

Maui County E9-1-1 Status Report

May 1, 2019 – May 31, 2019



Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

TABLE OF CONTENTS

1. PSAP Operations	5
9-1-1 Call Volume Maui PSAP – May 2019	5
Call Volume Maui PSAP Notes:.....	5
9-1-1 Call Volume Maui PSAP – Calendar Year 2019.....	5
9-1-1 Call Volume Molokai PSAP – May 2019	6
Call Volume Molokai PSAP Notes:.....	6
9-1-1 Call Volume Molokai PSAP – Calendar Year 2019	6
9-1-1 Call Volume (Combined Maui & Molokai PSAPS) – May 2019	7
9-1-1 Call Volume (Combined Maui & Molokai PSAPS) – Calendar Year 2019.....	7
PSAP Operation Notes:.....	7
For Your Information.....	8
Text To 911 – Current Month – May 2019.....	8
Note:	8
Wireless PSAP Testing – May 2019.....	9
Notes:	9
2. MSAG (Master Street Address Guide)	10
MSAG Transactions Current Month/Year – May 2019.....	10
MSAG Current Month Notes:	11
Telephone Record (ALI) Transactions Current Month Notes:.....	11
Open Telephone Record (ALI) Discrepancy Status:.....	11
TNCR (Telephone Number Change Request) Current Status – May, 2019	12

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

NOTE:.....	12
Dispatchable Location – Status As Of – May 2019	13
Narrative:	13
Spectrum (Charter) 9-1-1 VoIP Database Verification Project – May 2019	14
Bandwidth 9-1-1 VoIP Database Verification Project – May 2019.....	15
3. Geographic Information System (GIS) – May 2019	16
Mapping Layers Updated (Part I)	16
Mapping Layers Updated (Part II)	17
Mapping Layers Updated (Part III)	18
Mapping Layers Updated (Part IV).....	19
Mapping Layers Updated (Part V).....	20
Mapping Layers Updated (Part VI).....	21
Note:	21
Geographic Information System (GIS) Narratives	22
GIS Key Activities/Updates.....	22
Intergraph CAD Upgrade.....	23
MapFlex System	23
MapFlex Issues	24
DATE.....	24
ISSUE	24
DESCRIPTION	24
STATUS.....	24
4. Service Requests Transactions.....	26
Open Service Requests – Maui County PSAPS - May 2019	26
.....	26
Note:	26

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

Maui PSAP Service Requests Year-To-Date (YTD) Summary – 2019	26
5. E9-1-1 Database Synchronization.....	27
Audit Summary Results – 2018 – 2019 -- TBA.....	27
MSAG Audit Summary Results – June 1, 2019 vs March 1, 2019 -- TBA	27
Invalid MSAG Streets and Address Ranges – ESN X99 Records -- TBA.....	27
Automatic Location Identification (ALI) Discrepancy Report -- TBA.....	27

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

1. PSAP OPERATIONS

9-1-1 CALL VOLUME MAUI PSAP – MAY 2019

Source: West Safety Services 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	
2019	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
MAY	12,440	1,491	11.99%	9,277	74.57%	59.12%	40.88%	319	2.56%	3	0.02%	0	0.00%	1,350	10.85%	0	0.00%

CALL VOLUME MAUI PSAP NOTES:

*Calls with No ALI for May 2019 = 0.02% - Statewide average for 2018 = 0.09%

9-1-1 CALL VOLUME MAUI PSAP – CALENDAR YEAR 2019

9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2019	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	11,085	1,607	14.50%	8,204	74.01%	60.68%	39.32%	295	2.66%	3	0.03%	0	0.00%	976	8.80%	0	0.00%
FEB	10,875	1,606	14.77%	7,841	72.10%	59.60%	40.40%	312	2.87%	4	0.04%	0	0.00%	1,112	10.23%	0	0.00%
MAR	12,403	1,626	13.11%	9,022	72.74%	58.93%	41.07%	360	2.90%	6	0.05%	0	0.00%	1,389	11.20%	0	0.00%
APR	12,358	1,495	12.10%	9,186	74.33%	57.72%	42.28%	338	2.74%	7	0.06%	0	0.00%	1,332	10.78%	0	0.00%
MAY	12,440	1,491	11.99%	9,277	74.57%	59.12%	40.88%	319	2.56%	3	0.02%	0	0.00%	1,350	10.85%	0	0.00%
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	59,161	7,825		43,530				1,624		23		0		6,159		0	
MON AVG	11,832	1,565	13.29%	8,706	73.55%	59.21%	40.79%	325	2.75%	5	0.04%	0	0.00%	1,232	10.37%	0.00	0.00%

