

Maui County E9-1-1 Status Report

March 1, 2020 – March 31, 2020



AKIMEKA

YOUR MISSION IS OUR MISSION

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

TABLE OF CONTENTS

1. PSAP Operations	5
9-1-1 Call Volume Maui PSAP – March 2020	5
Call Volume Maui PSAP Notes:.....	5
9-1-1 Call Volume Maui PSAP – Calendar Year 2020.....	5
9-1-1 Call Volume Molokai PSAP – March 2020	6
Call Volume Molokai PSAP Notes:.....	6
9-1-1 Call Volume Molokai PSAP – Calendar Year 2020	6
9-1-1 Call Volume (Combined Maui & Molokai PSAPS) – March 2020	7
9-1-1 Call Volume (Combined Maui & Molokai PSAPS) – Calendar Year 2020.....	7
PSAP Operation Notes:.....	7
For Your Information.....	8
Text To 911 – Current Month – March 2020.....	9
Note:	9
Wireless PSAP Testing – March 2020.....	10
Notes:	10
2. MSAG (Master Street Address Guide)	11
MSAG Transactions Current Month/Year – March 2020.....	11
MSAG Current Month Notes:	12
Telephone Record (ALI) Transactions Current Month Notes:.....	12

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

Open Telephone Record (ALI) Discrepancy Status:.....	12
TNCR (Telephone Number Change Request) Current Status – March, 2020	13
NOTE:.....	13
Dispatchable Location – Status As Of – March 2020	14
Narrative:	14
Spectrum (Charter) 9-1-1 VoIP Database Verification Project – March 2020	15
Bandwidth 9-1-1 VoIP Database Verification Project – March 2020.....	16
3. Geographic Information System (GIS) – March 2020.....	17
Mapping Layers Updated (Part I)	17
Mapping Layers Updated (Part II)	18
Mapping Layers Updated (Part III).....	19
Mapping Layers Updated (Part IV).....	20
Mapping Layers Updated (Part V).....	21
Note:	21
Geographic Information System (GIS) Narratives	22
GIS Key Activities/Updates.....	22
Intergraph CAD Upgrade.....	22
MapFlex System	23
MapFlex Issues	23
DATE.....	23
ISSUE	23
DESCRIPTION	23
STATUS.....	23
4. Service Requests Transactions.....	25
Open Service Requests – Maui County PSAPS - March 2020	25
.....	25

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

Note:	25
Maui PSAP Service Requests Year-To-Date (YTD) Summary – 2020.....	25
5. E9-1-1 Database Synchronization.....	26
Audit Summary Results – 2019 – 2020	27
Audit Summary Notes:	27
MSAG Audit Summary Results – March 1, 2020 vs December 1, 2019.....	28
Msag Audit Summary Results Notes:	28
Invalid MSAG Streets and Address Ranges – ESN X99 Records	29
Automatic Location Identification (ALI) Discrepancy Report	29

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

1. PSAP OPERATIONS

9-1-1 CALL VOLUME MAUI PSAP – MARCH 2020

Source: Intrado Viper system

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

9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2020	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	11,163	1,102	9.87%	8,441	75.62%	55.21%	44.79%	279	2.50%	2	0.02%	0	0.00%	1,339	11.99%	0	0.00%

CALL VOLUME MAUI PSAP NOTES:

*Calls with No ALI for March 2020 = 0.02% - Statewide average for 2019 = 0.04%

9-1-1 CALL VOLUME MAUI PSAP – CALENDAR YEAR 2020

9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2020	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	12,520	1,223	9.77%	9,468	75.62%	54.67%	45.33%	347	2.77%	5	0.04%	0	0.00%	1,477	11.80%	0	0.00%
FEB	11,976	1,200	10.02%	8,974	74.93%	55.59%	44.41%	334	2.79%	3	0.03%	0	0.00%	1,465	12.23%	0	0.00%
MAR	11,163	1,102	9.87%	8,441	75.62%	55.21%	44.79%	279	2.50%	2	0.02%	0	0.00%	1,339	11.99%	0	0.00%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	35,659	3,525		26,883				960		10		0		4,281		0	
MON AVG	11,886	1,175	9.89%	8,961	75.39%	55.16%	44.84%	320	2.69%	3	0.03%	0	0.00%	1,427	12.01%	0.00	0.00%

