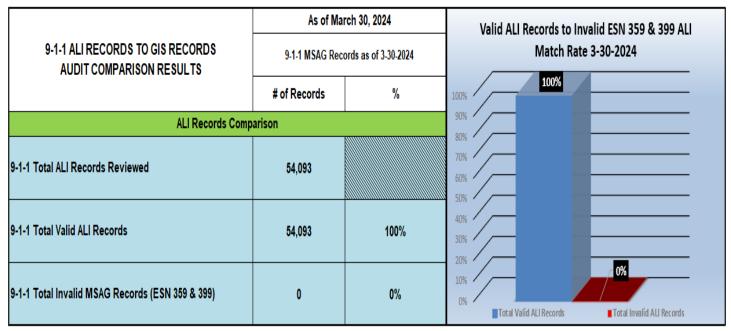




March 1, 2024 - March 31, 2024

Valid ALI Records to Invalid ESN 359 & ESN 399 ALI Records

The ESN 359 and ESN 399 invalid ALI records have been investigated and corrected. There are 0 ESN 359 and 0 ESN 399 ALI records. V2X (Formally Akimeka LLC) has completed the research and has corrected all invalid ALI records within Maui County.



NENA Recommended Match Rate = 98%