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

9-1-1 CALL VOLUME MOLOKAI PSAP – MAY 2019

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2019	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
MAY	550	132	24.00%	353	64.18%	64.59%	35.41%	2	0.36%	0	0.00%	0	0.00%	63	11.45%	0	0.00%

CALL VOLUME MOLOKAI PSAP NOTES:

* Calls with No ALI for May 2019 = 0.00% - Statewide average for 2018 = 0.09%

9-1-1 CALL VOLUME MOLOKAI PSAP – CALENDAR YEAR 2019

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2019	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	474	145	30.59%	285	60.13%	55.79%	44.21%	1	0.21%	0	0.00%	0	0.00%	43	9.07%	0	0.00%
FEB	574	222	38.68%	266	46.34%	62.03%	37.97%	5	0.87%	0	0.00%	0	0.00%	81	14.11%	0	0.00%
MAR	484	135	27.89%	279	57.64%	62.72%	37.28%	2	0.41%	2	0.41%	0	0.00%	66	13.64%	0	0.00%
APR	514	109	21.21%	331	64.40%	63.44%	36.56%	0	0.00%	1	0.19%	0	0.00%	73	14.20%	0	0.00%
MAY	550	132	24.00%	353	64.18%	64.59%	35.41%	2	0.36%	0	0.00%	0	0.00%	63	11.45%	0	0.00%
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	2,596	743		1,514				10		3		0		326		0	
MON AVG	519	149	28.47%	303	58.54%	61.72%	38.28%	2.00	0.37%	1	0.12%	0	0.00%	65.2	12.50%	0	0.00%

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – MAY 2019

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP Calls		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2019	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
MAY	12,990	1,623	12.49%	9,630	74.13%	59.33%	40.67%	321	2.47%	3	0.02%	0	0.00%	1,413	10.88%	0	0.00%

9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – CALENDAR YEAR 2019

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2019	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	11,559	1,752	15.16%	8,489	73.44%	60.51%	39.49%	296	2.56%	3	0.03%	0	0.00%	1,019	8.82%	0	0.00%
FEB	11,449	1,828	15.97%	8,107	70.81%	59.68%	40.32%	317	2.77%	4	0.03%	0	0.00%	1,193	10.42%	0	0.00%
MAR	12,887	1,761	13.66%	9,301	72.17%	59.05%	40.95%	362	2.81%	8	0.06%	0	0.00%	1,455	11.29%	0	0.00%
APR	12,872	1,604	12.46%	9,517	73.94%	57.92%	42.08%	338	2.63%	8	0.06%	0	0.00%	1,405	10.92%	0	0.00%
MAY	12,990	1,623	12.49%	9,630	74.13%	59.33%	40.67%	321	2.47%	3	0.02%	0	0.00%	1,413	10.88%	0	0.00%
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	61,757	8,568		45,044				1,634		26		0		6,485		0	
MON AVG	12,351	1,714	13.95%	9,009	72.90%	59.30%	40.70%	327	2.65%	5	0.04%	0.00	0.00%	1,297	10.46%	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

May 1, 2019 - May 31, 2019

FOR YOUR INFORMATION

FYI.....For Your Information								
PSAP Operations								
Statewide 911 Call Volumes								
PSAP	2018		2017		2016		2015	
Oahu Civilian	1,034,190	70.62%	1,022,818	72.16%	1,009,059	71.93%	1,019,402	70.94%
RDC Pearl Harbor	37,068	2.53%	27,916	1.97%	N/A	N/A	N/A	N/A
Hawaii County	206,648	14.11%	193,166	13.62%	205,412	14.64%	217,768	15.15%
Maui County	133,869	9.14%	123,685	8.73%	137,333	9.80%	142,952	9.95%
Kauai County	52,623	3.60%	49,902	3.52%	50,955	3.63%	56,874	3.96%
Total	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								