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

9-1-1 CALL VOLUME MOLOKAI PSAP – MARCH 2020

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2020	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	700	171	24.43%	410	58.57%	64.15%	35.85%	6	0.86%	0	0.00%	0	0.00%	113	16.14%	0	0.00%

CALL VOLUME MOLOKAI PSAP NOTES:

* Calls with No ALI for March 2020 = 0.00% - Statewide average for 2019 = 0.04%

9-1-1 CALL VOLUME MOLOKAI PSAP – CALENDAR YEAR 2020

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2020	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	654	195	29.82%	356	54.43%	60.67%	39.33%	1	0.15%	0	0.00%	0	0.00%	102	15.60%	0	0.00%
FEB	599	167	27.88%	336	56.09%	59.52%	40.48%	5	0.83%	0	0.00%	0	0.00%	91	15.19%	0	0.00%
MAR	700	171	24.43%	410	58.57%	64.15%	35.85%	6	0.86%	0	0.00%	0	0.00%	113	16.14%	0	0.00%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	1,953	533		1,102				12		0		0		306		0	
MON AVG	651	178	27.37%	367	56.37%	61.45%	38.55%	4.00	0.61%	0	0.00%	0	0.00%	102	15.64%	0	0.00%

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – MARCH 2020

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP Calls		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2020	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	11,863	1,273	10.73%	8,851	74.61%	55.62%	44.38%	285	2.40%	2	0.02%	0	0.00%	1,452	12.24%	0	0.00%

9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – CALENDAR YEAR 2020

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2020	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	13,174	1,418	10.76%	9,824	74.57%	54.89%	45.11%	348	2.64%	5	0.04%	0	0.00%	1,579	11.99%	0	0.00%
FEB	12,575	1,367	10.87%	9,310	74.04%	55.74%	44.26%	339	2.70%	3	0.02%	0	0.00%	1,556	12.37%	0	0.00%
MAR	11,863	1,273	10.73%	8,851	74.61%	55.62%	44.38%	285	2.40%	2	0.02%	0	0.00%	1,452	12.24%	0	0.00%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	37,612	4,058		27,985				972		10		0		4,587		0	
MON AVG	12,537	1,353	10.79%	9,328	74.41%	55.41%	44.59%	324	2.58%	3	0.03%	0.00	0.00%	1,529	12.20%	0	0.00%

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.
- Outgoing 911 calls are included in the totals. These are ringback or callback 911 calls made from the Viper System.

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

FOR YOUR INFORMATION

FYI.....For Your Information										
PSAP Operations										
Statewide 911 Call Volumes										
PSAP	2019		2018		2017		2016		2015	
Oahu Civilian	1,075,726	69.67%	1,034,190	70.62%	1,022,818	72.16%	1,009,059	71.93%	1,019,402	70.94%
RDC Pearl Harbor	37,905	2.45%	37,068	2.53%	27,916	1.97%	N/A	N/A	N/A	N/A
Hawaii County	211,611	13.70%	206,648	14.11%	193,166	13.62%	205,412	14.64%	217,768	15.15%
Maui County	157,127	10.18%	133,869	9.14%	123,685	8.73%	137,333	9.80%	142,952	9.95%
Kauai County	61,754	4.00%	52,623	3.60%	49,902	3.52%	50,955	3.63%	56,874	3.96%
Total	1,544,123	100.00%	1,464,398	100.00%	1,417,487	100.00%	1,402,759	100.00%	1,436,996	100.00%
*2016 & 2015 Statewide average does not include Military 911 calls										

911 Call Volume % increase from 2018 to 2019	
Oahu	4.02%
RDC	2.25%
Hawaii	2.40%
Maui	17.37%
Kauai	17.35%
State of Hawaii average	8.68%

911 Calls with No ALI % average for 2019	
Oahu	0.03%
RDC	0.01%
Hawaii	0.10%
Maui	0.05%
Kauai	0.03%
State of Hawaii average	0.04%

State of Hawaii 2019 TEXT TO 911	
Oahu Civilian	1,629
RDC Pearl Harbor	43
Hawaii County	275
Maui County	228
Kauai County	103
*Total	2,278
*Totals may include PSAP training, testing, and 911 Texting errors	

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

TEXT TO 911 – CURRENT MONTH – MARCH 2020

NOTE:

- Although there is a “Text to 911” plot on the MapFlex, the location of the plot is not reliable. Text to 911 Dispatchers should use their skills to ascertain the exact location of the emergency response.

