Maui County E9-1-1 Status Report

March 1, 2025 – March 31, 2025

GO TOWARDS TOMORROW go V2X

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1. PSAP OPERATIONS

9-1-1 CALL VOLUME MAUI PSAP – MARCH 2025

Source: **Intrado Viper system**

9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2025	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% 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 Calls	% of Total Calls
MAR	9,097	601	6.61%	7,428	81.65%	17.97%	82.03%	379	4.17%	1	0.01%	0	0.00%	687	7.55%	1	0.01%

"Other Calls" (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.

CALL VOLUME MAUI PSAP NOTES:

911 Calls with "no value" for March 2025 = 11,456 (see report on page 7)

9-1-1 CALL VOLUME MAUI PSAP – CALENDAR YEAR 2025

9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2025	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% 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 Calls	% of Total Calls
JAN	9,444	626	6.63%	7,417	78.54%	20.48%	79.52%	714	7.56%	3	0.03%	0	0.00%	676	7.16%	8	0.08%
FEB	8,041	493	6.13%	6,614	82.25%	18.87%	81.13%	318	3.95%	0	0.00%	0	0.00%	616	7.66%	0	0.00%
MAR	9,097	601	6.61%	7,428	81.65%	17.97%	82.03%	379	4.17%	1	0.01%	0	0.00%	687	7.55%	1	0.01%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	26,582	1,720		21,459				1,411		4		0		1,979		9	
MON AVG	8,861	573	6.46%	7,153	80.81%	19.11%	80.89%	470	5.23%	1	0.01%	0	0.00%	660	7.46%	3.00	0.03%

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9-1-1 CALL VOLUME MOLOKAI PSAP – MARCH 2025

Source: **Intrado Viper system**

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

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2025	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% 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 Calls	% of Total Calls
MAR	623	85	13.64%	420	67.42%	29.76%	70.24%	9	1.44%	0	0.00%	0	0.00%	109	17.50%	0	0.00%

CALL VOLUME MOLOKAI PSAP NOTES:

911 Calls with "no value" for March 2025 = 1,451 (see report on page 7)

9-1-1 CALL VOLUME MOLOKAI PSAP – CALENDAR YEAR 2025

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2025	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% 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 Calls	% of Total Calls
JAN	601	98	16.31%	406	67.55%	30.05%	69.95%	26	4.33%	0	0.00%	0	0.00%	71	11.81%	0	0.00%
FEB	501	160	31.94%	256	51.10%	37.11%	62.89%	5	1.00%	0	0.00%	0	0.00%	80	15.97%	0	0.00%
MAR	623	85	13.64%	420	67.42%	29.76%	70.24%	9	1.44%	0	0.00%	0	0.00%	109	17.50%	0	0.00%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	1,725	343		1,082				40		0		0		260		0	
MON AVG	575	114	20.63%	361	62.02%	32.31%	67.69%	13.33	2.26%	0	0.00%	0	0.00%	86.667	15.09%	0	0.00%

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9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – MARCH 2025

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP Calls		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2025	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% 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 Calls	% of Total Calls
MAR	9,720	686	7.06%	7,848	80.74%	18.60%	81.40%	388	3.99%	1	0.01%	0	0.00%	796	8.19%	1	0.01%

9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – CALENDAR YEAR 2025

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2025	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% 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 Calls	% of Total Calls
JAN	10,045	724	7.21%	7,823	77.88%	20.98%	79.02%	740	7.37%	3	0.03%	0	0.00%	747	7.44%	8	0.08%
FEB	8,542	653	7.64%	6,870	80.43%	19.55%	80.45%	323	3.78%	0	0.00%	0	0.00%	696	8.15%	0	0.00%
MAR	9,720	686	7.06%	7,848	80.74%	18.60%	81.40%	388	3.99%	1	0.01%	0	0.00%	796	8.19%	1	0.01%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	28,307	2,063		22,541				1,451		4		0		2,239		9	
MON AVG	9,436	688	7.30%	7,514	79.68%	19.71%	80.29%	484	5.05%	1	0.01%	0.00	0.00%	746	7.92%	3	0.03%

***Calls with No ALI for March 2025 = 0.01% - Statewide average for 2024 = 0.42%**

911 Calls with “no value”

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

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

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

For PSAPs that have MIS_Power911_5.x data:
Calls identified with “No Value” will not appear in this report unless you specifically filter for “No Value”.