TEXT TO 911 – CURRENT MONTH – MAY 2019

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 2019		
Month	Received at Maui	Received at Molokai
January	25	4
February	29	5
March	16	0
April	10	4
May	10	2
June		
July		
August		
September		
October		
November		
December		
YTD	90	15
Monthly Avg.	18	3

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

WIRELESS PSAP TESTING – MAY 2019

MAUI COUNTY - MAY 2019						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
5/13/2019	Sprint	1	2	Maui PSAP	Pass	
5/29/2019	Sprint	1	3	Maui PSAP	Pass	

NOTES:

- There were two (2) scheduled Wireless 911 tests conducted in May 2019 for the Maui and Molokai PSAPs.
- Verizon Wireless has completed migrating their Wireless network database from West 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, West completed the position source mapping for ComTech which appears to have resolved this issue.

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – MAY 2019

MAUI COUNTY	9-1-1 TRANSACTIONS								
	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Submitted		Open ALI Discrepancy Records			Customer Addresses Affected
2019		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	
JANUARY	65	46	7	6	6	18	0	0	122
FEBRUARY	20	0	5	11	4	18	0	0	98
MARCH	248	224	15	8	1	209	0	0	58
APRIL	258	250	5	1	2	309	0	0	224
MAY	116	102	13	1	0	334	0	0	61
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	707	622	45	27	13	888	0	0	563
AVG PER MONTH	141	124	9	5	3	178	0	0	113

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

May 1, 2019 - May 31, 2019

MSAG CURRENT MONTH NOTES:

A total of **116** MSAG transactions were processed in 9-1-1 Net during the current month. Thirteen (**13**) 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.

61 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

One (**1**) Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 399 clean-up effort. ESN 399 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record.

Akimeka processed one hundred ninety-five (102) TN CRs related to the Dispatchable Location Project during the current month.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently 334 Open TN CRs.**

331 Open TN CR transactions are a result of the Dispatchable Location project on Maui. Akimeka continues to monitor and track the progress of the Referred records. Once a telephone number is submitted to West for correction, it must be verified against HT records and/or approved by the customer. West'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 May 31, 2019**
- **There are no open ALI DRs as of May 31, 2019**

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – MAY, 2019

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 West Safety Services 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 WEST SAFETY SERVICES	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES	TOTAL UNOPENED TNCR RECORDS
MAUI	331	9	220	102
MOLOKAI	3	3	0	0
TOTAL	334	12	220	102

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 West Safety Services 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

May 1, 2019 - May 31, 2019

DISPATCHABLE LOCATION – STATUS AS OF – MAY 2019

NARRATIVE:

During the August 2015 State of Hawaii 911 Board meeting, Akimeka provided a “State of Hawaii PSAPs Proposed ALI Compliance 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 102 Dispatchable Locations submitted in May 2019 and 83 were processed by West.

Dispatchable Location			
2019	Common Name Place MSAG Address	TNCR* Transactions Submitted	Transactions Processed**
Quarter 2			
Quarter 1 Carryover		3,083	2,831
April	Maul Mall, 70 E Kaahumanu Ave, Kahului	0	55
	Piilani Village, Piikea Ave, Kihei	0	70
	Azeka Shopping Center,S Kihei Rd, Kihei	0	70
	Hotel Wailea, 555 Kaukahi St, Wailea	22	0
	Wailea Beach Resort 3700 Wailea Alanui Dr, Wailea	228	0
May	Hotel Wailea, 555 Kaukahi St, Wailea	0	22
	Wailea Beach Resort 3700 Wailea Alanui Dr, Wailea	0	55
	Piilani Village, Piikea Ave, Kihei	0	2
	Azeka Shopping Center,S Kihei Rd, Kihei	0	1
	Maul Mall, 70 E Kaahumanu Ave, Kahului	0	3
	Kahului School, 410 Hina Ave, Kahului	8	0
	Hoolei At The Grand, 146 Hoolei Cir, Wailea	8	0
	Grand Wailea Resort, 3850 Wailea Alanui Dr, Wailea	71	0
	Haiku Elementary School, 105 Pauwela Rd, Haiku	10	0
	Polo Beach Front Condo, 4406 Makena Rd, Wailea	5	0
June			
Quarter 2 Total		352	278
Total		3,435	3,109