TEXT TO 911 Maui County PSAPs 2020		
Month	Received at Maui	Received at Molokai
January	18	1
February	19	4
March	38	0
April		
May		
June		
July		
August		
September		
October		
November		
December		
YTD	75	5
Monthly Avg.	25	2

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

WIRELESS PSAP TESTING – MARCH 2020

MAUI COUNTY - MARCH 2020						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
3/24/2020	Verizon	1	1	Maui PSAP	Pass	
3/25/2020	Sprint	1	3	Maui PSAP	Pass	

NOTES:

- There were two (2) scheduled Wireless 911 tests conducted in March 2020 for the Maui and Molokai PSAPs.
- Verizon Wireless has completed migrating their Wireless network database from Intrado to ComTech.
- During the 4th quarter of 2018, there was an increasing amount of “MOBL” class of service type of 911 calls delivered to the State of Hawaii PSAPs. On January 15th, 2019, Intrado completed the position source mapping for ComTech which appears to have resolved this issue.

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – MARCH 2020

MAUI COUNTY	9-1-1 TRANSACTIONS								
	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Submitted		Open ALI Discrepancy Records			Customer Addresses Affected
2020		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	
JANUARY	244	141	97	2	4	236	0	0	651
FEBRUARY	323	69	250	2	2	206	0	0	2,441
MARCH	227	201	23	0	3	146	0	0	140
APRIL									
MAY									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	794	411	370	4	9	588	0	0	3,232
AVG PER MONTH	265	137	123	1	3	196	0	0	1,077

Definitions

- (A) **Dispatchable Location** - 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) **Master Street Address Guide** - Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (C) **Telephone Number Change Request** - 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.

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

MSAG CURRENT MONTH NOTES:

A total of **227** MSAG transactions were processed in 9-1-1 Net during the current month. Twenty-three (**23**) requests were 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 **140** customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

Three (**3**) ALI DRs were submitted as the result of 9-1-1 wireline calls. Two (**2**) calls were made from residential phones in Hana and one (**1**) call from a residential phone in Kaunakakai, Molokai.

Akimeka submitted Two-hundred and one (**201**) TN CRs related to the Dispatchable Location Project during the current month.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently 146 Open TN CR Transactions.**
- **Refer to chart in the next section “TNCR Current Status”**

146 Open TN CR transactions are a direct result of the Dispatchable Location Project and are awaiting approval from Hawaiian Telcom, Inc. 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 DRs as of March 31, 2020**
- **There are no open ALI DRs as of March 31, 2020**

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – MARCH, 2020

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 AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY INTRADO	OPENED TNCRS REFERRED TO TELCO BY INTRADO	TOTAL UNOPENED TNCR RECORDS
MAUI	146	0	146	0
MOLOKAI	0	0	0	0
TOTAL	146	0	146	0

STATUS
<u>TOTAL TNCRs SUBMITTED</u> - The total number of TNCR requests for modification that have been submitted in 9-1-1
<u>PENDING STATUS</u> - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and are pending investigation whether the request is valid or invalid, and/or whether the request requires additional information to validate.
<u>REFERRED STATUS</u> - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and the request requires additional information to validate. The Intrado Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<u>TOTAL UNOPENED TNCR RECORDS STATUS</u> - The request is submitted by Akimeka 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, 2020 - March 31, 2020

DISPATCHABLE LOCATION – STATUS AS OF – MARCH 2020

NARRATIVE:

During the August 2015 State of Hawaii 911 Board meeting, 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, 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), Akimeka standardized an additional information data format to proceed with this project. During the month of August 2015, 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. 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, 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 201 Dispatchable Locations submitted in March 2020 and 261 were processed by Intrado.