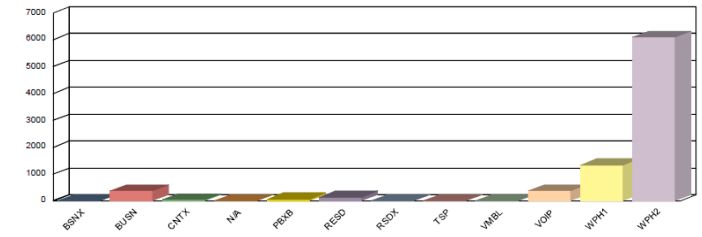
- No Value appears in the Others filter subcategory:

Routine 911 Call Volume report

Maui PD Class of Service

From: 03/01/2025 00:00:00 **To:** 03/31/2025 23:59:59
PSAP: Psap 40, Undefined
Class of Service: BSNX, BUSN, CNTX, COIN, MOBL, N/A, PAY$, PBXB, PBXR, RESD, RSDX, TSP, VBUS, VIOP, VMBI, VMBL, VOIP, VRES, WPH1, WPH2

Number of Calls : 8,410



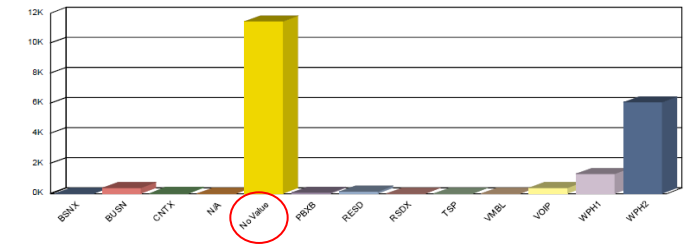
Class of Service	Number of Calls	Percentage (%)	Cumulative (%)
BSNX	2	0.02	0.02
BUSN	371	4.41	4.44
CNTX	32	0.38	4.82
N/A	1	0.01	4.83
PBXB	58	0.69	5.52
RESD	128	1.52	7.04
RSDX	10	0.12	7.16
TSP	1	0.01	7.17
VMBL	4	0.05	7.22
VOIP	375	4.46	11.68
WPH1	1,335	15.87	27.55
WPH2	6,093	72.45	100.00
	8,410	100.00	

911 Call Volume report with “no value”

Maui PD Class of Service

From: 03/01/2025 00:00:00 **To:** 03/31/2025 23:59:59
PSAP: Psap 40, Undefined
Class of Service: BSNX, BUSN, CNTX, COIN, MOBL, N/A, No Value, PAY$, PBXB, PBXR, RESD, RSDX, TSP, VBUS, VIOP, VMBI, VMBL, VOIP, VRES, WPH1, WPH2

Number of Calls : 19,866



Class of Service	Number of Calls	Percentage (%)	Cumulative (%)
BSNX	2	0.01	0.01
BUSN	371	1.87	1.88
CNTX	32	0.16	2.04
N/A	1	0.01	2.04
No Value	11,456	57.67	59.71
PBXB	58	0.29	60.00
RESD	128	0.64	60.65
RSDX	10	0.05	60.70
TSP	1	0.01	60.70
VMBL	4	0.02	60.72
VOIP	375	1.89	62.61
WPH1	1,335	6.72	69.33
WPH2	6,093	30.67	100.00
	19,866	100.00	

The “no value” calls for the Maui Police PSAP increased the 911 call volume by 11,456 for March 2025.

All other Class of Service calls remained consistent.

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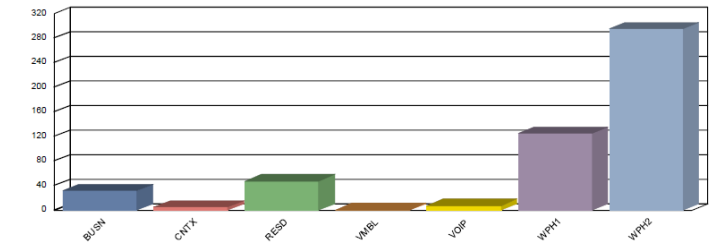
Routine 911 Call Volume report

Molokai PD Class of Service

From: 03/01/2025 00:00:00 **To:** 03/31/2025 23:59:59
PSAP: Psap 60, Undefined
Class of Service: BSNX, BUSN, CNTX, COIN, MOBL, N/A, PAY$, PBXB, PBXR, RESD, RSDX, VBUS, VMBL, VOIP, VRES, WPH1, WPH2

Number of Calls : 514



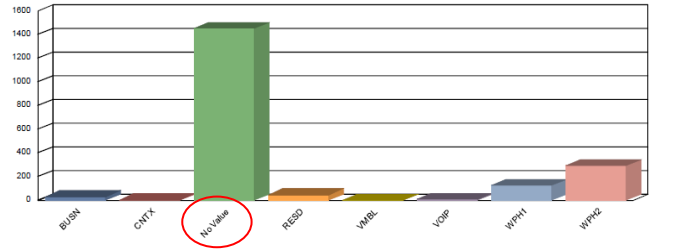
Class of Service	Number of Calls	Percentage (%)	Cumulative (%)
BUSN	32	6.23	6.23
CNTX	5	0.97	7.20
RESD	48	9.34	16.54
VMBL	1	0.19	16.73
VOIP	8	1.56	18.29
WPH1	125	24.32	42.61
WPH2	295	57.39	100.00
	514	100.00	