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT – MAY 2019

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

May 1, 2019 - May 31, 2019

BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT – MAY 2019

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

May 1, 2019 - May 31, 2019

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – MAY 2019

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	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Added address for one (1) record in Lahaina
		Spatially corrected one (1) record in Kaanapali
		Updated address for one (1) record in Pukalani
		Added address for one (1) record in Kahului
		Added address for one (1) record in Wailuku
		Spatially corrected one (1) record in Kula
		Verified address for twenty-four (24) records in Wailea
		Added address for one (1) record in Kula
		Spatially corrected one (1) record in Kahului
		Spatially corrected one (1) record in Lahaina
		Verified address for one (1) record in Kula
		Spatially corrected three (3) records in Wailea
	5/8/19 To 5/21/19	Delivered 5/22/2019
		Added address for four (4) records in Kula
		Verified address for fifty-two (52) records in Wailea
		Added address for one (1) record in Haiku
		Updated street name for one (1) record in Maunaloa
		Added address for one (1) record in Waikapu
		Spatially moved two (2) records in Wailea
		Updated location name for one (1) record in Kahului
		Verified address for seventeen (17) records in Kihei
		Verified address for two (2) records in Lahaina
		Added address for one (1) record in Kaunakakai
		Verified address for two (2) records in Kahului
		Removed bldg info & label for twenty-six (26) records in Kihei
		Spatially corrected one (1) record in Haiku
		Added address for one (1) record in Lahaina
		Added address for twenty-four (24) records in Kihei
		Updated street name for one (1) record in Lanai
		Added address for one (1) record in Hana
		Corrected routingID for one (1) record in Kaluakoi

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

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	5/8/19 To 5/21/19	Corrected routingID for one (1) record in Kaanapali
		Verified address for two (2) records in Kula
		Spatially corrected two hundred and twenty-three (223) records in Wailea
		Corrected routingID for three (3) records in Pukoo
		Updated street name for two (2) records in Pukalani
		Added address for two (2) records in Wailea
		Spatially corrected seven (7) records in Kihei
		Updated routingID for twelve (12) records in Haiku
		Corrected routingID for one (1) record in Hana
		Spatially corrected one (1) record in Makawao
		Corrected routingID for three (3) records in Lanai
	5/1/19 To 5/7/19	Delivered 5/8/2019
		Updated address for ten (10) records in Wailea
		Spatially corrected two hundred and seventy-one (271) records in Wailea
		Verified address for ninety-six (96) records in Kihei
		Added neighborhood info for three hundred and thirty-four (334) records in Kihei
		Spatially corrected one (1) record in Waikapu
		Added address for four (4) records in Kihei
		Spatiallly corrected for one (1) record in Kihei
		Spatially corrected, added neighborhood info for two (2) records in Kihei
		Spatially corrected three hundred and fourteen (314) records in Kihei
		Verified address for four (4) records in Wailea
		Spatially corrected, updated location name for one (1) record in Wailea
		Added neighborhood for one (1) record in Kihei
		Spatially corrected one (1) record in Maalaea
		Spatially corrected, udpated location name for one (1) record in Kihei
		Added neighborhood info for two hundred and ninety-three (293) records in Wailea
Airports		
Bridges		
Building Footprints	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Added address info for one hundred and twenty (120) records in Wailuku
		Verified address for one thousand, six hundred and eighteen (1618) records in
		Added address info for one hundred and sixty-eight (168) records in

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

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)		
Bus Stops		
Churches	5/8/19 To 5/21/19	Delivered 5/22/2019
		Spatially corrected two (2) records in Kahului
	5/1/19 To 5/7/19	Delivered 5/8/2019
		Spatially corrected one (1) record in Kihei
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	5/8/19 To 5/21/19	Delivered 5/22/2019
		Spatially corrected, updated address for one (1) record in Kaanapali
Gas Stations		
Gate Codes		
Government Buildings		
Harbors		
Helipads		
Hiking Trails		
Hospitals		
Hydrants		
Hyrdology Layers		
Incident Response Areas		
Lodging	5/1/19 To 5/7/19	Delivered 5/8/2019
		Spatially corrected five (5) records in Kihei
		Added two (2) records in Kihei