Dispatchable Location			
2020	Common Name Place MSAG Address	TNCR* Transactions Submitted	Transactions Processed**
Quarter 1			
2019 Carryover		4,552	4,178
January	Maui Marketplace, 270 Dairy Rd, Kahului	0	5
	Harbor Shops and Restaurants, 300 Maalaea Rd, Maalaea	0	24
	Honokowai Market Pl, 3350 Lower Honoapiilani Rd, Napili	0	86
	Wailea Gateway Center, Wailea Gateway Pl, Wailea	0	1
	Dairy Center, 395 Dairy Rd, Kahului	47	0
	First Insurance Place, 333 Dairy Rd, Kahului	45	1
	Midway Center, 111 Hana Hwy, Kahului	49	0
February	Midway Center, 111 Hana Hwy, Kahului	0	30
	First Insurance Place, 333 Dairy Rd, Kahului	0	34
	Dairy Center, 395 Dairy Rd, Kahului	0	38
	Courtyard Airport, 532 Keolani Pl, Kahului	6	0
	Maui Beach Hotel, 170 Kaahumanu Ave, Kahului	21	0
	Maui Seaside Hotel, 100 Kaahumanu Ave, Kahului	9	0
	305 Dairy Rd (multi business), Kahului	22	0
March	415 Dairy Rd (multi business), Kahului	11	0
	Maui Seaside Hotel, 100 Kaahumanu Ave, Kahului	0	9
	Maui Beach Hotel, 170 Kaahumanu Ave, Kahului	0	19
	305 Dairy Rd (multi business), Kahului	0	20
	415 Dairy Rd (multi business), Kahului	0	6
	Courtyard Airport, 532 Keolani Pl, Kahului	0	6
	Wailuku Tel Ex, 2110 Wells St, Wailuku	92	92
	Wells St Professional Center, 2145 Wells St, Wailuku	109	109
Q1		411	480
Total		4,963	4,658

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT – MARCH 2020

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 Akimeka has access to these ALI Records, 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 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 Civilian	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

** Akimeka provided VoIP Records with Latitude/Longitude coordinates

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

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT – MARCH 2020

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 Akimeka has access to these ALI Records, 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.

Akimeka will update the chart below as we receive updated ALI records from Bandwidth.

*Bandwidth 9-1-1 VoIP Database Verification Project **(Updated)					
PSAP	TOTAL RECORDS SUBMITTED BY BANDWIDTH (A)	TOTAL NEW RECORDS VERIFIED WITH 911 DATABASES (B)	TOTAL RECORDS NOT MATCHING	NON MATCHING RECORDS CORRECTED BY AKIMEKA (C)	PERCENT COMPLETED
HAWAII County	545	85	0	0	100.00%
KAUAI County	306	41	0	0	100.00%
MAUI County	914	222	1	1	100.00%
OAHU Civilian	4,065	888	1	1	100.00%
OAHU Military	56	7	0	0	100.00%
TOTAL	5,886	1,243	2	2	100.00%

***Bandwidth VoIP Database received on April 5th, 2018**

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

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

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – MARCH 2020

MAPPING LAYERS UPDATED (PART I)

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

MAUI COUNTY		
Type of Layer	Akimeka GIS Server	GIS Delivery Dates/Remarks
	Date Created/ Edits Performed	
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Address Points	3/25/2020 To 3/31/2020	Next Delivery 4/8/2020
		Added address for one (1) record in Lanai
		Verified address for one (1) record in Kihei
		Added new address for two (2) records in Hana
		Added address for one (1) record in Makawao
		Verified address for one (1) record in Haiku
		Corrected full address for four (4) records in Kihei
		Corrected address for one (1) record in Waiehu
		Spatially corrected one (1) record in Kula
		Added address for one (1) record in Hana
		Added address for two (2) records in Kula
		Added location name for one (1) record in Kahului
		Verified address for one (1) record in Kula
		Verified address for three (3) records in Wailuku
	3/11/2020 To 3/24/2020	Delivered 3/25/2020
		Added address for one (1) record in Paia
		Updated address for one (1) record in Pukalani
		Added address for one (1) record in Makawao
		Verified address for seven (7) records in Haiku
		Updated address for one (1) record in Lahaina
		Corrected address for one (1) record in Kihei
		Spatially corrected one (1) record in Kula
		Added address for two (2) records in Hana
		Added address for three (3) records in Kula
		Corrected address for one (1) record in Wailuku
		Added TMK for one (1) record in Makawao
		Added address for three (3) records in Kihei
		Verified address for three (3) records in Kula
	Added address for one (1) record in Hoolehua	
	Spatially corrected two (2) records in Haiku	
	3/1/2020 To 3/10/2020	Delivered 3/11/2020
		Added address for one (1) record in Kihei
		Verified address for one (1) record in Wailuku
		Added address for one (1) record in Waiehu

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

MAPPING LAYERS UPDATED (PART II)

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

MAUI COUNTY		
Type of Layer	Akimeka GIS Server	GIS Delivery Dates/Remarks
	Date Created/ Edits Performed	
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Address Points	3/1/2020 To 3/10/2020	Added address for nine (9) records in Wailea
		Added address for one (1) record in Kahului
		Added location name for one (1) record in Kahului
		Added address for two (2) records in Kaunakakai
		Added address for one (1) record in Pukalani
		Spatially corrected one (1) record in Wailuku
Airports		
Bridges		
Building Footprints	3/11/2020 To 3/24/2020	Delivered 3/25/2020
		Added four (4) records in Wailuku
	3/1/2020 To 3/10/2020	Delivered 3/11/2020
		Spatially corrected fourteen (14) records in Kahului
		Added address, spatially corrected one hundred and ten (110) records in Kaunakakai
		Spatially corrected one (1) record in Kaunakakai
		Added address for three (3) records in Kahului
		Added address, spatially corrected forty-four (44) records in Waiehu
		Added thirteen (13) records in Wailuku
		Spatially corrected, added address for fifteen (15) records in Kahului
		Spatially corrected five (5) records in Kahului
		Added three (3) records in Waiehu
		Added address, spatially corrected one (1) record in Kahului
		Added seventy (70) records in Kahului
		Verified address for four (4) records in Kaunakakai
		Added address, spatially corrected one (1) record in Wailuku
		Spatially corrected eight (8) records in Wailuku
Bus Stops		
Churches		
Coastal Names		
Coastline		
Common Places		
Correctional Facilities		
Emergency Callboxes		
Emergency Operation Centers		

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

MAPPING LAYERS UPDATED (PART III)

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

MAUI COUNTY		
Type of Layer	Akimeka GIS Server	GIS Delivery Dates/Remarks
	Date Created/ Edits Performed	
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
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		
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	3/1/2020 To 3/10/2020	Delivered 3/11/2020
		Added park for one (1) record in Wailuku
Parks Polygon	3/1/2020 To 3/10/2020	Delivered 3/11/2020
		Added park for one (1) record in Wailuku

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

MAPPING LAYERS UPDATED (PART IV)

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

MAUI COUNTY		
Type of Layer	Akimeka GIS Server	GIS Delivery Dates/Remarks
	Date Created/ Edits Performed	
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Points of Interest	3/25/2020 To 3/31/2020	Next Delivery 4/8/2020 Updated POI address for one (1) record in Kahului
Police Beats		
Police Districts		
Police Response Areas		
Police Stations		
Post Offices		
Schools		
Street Centerlines	3/25/2020 To 3/31/2020	Next Delivery 4/8/2020
		Modified range for one (1) record in Hoolehua
		Modified range for one (1) record in Lanai
		Modified range for two (2) records in Wailuku
		Modified range for two (2) records in Kula
		Modified range for one (1) record in Kihei
		Modified range for two (2) records in Haiku
		Modified range for one (1) record in Haiku
		Modified range for one (1) record in Lahaina
		Modified range for one (1) record in Hana
		Spatially corrected one (1) record in Haiku
	3/11/2020 To 3/24/2020	Delivered 3/25/2020
		Split street centerline one (1) record in Hana
		Extended range for two (2) records in Haiku
		Modified range for one (1) record in Lanai
		Modified range for one (1) record in Wailuku
		Modified range for three (3) records in Kula
		Spatially corrected one (1) record in Hana
		Modified range for one (1) record in Kaunakakai
		Modified range for five (5) records in Kahului
		Modified range for one (1) record in Lahaina
		Spatially corrected one (1) record in Waiehu
		Spatially corrected one (1) record in Wailea
		Modified range for one (1) record in Haiku
		Modified range for one (1) record in Hana

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

MAPPING LAYERS UPDATED (PART V)

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

MAUI COUNTY		
Type of Layer	Akimeka GIS Server	GIS Delivery Dates/Remarks
	Date Created/ Edits Performed	
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Subdivisions		
Tow Jurisdictions		
Tsunami Evacuation Zones		
Tsunami Heights		
Waste Water Plants		
WSP Cell Sectors	3/11/2020 To 3/24/2020	Delivered 3/25/2020
		Updated one (1) sector per T-Mobile CRS
	3/1/2020 To 3/10/2020	Delivered 3/11/2020
		Added eighteen (18) sectors per Sprint CRS
WSP Cell Towers	3/11/2020 To 3/24/2020	Delivered 3/25/2020
		Updated one (1) tower per T-Mobile CRS
	3/1/2020 To 3/10/2020	Delivered 3/11/2020
		Added three (3) towers per Sprint CRS

NOTE:

The Parcels layer is provided by Maui County. 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.

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

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
3/25/2020	Delivered updated data for MapFlex which included Address Points, Building Footprint, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers.
3/25/2020	Delivered .map, .ply, .str, .rte, Maui Cell Coverage.csv, and database files, which included updated Address Points, Building Footprints, Common Name Lookup Table, Points Of Interest, Street Centerlines, and WSP Cell Towers for Intergraph.
3/11/2020	Delivered updated data for MapFlex which included Address Points, Building Footprint, Parks, Parks Polygon, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers.
3/11/2020	Delivered .map, .ply, .str, .rte, Maui Cell Coverage.csv, and database files, which included updated Address Points, Building Footprints, Common Name Lookup Table, Parks, Points Of Interest, Street Centerlines, and WSP Cell Towers for Intergraph.

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. Akimeka delivered an updated Intergraph CAD map March 11th, 2020 which included:
 - a. Address Points, Building Footprints, Common Name Lookup Table, Parks, Points of Interest, Street Centerlines, and WSP Cell Towers.
 - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
2. On March 25th, 2020 Akimeka delivered an updated Intergraph CAD map which included:
 - a. Address Points, Building Footprints, Common Name Lookup Table, Points Of Interest, Street Centerlines, and WSP Cell Towers
 - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv

During April 2020, 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.

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

MAPFLEX SYSTEM

Akimeka delivered GIS data to the MapFlex system on the following dates in March 2020.

Hawaii County – March 10th, 2020 and March 24th, 2020

Maui County – March 11th, 2020 and March 25th, 2020

Kauai County – March 12th, 2020, and March 26th, 2020

Honolulu – March 13th, 2020, and March 27th, 2020

MAPFLEX ISSUES

Below is a detailed list of issues regarding the MapFlex systems throughout the State of Hawaii.

DATE	ISSUE	DESCRIPTION	STATUS
8/2016	Wireless Addresses	MapFlex system began displaying wireless information incorrectly. MapFlex system is doing a reverse query for additional information in the GIS and this is overriding the ALI information with the closest address in the GIS.	Partially Resolved (Nov 2016) The overriding ALI with updated Lat/Longs from the GIS is still occurring
11/2016	Phase I Display	Wireless Phase I calls plotting at centroid of coverage area and landing in the ocean. After installation of new MapFlex version to correct other issues, the configurations for Wireless Phase I were not set up properly by Intrado, in which the mapping did not point to the correct information in MapFlex.	Partially Resolved (Dec 2016) According to PSAPs, it's not fully resolved. The icon of the tower still doesn't plot for Phase I.
11/2016	Wireless Confidence	Sprint calls coming across with unusually high confidence. Coordination is taking place with Sprint and Intrado. Intrado provides the PDE services for Sprint.	Pending
3/22/2017	ArcGIS Address Locator	The locators in MapFlex have a configurations which does not include ESNs. A reported issue has occurred with the Sheraton in Waikiki. The address locator does not differentiate between the Sheraton hotel and the surf break and plots on the surf break. The bigger issue is that this same issue will occur with complexes that have same primary address.	Pending A new SP 5.4 update by Intrado is aimed to correct this issue.
5/17/2017	VoIP Calls Plotting Incorrectly	Recognized in late April and early May 2017, the PSAPs have been receiving several VoIP calls which are plotting in the incorrect locations. After further research it was determined that it is because MapFlex is configured to plot the received Lat/Long. The problem is that these are not always maintained properly and that ideally the system should first choose to match with the GIS data based on the provided address. During the September 20, 2017 PSAP conference call, HT relayed there was confirmation that the Time Warner records were in fact passing through the Intrado FMCC.	Partially Resolved – the Lat/Longs are no longer being plotted in MapFlex due to a software release.

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

5/17/2017	Landline Calls Producing X/Y on calls	It was determined that for normal landline calls, the X/Y coordinates are being sent. The PSAPs have asked where these are being generated and why would they be sent for landline calls.	Intrado is looking into this (May - June 2017)
5/23/2018	Phase I & Phase II coverage area	Phase I calls received at the Kihei Maui PSAP are displaying a circular circumference area rather than a cone shaped directional coverage. Phase II calls are not plotting the COF meters correctly.	Pending
5/24/2018	Incorrect Addresses	MapFlex system began displaying incorrect addresses in the bubble display when an Address Point is right mouse clicked to see information by the PSAPs. However, the address in the data is still correct as shown on the left hand side.	Pending
6/27/2018	Moving Labels	It was brought up during the PSAP teleconference with Hawaiian Tel and Intrado that the Hawaii Fire Department submitted a trouble ticket regarding the parcel labels. When the base map is checked on for viewing the owner's names on the parcel layer, the names of some of the parcels will follow and leave their parcel as the map is panned following streets. This problem was also recreated at the Hawaii Police Department.	Pending

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - MARCH 2020

MAUI COUNTY						
#	Date	Ticket #	Description	PSAP	Urgency	Comments
1	12/13/2019	1018	Updated Address	Maui	Normal	Confirmation pending from Time Warner Cable 03/31/2020

NOTE:

There is one (1) Open Service Request for the Maui County PSAPs for March, 2020.

MAUI PSAP SERVICE REQUESTS YEAR-TO-DATE (YTD) SUMMARY – 2020

MAUI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2020	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2019 Carryover*			1						
January	4	4	1	4	4	0	0	0	0
February	2	2	1	2	2	0	0	0	0
March	3	3	1	3	3	0	0	0	0
April									
May									
June									
July									
August									
September									
October									
November									
December									
TOTAL	9	9	1	9	9	0	0	0	0

Note:

*The 2019 Carry Over row indicates the number of Service Requests that were opened in 2019; however, were brought forward into 2020 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	Telephone Number (ALI) Discrepancies from VoIP phones that have been submitted to Time Warner Cable (TWCBL) or other VoIP providers for correction

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

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)

As part of Akimeka's value added services, Akimeka conducted the next quarterly database synchronization audit for Maui County in March 2020.

The database synchronization effort included comparing Maui County's 9-1-1 MSAG against its GIS Street Centerline data. A total number of **3,119** 9-1-1 MSAG (ESN 300 – 357) records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on March 1, 2020 for Maui County are reported below.

Database synchronization should be part of an ongoing and continuous process to ensure that the databases remain current and synchronized. 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 percentage will fluctuate by a small degree. As such, NENA's recommended minimum match rate is 98%.

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

AUDIT SUMMARY RESULTS – 2019 – 2020

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of June 1, 2019		As of September 1, 2019		As of December 1, 2019		As of March 1, 2020	
		9-1-1 MSAG Dated 6-01-19		9-1-1 MSAG Dated 9-01-19		9-1-1 MSAG Dated 12-01-19		9-1-1 MSAG Dated 3-01-20	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		2,739		2,740		2,741		3,119	
Less: 9-1-1 MSAG Exception Records	(1)	64	2.3%	64	2.3%	64	2.3%	64	2.0%
Net 9-1-1 MSAG Records Eligible for Comparison		2,675		2,676		2,677		3,055	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		2,673	100.00%	2,674	100.00%	2,673	100.00%	2,673	100.00%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	0	0.0%	2	0.0%	2	0.0%	10	0.0%
9-1-1 MSAG Record With No GIS Record	(3)	2	0.0%	0	0.0%	2	0.0%	0	0.0%
Total 9-1-1 MSAG Records No Match		2	0.0%	2	0.0%	4	0.0%	10	0.0%

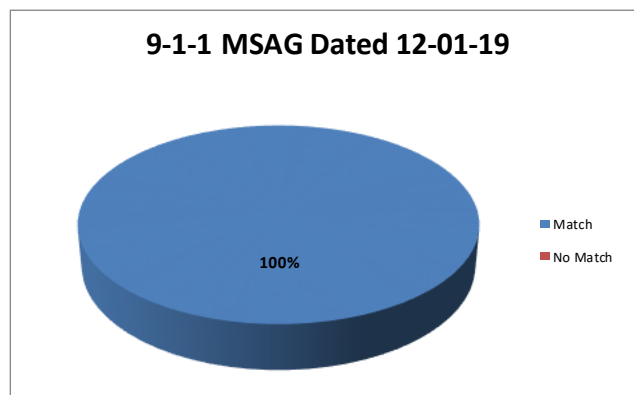
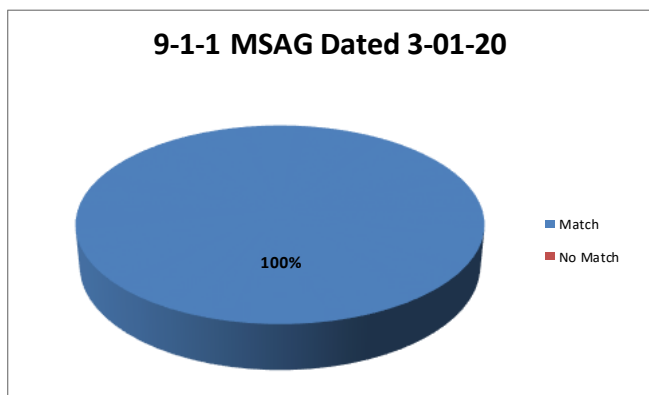
AUDIT SUMMARY NOTES:

- (1)An MSAG Record that will not have a corresponding GIS Street Centerline Record but is required for the routing of E9-1-1 calls (i.e., Emergency Call Box, Foreign Exchange Records, Wireless Shell Records, etc.). No further action is required.
- (2)An MSAG Record that requires minor MSAG attention in 9-1-1Net to correct MSAG Records (i.e., Reassignment of an MSAG Community, modification of the Site Address Range, assignment of an ESN, performing a combine or insert of an existing MSAG Record, etc.).
- (3)An MSAG Record that does not have a corresponding GIS Record and will require additional research and validation. The GIS Section will assist with this effort.

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

MSAG AUDIT SUMMARY RESULTS – MARCH 1, 2020 VS DECEMBER 1, 2019



**Maui County's level of accuracy or 9-1-1 Match percentage remained constant
at 100% as of March 1, 2020 to 100% on December 1, 2019**

NENA Recommended Match Rate = 98%

MSAG AUDIT SUMMARY RESULTS NOTES:

- “MSAG - GIS Minor Corrections” increased (2 to 10) from December 2019 to March 2020. Minor corrections were primarily the result of edits made to the GIS Street Centerlines layer in order to meet new NG9-1-1 requirements. Low and high address ranges were then adjusted in the MSAG to correspond with the GIS record. Although this is a minor correction, customer telephone numbers (TNs) need to be validated by the service providers prior to adjusting an address range.
- “MSAG Record with No GIS Record” increased (2 to 0) from December 2019 to March 2020. MSAG Record with No GIS Record were zero due primarily to the verification of the MSAG records against multiple GIS databases to determine if the roads are existing within Maui County records.
- Ongoing maintenance is critical to ensure the database synchronized level of address accuracy is maintained each time an MSAG or GIS record is “last modified”.

Maui County E9-1-1 Status Report

March 1, 2020 - March 31, 2020

INVALID MSAG STREETS AND ADDRESS RANGES – ESN X99 RECORDS

Hawaiian Telcom, Inc. (HTI) provides Maui County and Akimeka, as the PSAP's agent, with access and visibility to the ESN 359/399 MSAG records which are "known" invalid streets and address ranges. Results of the data provided are as follows:

PSAP	ESN	Invalid MSAG Records	
		9-1-1 MSAG Dated 03-01-20	
		# of Records	% of Total MSAG Records (Valid and Invalid)
MAUI	399	0	0.0%
MOLOKAI	359	0	0.0%
TOTAL MAUI		0	0.0%

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT

As part of Akimeka's ongoing database synchronization efforts, Akimeka reviewed and summarized the ALI discrepancy reports by community for Maui County. As of **March 30, 2020**, **0** ESN 399 (Maui/Lanai) and ESN 359 (Molokai) records, representing **0%** of Maui County's total ALI records, require research and corrective action, if needed.