911 Call Volume report with “no value”

Molokai PD Class of Service

From: 03/01/2025 00:00:00 **To:** 03/31/2025 23:59:59
PSAP: Psap 60, Undefined
Class of Service: BSNX, BUSN, CNTX, COIN, MOBL, N/A, No Value, PAY$, PBXB, PBXR, RESD, RSDX, VBUS, VMBL, VOIP, VRES, WPH1, WPH2

Number of Calls : 1,965



Class of Service	Number of Calls	Percentage (%)	Cumulative (%)
BUSN	32	1.63	1.63
CNTX	5	0.25	1.88
No Value	1,451	73.84	75.73
RESD	48	2.44	78.17
VMBL	1	0.05	78.22
VOIP	8	0.41	78.63
WPH1	125	6.36	84.99
WPH2	295	15.01	100.00
	1,965	100.00	

The “no value” calls for the Molokai Police PSAP increased the 911 call volume by 1,451 for March 2025.

All other Class of Service calls remained consistent.

Collectively the number of “no value” 911 calls increased by 12,907 in March 2025 for Maui County.

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

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

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

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

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TEXT TO 911 – CURRENT MONTH – MARCH 2025

TEXT TO 911 Maui County PSAPs 2025		
Month	Received at Maui	Received at Molokai
January	27	1
February	36	0
March	33	2
April		
May		
June		
July		
August		
September		
October		
November		
December		
YTD	96	3
Monthly Avg.	32	1

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 2025

MAUI COUNTY - MARCH 2025						
Date	**WSP**	**Sites Tested**	**Sectors Tested**	**Tested By:**	**Test Pass/Fail**	**Comments:**

NOTES:

- There were no (0) scheduled Wireless 911 tests conducted in March 2025 for the Maui and Molokai PSAPs.

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – MARCH 2025

MAUI COUNTY	9-1-1 TRANSACTIONS								
	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Submitted		Open ALI Discrepancy Records			Customer Addresses Affected
2025		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	
JANUARY	48	44	4	0	0	548	0	0	82
FEBRUARY	102	101	1	0	0	544	0	0	0
MARCH	73	72	1	0	0	566	0	0	17
APRIL									
MAY									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	223	217	6	0	0	1,658	0	0	99
AVG PER MONTH	74	72	2	0	0	553	0	0	33

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) **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.

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MSAG CURRENT MONTH NOTES:

A total of **73** 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 **17** customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

V2X submitted seventy-two (**72**) TN CRs related to the Dispatchable Location Project during the current month.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently 566 Open TN CR Transactions.**
- **Refer to chart in the next section "TNCR Current Status"**

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

- **There are no open VoIP DR as of March 31, 2025**
- **There are no open ALI DRs as of March 31, 2025**

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

NOTE:

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

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
County	**TOTAL TNCR RECORDS SUBMITTED BY V2X**	**OPENED TNCRS PENDING FURTHER ACTION BY INTRADO**	**OPENED TNCRS REFERRED TO TELCO BY INTRADO**	**TOTAL UNOPENED TNCR RECORDS**
MAUI	**560**	**2**	**465**	**93**
MOLOKAI	**6**	**0**	**6**	**0**
TOTAL	**566**	**2**	**471**	**93**

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

Maui County E9-1-1 Status Report

March 1, 2025 - March 31, 2025

DISPATCHABLE LOCATION – STATUS AS OF – MARCH 2025

NARRATIVE:

During the August 2015 State of Hawaii 911 Board meeting, V2X provided a "State of Hawaii PSAPs Proposed ALI Compliancy with FCC 15-9" presentation. Based on the 9-1-1 Board's confirmation to add the "Dispatchable Location" information into the ALI database, V2X researched the format standards of each pertinent field and tested the delivery of the data to the PSAP. After a few configuration adjustments (eliminating the TelCo comments field from appearing on the ALI Screen), V2X standardized an additional information data format to proceed with this project. During the month of August 2015, V2X 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 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 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 72 Dispatchable Locations submitted in March 2025 and 51 was processed by Intrado. (see next pages)

Dispatchable Location			
2025 Quarter 1	Common Name Place MSAG Address	TNCR* Transactions Submitted	Transactions Processed**
2024 Carryover		**21,190**	**20,651**
March	Pacific Auto Maintenance, 1866 Wili Pa Loop, Wailuku	2	0
	Multi Bus, 1826 Wili Pa Loop, Wailuku	4	0
	Multi Bus, 1831 Wili Pa Loop, Wailuku	3	0
	Iao Parkside, 11-60 Waipaa Ln, Wailuku	12	0
	Bacon Universal, 816 Alua St, Wailuku	8	8
	M Toguchi Body Shop, 822/830 Alua St, Wailuku	4	0
	Multi Bus, 210 Imi Kala St, Wailuku	39	0
	Beauty Bar, 1910 Vineyard St, Wailuku	0	2
	Lori's Hair Shack, 1980 Vineyard St, Wailuku	0	1

DISPATCHABLE LOCATION – STATUS AS OF – MARCH 2025 – CONTINUED

Dispatchable Location			
2025 Quarter 1	Common Name Place MSAG Address	TNCR* Transactions Submitted	Transactions Processed**
2024 Carryover		21,190	20,651
March	Multi Bus, 2062 Vineyard St, Wailuku	0	4
	Mental Health Kokua, 2276 Vineyard St, Wailuku	0	10
	Iao Presch/United Church, 2371 Vineyard St, Wailuku	0	11
	Puuone Terrace Apts, 493 Pio Pl, Wailuku	0	5
	Multi Bus/Hawaii State Govt, 811 Kolu St, Wailuku	0	10
Q1		217	256
Total		21,407	20,907

Maui County E9-1-1 Status Report

March 1, 2025 - March 31, 2025

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

V2X received the Automatic Location Identification (ALI) records from Spectrum (formally known as Charter Communications) which is the predominant Voice over Internet Protocol (VoIP) provider in the State of Hawaii. As V2X has access to these ALI Records, V2X is researching and verifying the VoIP records against an MSAG valid address and the GIS data. This research is a validation of the ALI Record to ensure that the location 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 provided VoIP Records with Latitude/Longitude coordinates**

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

Maui County E9-1-1 Status Report

March 1, 2025 - March 31, 2025

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

V2X received the Automatic Location Identification (ALI) records from Bandwidth which is a Voice over Internet Protocol (VoIP) provider in the State of Hawaii. As V2X has access to these ALI Records, V2X researched and verified the VoIP records against an MSAG valid address and the GIS data. This research is a validation of the ALI Record to ensure that the location 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 will update the chart below as we receive updated ALI records from Bandwidth.

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

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

***Bandwidth VoIP Database received on April 5th, 2018**
****Updated Bandwidth VoIP Database received on September 6th, 2018**
***** Updated Bandwidth VoIP Database received on October 1st, 2021**

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

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – MARCH 2025

MAPPING LAYERS UPDATED (PART I)

The 9-1-1 GIS layers provided by V2X to the PSAP are designed for use on E9-1-1 and NG9-1-1 systems.

MAUI COUNTY		
Type of Layer	**V2X GIS Server Date Created/ Edits Performed**	**Other/Remarks**
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Address Points	**3/5/3025 To 3/18/2025**	**Delivered 3/19/2025**
		Added address for eight (8) records in Lahaina
		Added address for four (4) records in Lanai
		Spatially corrected one (1) record in Kula
		Added address for one (1) record in Hana
		Added address for two (2) records in Kula
		Spatially corrected three (3) records in Lanai
		Spatially corrected two (2) records in Kihei
		Spatially corrected forty (40) records in Wailuku
		Added location name for one (1) record in Wailuku
		Spatially corrected five (5) records in Lahaina
	3/1/2025 To 3/4/2025	**Delivered 3/5/2025**
		Added address for two (2) records in Lahaina
		Spatially corrected one (1) record in Lahaina
		Added address for one (1) record in Hana
Airports		
Bridges		
Building Footprints	**3/5/3025 To 3/18/2025**	**Delivered 3/19/2025**
		Added building footprint for nine (9) records in Wailuku
		Spatially corrected four (4) records in Wailuku
	3/1/2025 To 3/4/2025	**Delivered 3/5/2025**
		Spatially corrected one (1) record in Haiku
		Added building footprint for forty (40) records in Haiku
Bus Stops		
Churches		

MAPPING LAYERS UPDATED (PART II)

The 9-1-1 GIS layers provided by V2X to the PSAP are designed for use on E9-1-1 and NG9-1-1 systems.

MAUI COUNTY		
Type of Layer	**V2X GIS Server Date Created/ Edits Performed**	**Other/Remarks**
CRITICAL 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		
Food & Beverage		
Gas Stations		
Gate Codes		
Government Buildings		
Harbors		
Helipads		
Hiking Trails		
Hospitals		
Hydrants		
Hyrdology Layers		
Incident Response Areas		
Lodging		

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MAPPING LAYERS UPDATED (PART III)

The 9-1-1 GIS layers provided by V2X to the PSAP are designed for use on E9-1-1 and NG9-1-1 systems.

MAUI COUNTY		
Type of Layer	**V2X GIS Server Date Created/ Edits Performed**	**Other/Remarks**
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Major Roads		
Medic Beats		
Medic Districts		
Medic Response Areas		
Medic Stations		
Medical Facilities		
Milepost Markers		
MSAG Communities		
Net Junctions		
Ocean Rescue Boundaries		
Ocean Safety		
Parcels		
Parks		
Parks Polygon		
Points of Interest	3/5/3025 To 3/18/2025	**Delivered 3/19/2025**
		Added POI for one (1) record in Wailuku
Police Beats		
Police Districts		
Police Response Areas		
Police Stations		
Post Offices		
Schools		
Street Centerlines	3/5/3025 To 3/18/2025	**Delivered 3/19/2025**
		Modified range for two (2) records in Lanai
		Spatially corrected one (1) record in Lahaina

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MAPPING LAYERS UPDATED (PART IV)

The 9-1-1 GIS layers provided by V2X to the PSAP are designed for use on E9-1-1 and NG9-1-1 systems.

MAUI COUNTY		
Type of Layer	**V2X GIS Server Date Created/ Edits Performed**	**Other/Remarks**
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Street Centerlines	3/1/2025 To 3/4/2025	Delivered 3/5/2025 Partial spatial correction for one (1) record in Haiku
Subdivisions		
Tow Jurisdictions		
Tsunami Evacuation Zones		
Tsunami Heights		
Waste Water Plants		
WSP Cell Sectors	3/5/3025 To 3/18/2025	Delivered 3/19/2025 Updated twenty (20) sectors per Verizon Wireless CRS
WSP Cell Towers		

NOTE:

The Parcels layer is provided by Maui County. V2X 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
3/5/2025	For Intrado MapFlex : Delivered AddressPoints, BuildingFootprint, CellSectors, CellTowers, POI, ESN, FireResponseAreas, MedicResponseAreas, MSAGCommunities, PoliceResponseAreas, StreetCenterlines
3/5/2025	For Hexagon CAD and map : Delivered AddressPoints, BuildingFootprint, CellSectors, CellTowers, POI, ESN, FireResponseAreas, MedicResponseAreas, MSAGCommunities, PoliceResponseAreas, StreetCenterlines
3/13/2025	Delivered the MSAG Community layer for Maui to the Hawaii Department of Transportation
3/19/2025	For Intrado MapFlex : Delivered AddressPoints, BuildingFootprint, CellSectors, CellTowers, POI, StreetCenterlines
3/19/2025	For Hexagon CAD and map : Delivered AddressPoints, BuildingFootprint, CellSectors, CellTowers, POI, StreetCenterlines

GIS FOR 911

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

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 5th, 2025 – V2X delivered an updated Intergraph CAD map which included:
   a. .map, .ply, .rte, and .str
   b. Address Points, Building Footprints, Common Name Lookup Table, Fire Response Areas, Medic Response Areas, Points Of Interest, Police Response Areas, Street Centerlines, and WSP Cell Towers.
   c. RMS files

2. V2X delivered an updated Intergraph CAD map March 19th, 2025, which included:
   a. .map, .ply, .rte, and .str
   b. Address Points, Building Footprints, Common Name Lookup Table, Points Of Interest, Street Centerlines, and WSP Cell Towers.
   c. RMS files

During April 2025, 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.

MOTOROLA PREMIER ONE PROJECT

On Wednesday, February 15, 2023, and Thursday, February 16th, 2023, V2X 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 delivered GIS data updates for Motorola for the Premiere One CAD implementation.

On Wednesday, May 24, 2023, V2X 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 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 will adjust the maps according as determined by the Maui Fire Department

On March 19, 2025, V2X met at the Maui Police Department with the Motorola CAD team which included MPD IT. It was established that V2X would continue delivering data every other week, uploading only updated data through the County's Access Console. Maui County IT needs to grant V2X access to the Motorola database.

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MAPFLEX/SCC SYSTEM

March 2025

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

Hawaii County – March 4, 2025, and March 18, 2025
Maui County – March 5, 2025, and March 19, 2025
Kauai County – March 6, 2025, and March 20, 2025
Honolulu – March 7, 2025, and March 21, 2025

MAPFLEX ISSUES

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

MAUI EMS (AMR)

On May 23, 2023, The Maui EMS Director contacted V2X 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.

Maui County E9-1-1 Status Report

March 1, 2025 - March 31, 2025

4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - MARCH 2025

#	Date	Description	Category	Comments

NOTE:

There are no (0) Open Service Request for the Maui County PSAPs for March 2025.

MAUI PSAP SERVICE REQUESTS YEAR-TO-DATE (YTD) SUMMARY – 2025

MAUI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2025	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2024 Carryover*			0						
January	1	1	0	0	0	0	0	1	1
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April									
May									
June									
July									
August									
September									
October									
November									
December									
TOTAL	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
Note:	*The 2024 Carry Over row indicates the number of Service Requests that were opened in 2024; however, were brought forward into 2025 in an effort to track the service request until completion.								

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

5. E9-1-1 DATABASE SYNCHRONIZATION

(Reference: 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'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.

The results of the **March 5, 2025,** database synchronization audits are presented below.