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

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)		
Major Roads		
Medic Beats		
Medic Districts		
Medic Response Areas		
Medic Stations		
Medical Facilities		
Milepost Markers		Delivered 5/22/2019
	5/8/19 To 5/21/19	Updated street name for one (1) record in Pukalani
MSAG Communities		
Net Junctions		
Ocean Rescue Boundaries		
Ocean Safety		
Parcels		
Parks	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Corrected name for one (1) record in Lahaina
Parks Polygon	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Corrected name for one (1) record in Lahaina
Points of Interest	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Spatially corrected one (1) record in Kaanapali
		Added POI for one (1) record in Hoolehua
		Added POI for one (1) record in Haiku
		Spatially corrected one (1) record in Lahaina
		Added POI for one (1) record in Kaunakakai
		Spatially corrected two (2) records in Wailea
	5/8/19 To 5/21/19	Delivered 5/22/2019
		Spatially corrected five (5) records in Kahului
		Added POI for one (1) record in Makawao
	5/1/19 To 5/7/19	Delivered 5/8/2019
		Updated name for one (1) record in Kihei
		Added POI for six (6) records in Kihei
		Verified address for eleven (11) records in Kihei
		Spatially corrected, updated name for one (1) record in Kihei

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

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)		
Points of Interest	5/1/19 To 5/7/19	Spatially corrected eight (8) records in Kihei
		Verified address for one (1) record in Hana
		Spatially corrected one (1) record in Wailea
		Spatially corrected, updated name for one (1) record in Wailea
Police Beats		
Police Districts		
Police Response Areas		
Police Stations		
Post Offices		
Rescue Tubes	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Added four (4) records in Wailea
	5/1/19 To 5/7/19	Delivered 5/8/2019
		Added twenty-one (21) records in Lahaina
Schools	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Added school for one (1) record in Kahului
Streams		Delivered 5/22/2019
		Updated name for one (1) record in Wailuku
Street Centerlines	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Added alias' for ten (10) records in Lahaina
	5/8/19 To 5/21/19	Delivered 5/22/2019
		Modified range for two (2) records in Hana
		Verified address for four (4) records in Kihei
		Corrected one way for one (1) record in Wailuku
		Verified address for one (1) record in Wailea
		Split segment, modified range for one (1) record in Wailuku
		Modified range for one (1) record in Kula
		Verified address for three (3) records in Kula
		Modified range for five (5) records in Haiku
		Modified range for two (2) records in Lahaina
		Verified address for ten (10) records in Kahului
		Spatially corrected seven (7) records in Wailuku
		Spatially corrected one (1) record in Wailea
		Spatially corrected one (1) record in Wailuku

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

MAPPING LAYERS UPDATED (PART VI)

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)		
Street Centerlines	5/1/19 To 5/7/19	Delivered 5/8/2019
		Spatially corrected, modified range for two (2) records in Kihei
		Modified range for two (2) records in Hana
		Added neighborhood info for one (1) record in Kihei
		Spatially corrected one (1) record in Kihei
Subdivisions	5/1/19 To 5/7/19	Delivered 5/8/2019
		Spatially corrected three (3) records in Kihei
		Spatially corrected two (2) records in Wailea
Tow Jurisdictions		
Tsunami Evacuation Zones		
Tsunami Heights		
Waste Water Plants		
WSP Cell Sectors	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Added seven (7) sectors per Verizon Wireless CRS
		Updated fifty-five (55) sectors per Verizon Wireless audit
		Added nine (9) sectors per AT&T CRS
		Added twenty-nine (29) sectors per Verizon Wireless audit
		Updated four (4) sectors per Verizon Wireless CRS
	5/8/19 To 5/21/19	Delivered 5/22/2019
		Added five (5) sectors per T-Mobile CRS
WSP Cell Towers	5/22/19 To 5/31/19	Next Delivery 6/5/2019
		Updated three (3) towers per Verizon Wireless CRS
		Updated twenty (20) towers per Verizon Wireless audit
		Added one (1) tower per Verizon Wireless audit
		Updated one (1) tower per AT&T CRS
	5/8/19 To 5/21/19	Delivered 5/22/2019
		Added three (3) towers per T-Mobile 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