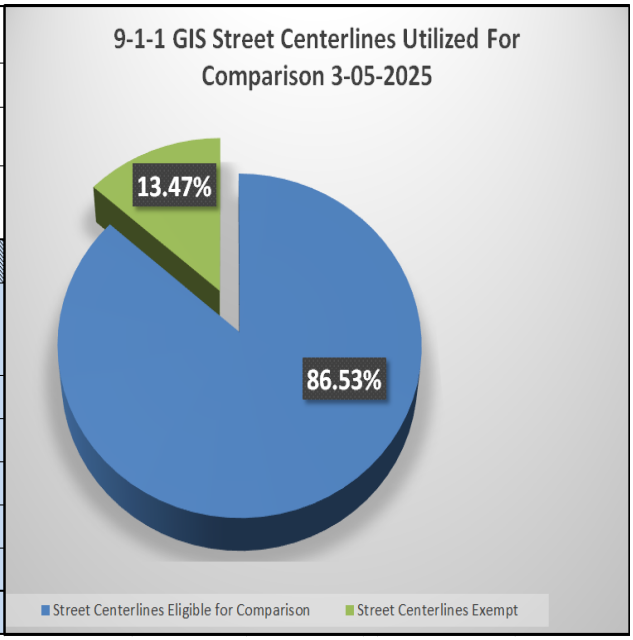
TWO-WAY (2-WAY) COMPARISION

V2X's two-way database comparison service provides for comparing the Local Exchange Carriers (LECs) MSAG Database to the 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.

9-1-1 GIS Street Centerlines Utilized For Comparison

A total number of **3,750** GIS Street Centerline Records are maintained for the Maui Police Department's 9-1-1 GIS database by V2X. For this comparison, **505** GIS street records were excluded as database exemptions. V2X excludes GIS Street Centerlines records from the comparison that do not have the possibility of generating a telephone company 9-1-1 wireline call. Those would include roadways that do not have an MSAG address such as, Freeways, Ramps, and alleys. The remaining **3,245** 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:

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	As of March 05, 2025 GIS Update 2-28-2025 9-1-1 MSAG Dated 3-05-2025	
	# of Records	Exact Match Rate %
Total 9-1-1 GIS Records Reviewed	3,750	
9-1-1 GIS Records Exempt for Comparison (Subtract 9-1-1 MSAG Exempt and GIS Number 1 Exempt Records)	505	13.47%
Subtotal 9-1-1 GIS Records Eligible for Comparison	3,245	86.53%
Subtotal 9-1-1 GIS Records Utilized for Comparison	3,245	100%
Total 9-1-1 GIS Records That Have Descrepancies	3	0%
9-1-1 GIS Records with No Matching MSAG Record	1	0%
Total 9-1-1 GIS Records Requiring Minor Correction	2	0%
Total 9-1-1 GIS Street Centerline Match Rate Percentage	3,242	100%



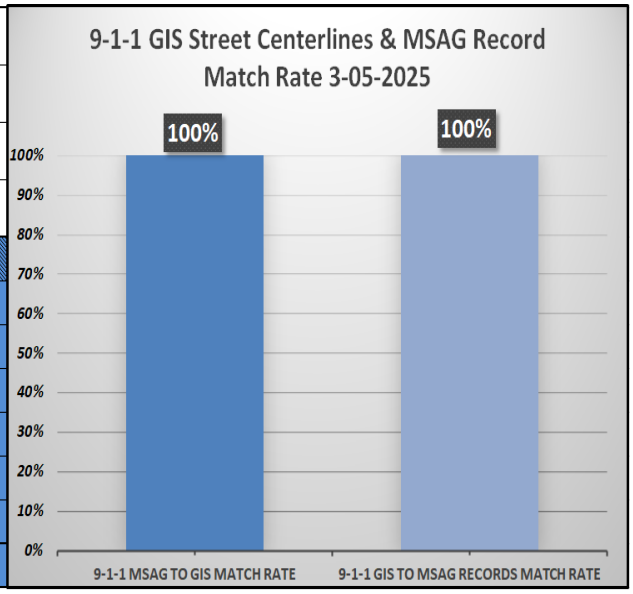
9-1-1 GIS Street Centerline to MSAG Record Comparison

A total of **3,317 9-1-1 MSAG Records** are maintained for the Maui Police Department's 9-1-1 GIS database by V2X. V2X 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 **3,246 MSAG Records**.

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.

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	As of March 05, 2025 GIS Update 2-28-2025 9-1-1 MSAG Dated 3-03-2025	
	# of Records	Exact Match Rate %
Total 9-1-1 MSAG Records Reviewed	3,317	
Less: 9-1-1 MSAG Exemption Records	71	2.14%
Net 9-1-1 MSAG Records Eligible for Comparison	3,246	97.86%
Net 9-1-1 MSAG Records Utilized for Comparison	3,246	100%
Total 9-1-1 MSAG Records That Have Descrepancies	3	0%
Total 9-1-1 MSAG Records with No Matching GIS Record	1	0%
Total 9-1-1 MSAG Records Requiring Minor Correction	2	0%
Total 9-1-1 MSAG Records Match Rate Percentage	3,243	100%

NENA Recommended Match Rate = 98%



THREE-WAY (3-WAY) COMPARISION

(Reference: 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%.

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

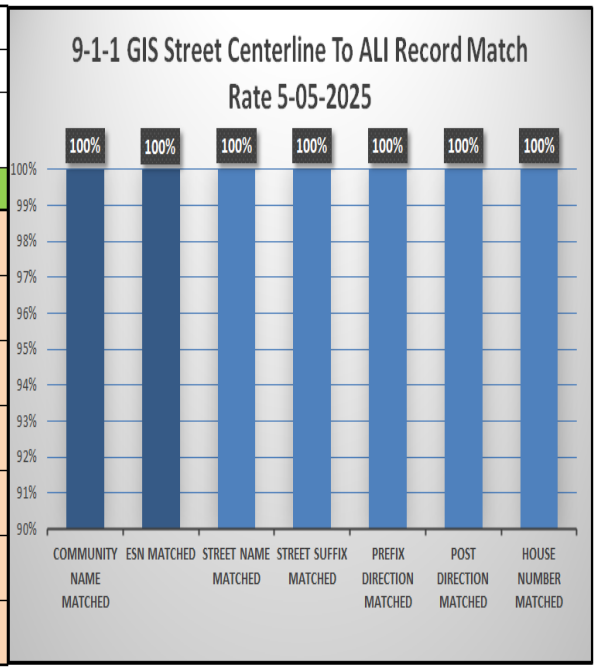
The 9-1-1 GIS Street Centerline to ALI records attribute comparison is used to identify the "course location", or main MSAG valid address that will geocode to the street centerline data. Geocoding is the process of assigning a geographic coordinate for a location and converting it to a valid address 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:

9-1-1 Street Centerline to ALI Records AUDIT COMPARISON RESULTS	As of March 05, 2025	
	9-1-1 ALI Records pulled Dated 3-05-2025	
	# of Records with Discrepancies	Match %
GIS Street Centerlines to ALI Records Comparison		
Community Name Matched	0	100%
ESN Matched	0	100%
Street Name Matched	0	100%
Street Suffix Matched	0	100%
Prefix Direction Matched	0	100%
Post Direction Matched	0	100%
House Number Matched	0	100%



NENA Recommended Match Rate = 98%

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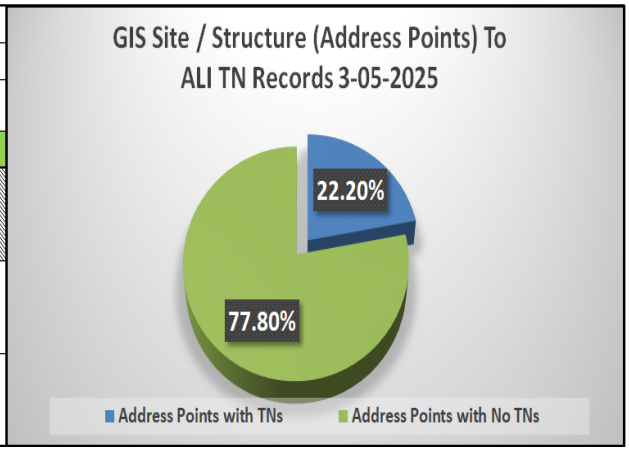
Total GIS Site/Structure (Address) Points and those with Matching ALI Records

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 **74,737 total Site Structure Points** with approximately **16,588** Site Structure Points that have an exact matching ALI telephone record. The are approximately **58,149** Site Structure Points without an exact matching ALI 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 AUDIT COMPARISON RESULTS	As of March 05, 2025	
	9-1-1 ALI Records pulled Dated 3-03-2025	
	# of Records	%
GIS Address Points to ALI Records Comparison		
Total Site / Structure (Address) Points Reviewed	74,737	
Site / Structure (Address) Points With a Matching ALI Record	16,588	22.20%
Site / Structure (Address) Points Without a Matching ALI Record	58,149	77.80%



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

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

There are **57,456 total Automatic Location Identification (ALI) Records** with the Wireline Provider. There are **57,453 Valid ALI records** that have an exact match with a GIS Site Structure Point. There are a total of **3 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.

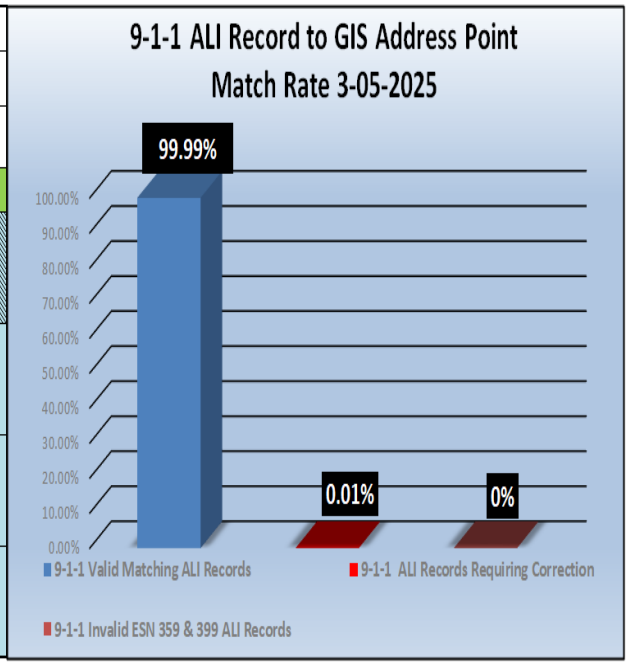
Attributes from the two Databases that were compared during this audit include:

- 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:

9-1-1 ALI RECORDS TO GIS RECORDS AUDIT COMPARISON RESULTS	As of March 05, 2025	
	9-1-1 ALI Records pulled Dated 3-05-2025	
	# of Records	Exact Match Rate %
ALI Records Comparison		
9-1-1 Total ALI Records Reviewed	57,456	
9-1-1 Valid Matching ALI Records	57,453	99.99%
9-1-1 Valid ALI Records Requiring Correction	3	0.01%
9-1-1 Invalid ESN 359 & 399 ALI Records	0	0.00%

NENA Recommended Match Rate = 98%



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 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.

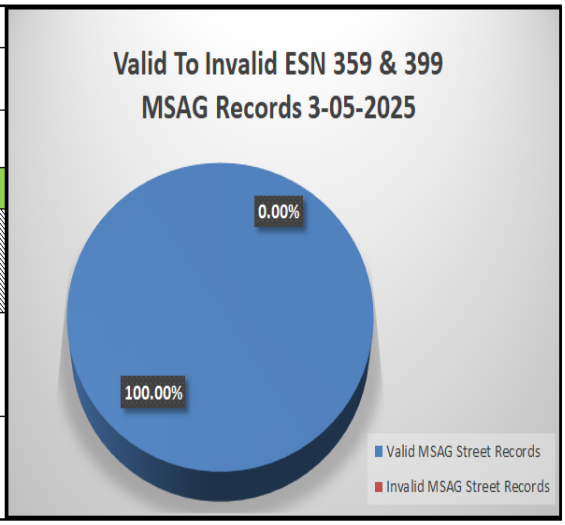
V2X has completed the necessary investigation and required correction of the **378** MSAG Street Records identified at the start of the project. This service was provided without interruption of 9-1-1 service to the owners of the telephone devices while simultaneously producing temporary locations until 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 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 05, 2025	
	9-1-1 MSAG Records pulled Dated March 03, 2025	
	# of Records	Exact Match %
MSAG Street Records Comparison		
9-1-1 Total MSAG Street Records Reviewed	3,316	
9-1-1 Total Valid MSAG Street Records Reviewed	3,316	100.00%
9-1-1 Total Invalid MSAG Records (ESN 359 & 399) Reviewed	0	0.00%



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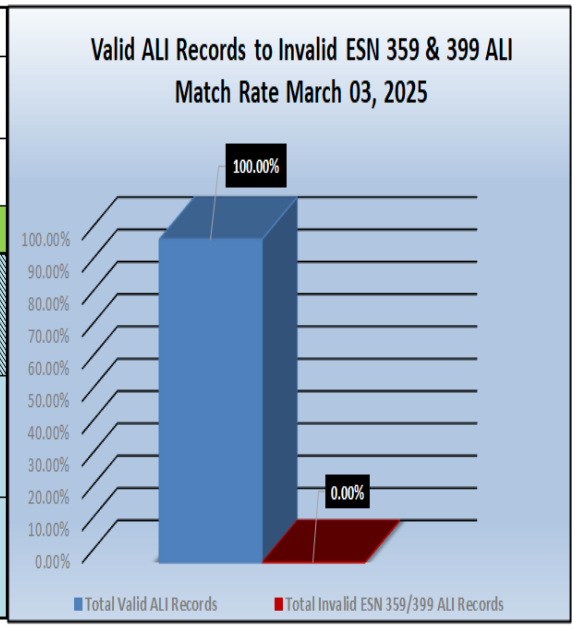
Valid ALI Records to Invalid ESN 359 & ESN 399 ALI Records

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 has completed the research and has corrected all invalid ALI records within Maui County.

9-1-1 ALI RECORDS TO GIS RECORDS AUDIT COMPARISON RESULTS	As of March 05, 2025	
	9-1-1 ALI Records as of 3-03-2025	
	# of Records	Exact Match %
ALI Records Comparison		
9-1-1 Total ALI Records Reviewed	57,456	
9-1-1 Total Valid ALI Records	57,456	100.00%
9-1-1 Total Invalid ALI Records (ESN 359 & 399)	0	0.00%



NENA Recommended Match Rate = 98%