May 1, 2019 - May 31, 2019

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
5/8/2019	Delivered updated data for MapFlex which included Address Points, Churches, Lodging, Points Of Interest, Street Centerlines, Subdivisions, WSP Cell Sectors and WSP Cell Towers
5/8/2019	Delivered .map, .str, .rte, and Maui Cell Coverage.csv which included updated Address Points, Common Places Lookup Table, Lodging, Points Of Interest, Rescue Tubes, Street Centerlines, Subdivisions and WSP Cell Towers for Intergraph
5/22/2019	Delivered .map, .str, .rte, and Maui Cell Coverage.csv which included updated Address Points, Common Places Lookup Table, Parks Polygon, Points Of Interest, Rescue Tubes, Streams, Street Centerlines, and WSP Cell Towers for
5/22/2019	Delivered updated data for MapFlex which included Address Points, Churches, Food & Beverage, Parks, Parks Polygon, Points Of Interest, Schools, Streams, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
5/29/2019	Updated Maui GIS data process and Intergraph documentation

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

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 May 8th, 2019 which included:
 - a. Address Points, Common Places Lookup Table, Lodging, Points Of Interest, Rescue Tubes, Street Centerlines, Subdivisions, and WSP Cell Towers for Intergraph
 - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
2. Akimeka attended a Hexagon CAD Mapping Workshop at the Maui Police Station from May 13-17.
3. On May 22nd, 2019– Akimeka delivered an updated Intergraph CAD map which included:
 - a. Address Points, Common Places Lookup Table, Parks, Points Of Interest, Rescue Tubes, Streams, Street Centerlines, and WSP Cell Towers
 - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
 - c. Removed duplicate Stream and Street Centerline labels. Also added Street Centerline labels and Highway Shields.
4. Akimeka is still waiting for the 2016 version upgraded software from Hexagon.

During June 2019, 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.

MAPFLEX SYSTEM

Akimeka delivered GIS data to the MapFlex system on the following dates in May 2019

Hawaii County – May 7th, 2019 and May 21st 2019

Maui County – May 8th, 2019 and May 22nd, 2019

Kauai County – May 9th, 2019, and May 23rd, 2019

Honolulu – May 10th, 2019, and May 24th, 2019

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

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 West, 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 West. West 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 West 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 West FMCC.	Partially Resolved – the Lat/Longs are no longer being plotted in MapFlex due to a software release.
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.	West 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

Maui County E9-1-1 Status Report

May 1, 2019 - May 31, 2019

6/27/2018	Moving Labels	It was brought up during the PSAP teleconference with Hawaiian Tel and West 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

May 1, 2019 - May 31, 2019

4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - MAY 2019

MAUI COUNTY						
#	Date	Ticket #	Description	PSAP	Urgency	Comments
			None			

NOTE:

There are no (0) Open Service Request for the Maui County PSAPs for May, 2019.

MAUI PSAP SERVICE REQUESTS YEAR-TO-DATE (YTD) SUMMARY – 2019

MAUI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2019	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2018 Carryover*			1						
January	5	5	1	5	5	0	0	0	0
February	4	3	2	4	3	0	0	0	0
March	1	3	1	1	3	0	0	0	0
April	1	1	0	1	1	0	0	0	0
May	0	0	0	0	0	0	0	0	0
June									
July									
August									
September									
October									
November									
December									
TOTAL	11	12	0	11	12	0	0	0	0

Note:

*The 2018 Carry Over row indicates the number of Service Requests that were opened in 2018; however, were brought forward into 2019 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 West Safety Services 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

May 1, 2019 - May 31, 2019

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)

Next Scheduled Database Synchronization – June 2019

AUDIT SUMMARY RESULTS – 2018 – 2019 -- TBA

MSAG AUDIT SUMMARY RESULTS – JUNE 1, 2019 VS MARCH 1, 2019 -- TBA

INVALID MSAG STREETS AND ADDRESS RANGES – ESN X99 RECORDS -- TBA

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA