

Kauai County E9-1-1 Status Report

October 1, 2017 – October 31, 2017



AKIMEKA | HIGH PRIORITY. HIGH IMPACT.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

TABLE OF CONTENTS

1. PSAP Operations	4
9-1-1 Call Volume – October 2017.....	4
9-1-1 Call Volume – Calendar Year 2017	4
PSAP Operation Notes:.....	4
For Your Information.....	5
Text to 911 – Current Month – October 2017.....	5
Note:	5
Wireless PSAP Testing – October 2017	6
Notes:	6
2. MSAG (Master Street Address Guide)	7
MSAG Transactions Current Month/Year – October 2017	7
MSAG Current Month Notes:	8
Telephone Record (ALI) Transactions Current Month Notes:.....	8
Open Telephone Record (ALI) Discrepancy Status:.....	8
Narrative:	8
TNCR (Telephone Number Change Request) Current Status – October, 2017.....	9
Note:	9
Dispatchable Location – Status As Of – October 2017 - Pending	10
Narrative:	10
Spectrum (Charter) 9-1-1 VoIP Database Verification Project - OCTOBER 2017.....	11
3. Geographic Information System (GIS) – October 2017	12
Mapping Layers Updated (Part I)	12
Mapping Layers Updated (Part II)	13
Mapping Layers Updated (Part III).....	14

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

Mapping Layers Updated (Part IV).....	15
Note:	15
Geographic Information System (GIS) Narratives	16
GIS Key Activities/Updates.....	16
MapFlex System	16
MapFlex Issues	17
DATE.....	17
ISSUE.....	17
DESCRIPTION	17
STATUS.....	17
Spillman Project.....	18
Lihue Airport boundaries	18
Open Service Requests – October 2017.....	19
Note:	19
Service Request Year-to-Date (YTD) Summary – 2017.....	19
5. E9-1-1 Database Synchronization.....	20
Audit Summary Results – 2017	21
Notes:	21
Audit Summary Results – October 1, 2017 MSAG vs. July 1, 2017 MSAG.....	22
Invalid MSAG Streets and Address Ranges – ESN X99 Records	23
Automatic Location Identification (ALI) Database Discrepancies	24

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

1. PSAP OPERATIONS

9-1-1 CALL VOLUME – OCTOBER 2017

(Source:) West Safety Services Viper system

9-1-1 Call Volume																	
KAUAI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other	% of Total Calls
Oct	4,156	642	15.45%	2,697	64.89%	40.38%	59.62%	167	4.02%	17	0.41%	0	0.00%	633	15.23%	0	0.00%

9-1-1 CALL VOLUME – CALENDAR YEAR 2017

9-1-1 Call Volume																	
KAUAI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other	% of Total Calls
JAN	4,006	627	15.65%	2,658	66.35%	38.11%	61.89%	175	4.37%	14	0.35%	0	0.00%	532	13.28%	0	0.00%
FEB	3,739	564	15.08%	2,403	64.27%	42.16%	57.84%	178	4.76%	12	0.32%	0	0.00%	582	15.57%	0	0.00%
MAR	4,035	701	17.37%	2,527	62.63%	39.41%	60.59%	179	4.44%	8	0.20%	0	0.00%	620	15.37%	0	0.00%
APR	3,721	645	17.33%	2,367	63.61%	36.38%	63.62%	154	4.14%	13	0.35%	0	0.00%	542	14.57%	0	0.00%
MAY	4,221	668	15.83%	2,849	67.50%	39.03%	60.97%	133	3.15%	6	0.14%	0	0.00%	565	13.39%	0	0.00%
JUNE	4,388	797	18.16%	2,893	65.93%	38.23%	61.77%	108	2.46%	2	0.05%	0	0.00%	588	13.40%	0	0.00%
JULY	4,416	744	16.85%	2,953	66.87%	38.47%	61.53%	161	3.65%	6	0.14%	0	0.00%	552	12.50%	0	0.00%
AUG	4,361	774	17.75%	2,794	64.07%	38.58%	61.42%	181	4.15%	7	0.16%	0	0.00%	605	13.87%	0	0.00%
SEPT	4,051	628	15.50%	2,717	67.07%	39.09%	60.91%	168	4.15%	12	0.30%	0	0.00%	526	12.98%	0	0.00%
OCT	4,156	642	15.45%	2,697	64.89%	40.38%	59.62%	167	4.02%	17	0.41%	0	0.00%	633	15.23%	0	0.00%
NOV																	
DEC																	
YTD	41,094	6,790		26,858				1604		97		0		5,745		0	
MON AVG	4,109	679	16.50%	2,686	65.32%	38.98%	61.02%	160	3.93%	10	0.24%	0	0.00%	575	14.02%	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 total Wireline and Wireless counts respectively.
- All VoIP (Voice over Internet Protocol) type of 911 calls is combined in the Call Volume statistic.
- 911 Calls with No Ali for October 2017 = 0.41% - Statewide average for 2016 = 0.15%

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

FOR YOUR INFORMATION

FYI For Your Information				
PSAP Operations				
Statewide 911 Call Volumes for 2016 & 2015 compare				
PSAP	2016		2015	
Oahu Civilian	1,009,059	71.93%	1,019,402	70.94%
Hawaii County	205,412	14.64%	217,768	15.15%
Maui County	137,333	9.80%	142,952	9.95%
Kauai County	50,955	3.63%	56,874	3.96%
Total	1,402,759	100.00%	1,436,997	100.00%
*Statewide average does not include Military 911 calls.				

TEXT TO 911 – CURRENT MONTH – OCTOBER 2017

TEXT TO 911 Kauai County 2017	
Month	Total received
January	5
February	6
March	6
April	5
May	7
June	6
July	15
August	16
September	14
October	15
November	
December	
YTD	95
Monthly Avg.	9.5

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.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

WIRELESS PSAP TESTING – OCTOBER 2017

KAUAI COUNTY - OCTOBER 2017						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:

NOTES:

- There were no (0) scheduled Wireless 911 testing for the month of October, 2107, for the Kauai PSAP.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – OCTOBER 2017

KAUAI COUNTY	9-1-1 TRANSACTIONS								
	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Submitted		Open ALI Discrepancy Records			Customer Addresses Affected
		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	
2017									
JANUARY	174	170	3	0	1	32	0	0	7
FEBRUARY	181	166	2	13	0	21	0	0	24
MARCH	245	206	13	26	0	12	0	0	39
APRIL	200	92	2	106	0	9	0	0	109
MAY	141	140	1	0	0	5	0	0	144
JUNE	135	127	5	2	1	1	0	0	134
JULY	104	98	4	1	1	0	0	0	100
AUGUST	195	195	0	0	0	0	0	0	202
SEPTEMBER	187	186	1	0	0	0	0	0	208
OCTOBER	274	272	1	0	1	2	0	0	270
NOVEMBER									
DECEMBER									
TOTAL YTD	1,836	1,652	32	148	4				1,237
AVG PER MONTH	184	165	3	15	0				124

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 299 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.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

MSAG CURRENT MONTH NOTES:

A total of **272** Dispatchable Location transactions during the current month. As of the current month, Akimeka has submitted **1,221** Dispatchable Location transactions for Kauai County.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

Akimeka processed **272** TN CRs related to the Dispatchable Location Project during the current month.

One (1) ALI DR was submitted as the result of a 9-1-1 call from a government office in Lihue. Kauai Police submitted this request to Akimeka to update the customer information and the discrepancy was corrected via 9-1-1 Net.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently two (2) Open TN CRs.**
- **There are currently no Open ALI-DRs.**
- **There are currently no Open VoIP DRs.**
- There are currently two (2) Open TN CRs. Both open TN CRs are Dispatchable Location transactions awaiting location information from Hawaiian Telcom and/or the customer in order to update.

NARRATIVE:

Akimeka has continued to research and prepare "Driving Instructions" for other shopping malls that will assist the Kauai Dispatchers with their 911 calls for service. A total of **2,309** telephone records are complete and being submitted as allocated by West for the State of Hawaii.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – OCTOBER, 2017

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)				
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
KAUAI	2	0	0	2

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.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

DISPATCHABLE LOCATION – STATUS AS OF – OCTOBER 2017 - PENDING

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 **Kukui Grove Center at 302600 Kaunualii Hwy, Lihue**. The “Dispatchable Location” data is entered into the “Driving Directions” field in the 9-1-1 Net system, and will display on the Viper Power 911 ALI Screen in the “Exact” field should a 911 call be received from that telephone number.

As Akimeka awaits for the notice to proceed, Akimeka has continued to research and prepare “Driving Instructions” for other shopping malls that will assist the Kauai Dispatchers with their 911 calls for service. A total of **2,309** telephone records are complete and being submitted as allocated by West for the State of Hawaii. **270** transactions were submitted and processed in October 2017.

Dispatchable Location				
2017	Common Name Place	TNCR Transactions Prepared	TNCR Transactions Submitted	Transactions Processed
Quarter 4	MSAG Address			
Quarter 3 Carryover		2114	949	949
October	Alii Kai Resort, 3830 Edward Rd, Princeville	29	29	29
	Kamahana Condos, 3800 Kamehameha Rd, Princeville	15	15	15
	Nihi Kai Villas, 1870 Hoone Rd, Poipu	65	65	65
	Nihilani Resort, 4919 Pepelani Loop, Princeville	18	18	18
	Plantation at Princeville, 4771 Pepelani Loop, Princeville	16	16	16
	Princeville Center, 504280 Kuhio Hwy, Princeville	0	77	75
	Sea Lodge, 3700 Kamehame Rd, Princeville	45	45	45
	Westin Princeville Resort, 3838 Wyllie Rd, Princeville	7	7	7
November				
December				
Total		195	272	270
YTD Total		2309	1221	1219

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT - OCTOBER 2017

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	209	10.02%
OAHU Military	3,663	710 (19%)	2,953	1,277	43.24%
TOTAL	140,313	**133,889	6,424	2,872	70.7%

* 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.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – OCTOBER 2017

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.

KAUAI COUNTY				
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks	
	Date Created/ Edits Performed			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Address Points		10/26/17		
	10/26/2017		Spatially corrected five (5) address points in Poipu	
	10/25/2017		Updated Location Name of one (1) address point in Eleele	
	10/25/2017		Added two (2) addresses in Kalaheo	
	10/25/2017		Added Location Name to one (1) address in Kalaheo	
	10/25/2017		Added Location Name for two (2) addresses in Kapaa	
	10/25/2017		Spatially corrected one (1) address point in Kapaa	
	10/25/2017		Added four (4) addresses in Lihue	
	10/25/2017		Updated Location Name of one (1) address in Nawiliwili	
	10/25/2017		Added one (1) address in Nawiliwili	
	10/25/2017		Added one (1) address in Poipu	
	10/25/2017		Added one (1) address in Port Allen	
	10/25/2017		Added Location Name for one (1) address in Puhi	
	10/25/2017		Spatially corrected five (5) address points in Wailua	
			10/12/17	
	10/12/2017			Added one (1) address in Hanalei
	10/12/2017			Added Location Name for one (1) address in Kalaheo
	10/12/2017			Added one (1) address in Kapaa
	10/12/2017			Added one (1) address in Kokee
	10/12/2017			Updated Location Name for two (2) addresses in Lihue
	10/12/2017			Updated Location Name for three (3) addresses in Poipu
	10/12/2017			Added three (3) addresses in Poipu
	10/12/2017			Updated Location Name for two (2) addresses in Wailua
10/12/2017			Spatially corrected one (1) address point in Wailua	
10/12/2017			Updated Location Name of one (1) address in Waipouli	
Airports				
Bridges				
Building Footprints				
Bus Stops				
Churches		10/12/17		
	10/12/2017		Added one (1) church in Waimea	
Coastal Names				

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

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.

KAUAI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers		10/26/17	
	10/26/2017		Spatially corrected seven (7) radio towers
	10/26/2017		Added address information to one (1) radio tower
	10/19/2017		Updated tower name for all thirteen (13) radio towers
	10/19/2017		Added address information for seven (7) radio towers
		10/12/17	
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			

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

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.

KAUAI COUNTY				
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks	
	Date Created/ Edits Performed			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Medic Stations				
Medical Facilities				
Milepost Markers				
MSAG Communities				
Net Junctions				
Ocean Rescue Boundaries				
Ocean Safety				
Parcels				
Parks				
Parks Polygon				
Points of Interest		10/26/17		
	10/25/2017		Updated one (1) POI name in Eleele	
	10/25/2017		Added one (1) POI in Kalaheo	
	10/25/2017		Spatially corrected one (1) POI in Kapaa	
	10/25/2017		Added two (2) POI in Kapaa	
	10/25/2017		Added one (1) POI in Nawiliwili	
	10/25/2017		Updated one (1) POI name in Nawiliwili	
	10/25/2017		Added one (1) POI in Poipu	
	10/25/2017		Added two (2) POI in Port Allen	
	10/25/2017		Added one (1) POI in Puhi	
	10/19/2017		Updated one (1) POI name in Kilauea	
			10/12/17	
	10/12/2017		Updated two (2) POI name in Lihue	
	10/12/2017		Updated one (1) POI name in Poipu	
10/12/2017		Updated one (1) POI name in Wailua		
10/12/2017		Updated one (1) POI name in Waimea		
Police Beats				
Police Districts				
Police Response Areas				
Police Stations				
Post Offices				
Schools				

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

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.

KAUAI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Street Centerlines		10/12/17	
	10/12/2017		Spatially corrected four (4) street centerline segments in Lawai
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors			
WSP Cell Towers			

NOTE:

- **The Parcels layer is provided by Kauai 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.**

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

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
10/26/2017	Delivered updated data for Spillman which included Address Points, Communications, and Street Centerlines
10/26/2017	Delivered updated data for MapFlex which included Address Points, Communications, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
10/12/2017	Delivered updated data for Spillman which included Address Points, Churches, and Street Centerlines
10/12/2017	Delivered updated data for MapFlex which included Address Points, Churches, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers

MAPFLEX SYSTEM

During the month of October 2017, the MapFlex system received updates manually as a result of MapFlex having several issues pertaining to the automated upload processes.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, West, was implemented across the State of Hawaii, in the below narrative there is some information pertaining to all of the Hawaiian Islands. For a record of historical information regarding the MapFlex system, please see MSRs during the 2015 and 2016 years.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in October 2017
 - a. **Hawaii County** – October 10th, 2017 and October 24th, 2017
 - b. **Maui County** – October 11th, 2017 and October 25th, 2017
 - c. **Kauai County** – October 12th, 2017 and October 26th, 2017
 - d. **Honolulu** – October 13th, 2017 and October 27th, 2017

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

MAPFLEX ISSUES

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

DATE	ISSUE	DESCRIPTION	STATUS
7/24/2016	Automatic Uploads Malfunctioning	It was identified that the Automatic uploads were creating issues within the MapFlex systems, where locators were not being published, etc. as a result of a scripting error at West. Manual uploads have been taking place of the GIS as necessary and agreed by all PSAPs.	Resolved, as of April 2017, West/HT has decided to implement a process to upload data the following week after GIS uploads (manually)
7/24/2016	Blank MapFlex Screen	The MapFlex screen went blank and there was no mapping capability, similar to what had occurred with Maui PD. Resulted from West's automatic update script. All of the PSAPs agreed to hold off on all GIS updates in MapFlex until West has resolved the issue.	Resolved (Nov 2016) There have been no reported blank screens
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
8/2016	Text-to-911 Icons	Icons for text calls have stopped displaying. Previously when calls came in as a text call, there would be an icon displaying "TEXT" where the call was plotted.	Resolved (Nov 2016)
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.	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
1/18/2017	RDC MapFlex	During a meeting between Akimeka and RDC, it was identified that HPD GIS data was contained within the RDC MapFlex and was missing RDC's data. Due to the proprietary nature of the GIS data provided by Akimeka for the civilian PSAP's mapping systems and the confidential information contained to support HPD operations, it was concerning. Actions were taken to request West to stop this and to pull RDC's archive data. West has since replied that they never knew RDC was military and functioned separately from the civilian PSAPs. HPD, RDC, and Akimeka have taken corrective actions to construct GIS data that will be used as a baseline for the RDC and to remove sensitive information supplied for the RDC MapFlex.	Resolved (August 2017)

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

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.	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.	West is currently researching their configurations (May - June 2017). Aside from the MapFlex, Akimeka is working with Spectrum (previously Time Warner) to correct their Lat/Longs on a mass scale Discussion has taken place on a temporary solution by suppressing XY in ALI. West had announced later October 2017 that engineering was working on an interim release that allows the PSAP to suppress Lat/Long at the MapFlex server.
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)

SPILLMAN PROJECT

The Kauai County Spillman project is considered consistent and has not had any major issues reported during October 2017.

LIHUE AIRPORT BOUNDARIES

During the month of April 2017, the Kauai Fire Department, AARF, and Akimeka held a conference to capture what requirements will be needed in order to modify the Fire Response Areas to include the airport response.

1. On April 27, 2017, Akimeka web-hosted the meeting so that the boundaries around the Lihue Airport could be roughly detailed, using verbal input from the AARF representatives.
 - a. The overall boundaries were defined during the call. Akimeka cleaned up the boundaries at the shoreline and fence line subsequent to the meeting, but separate from the active Fire Response Area until all approvals have been made.
 - b. There has been no official request to include the new response area into the GIS data yet.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

OPEN SERVICE REQUESTS – OCTOBER 2017

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

NOTE:

There are no open service requests for October 2017.

SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY – 2017

KAUAI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2017	TOTAL		Open	WIRESLINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2016 Carryover*			0						
January	1	1	0	1	1	0	0	0	0
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0
June	1	1	0	1	1	0	0	0	0
July	1	1	0	0	0	0	0	1	1
August	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0
October	1	1	0	1	1	0	0	0	0
November									
December									
TOTAL	4	4	0	3	3	0	0	1	1

Note:

* The 2016 Carryover row indicates the number of Service Requests that were opened in 2016; however, were brought forward into 2017 in an effort to track the service request until completion.

	Category	Description
Definitions:	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) for correction

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

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 a database synchronization audit for Kauai County in October 2017.

The database synchronization effort included comparing Kauai County's 9-1-1 MSAG received from the 911 Database provider, West on October 1, 2017, against its 9-1-1 GIS Street Centerline data. A total number of **1,352** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on July 1, 2017 for Kauai 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 yield a 100 percent match rate. As such, NENA's recommended minimum match rate is 98%.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

AUDIT SUMMARY RESULTS – 2017

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of January 1 , 2017		As of April 1 , 2017		As of July 1 , 2017		As of October 1 , 2017	
		9-1-1 MSAG Dated 1-01-17		9-1-1 MSAG Dated 4-01-17		9-1-1 MSAG Dated 7-01-17		9-1-1 MSAG Dated 10-01-17	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		1,349		1,351		1,351		1,352	
Less: 9-1-1 MSAG Exception Records	(1)	84	6.2%	84	6.2%	84	6.2%	84	6.2%
Net 9-1-1 MSAG Records Eligible for Comparison		1,265		1,267		1,267		1,268	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		1,265	100.0%	1,264	99.8%	1,267	100.0%	1,268	100.0%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	0	0.0%	2	0.2%	0	0.0%	0	0.0%
9-1-1 MSAG Record With No GIS Record	(3)	0	0.0%	1	0.1%	0	0.0%	0	0.0%
Total 9-1-1 MSAG Records No Match		0	0.0%	3	0.2%	0	0.0%	0	0.0%

Objective: NENA Recommended Match Rate = 98%

The two-way (MSAG – GIS) database synchronization audit for the Kauai County was completed as scheduled. The match rate remained consistent from October 2017 with a 100% Match Rate to a 100% Match Rate as of July 2017.

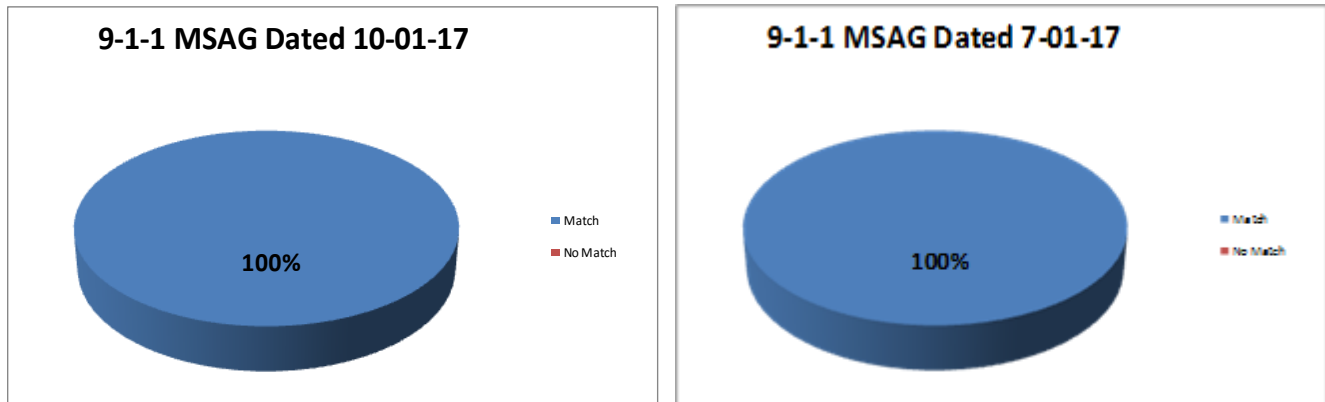
NOTES:

- 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.
- 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.).
- 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.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

AUDIT SUMMARY RESULTS – OCTOBER 1, 2017 MSAG VS. JULY 1, 2017 MSAG



Kauai County level of accuracy for 9-1-1 Match percentage remained consistent with a 100% as of October 1, 2017 compared to 100% as of July 1, 2017

- ❖ Akimeka continues to work with Kauai County GIS and Planning departments to validate streets and communities.
- ❖ In achieving and exceeding the NENA minimum match rate of 98% for data accuracy, Kauai County is ready for Next Generation 9-1-1 (NG9-1-1) from a database perspective.
- ❖ A constant effort to keep the databases synchronized and maintained are required to ensure the level of accuracy of the E9-1-1 databases each time an MSAG or GIS record is “last modified”.
- ❖ “MSAG record that doesn’t match the GIS” remained at **100%** (0 to 0) from July 2017 to October 2017 respectively.
- ❖ “MSAG record with no GIS record” remained at 100% (0 to 0) from July 2017 to October 2017. MSAG records with no matching record were due primarily to the verification of the MSAG records against multiple GIS databases to determine if the roads are existing within Kauai County.
- ❖ “MSAG Records Corrections Required” remained at 100% (0 to 0) from July 2017 to October 2017. MSAG records have been combined, split, and high/low ranges have been changed, to match the Street Centerlines.
- ❖ Accurate location and GIS information will ensure proper dispatching and response in a timely manner for all Public Safety agencies.
- ❖ All the hard work to maintain and synchronize the E9-1-1 databases is validated when a life and/or property is saved.
- ❖ Coordinating the clean-up of the ALI discrepancy records associated with an assigned ESN of 499 with the respective Service Providers is needed to ensure all records are MSAG valid.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

INVALID MSAG STREETS AND ADDRESS RANGES – ESN X99 RECORDS

At the request of the Kauai County Chief of Police, Hawaiian Telcom, Inc. (HTI) provided Kauai County and Akimeka, as the PSAP’s agent, with access and visibility to the ESN x99 MSAG records which are “known” invalid streets and address ranges. Akimeka will be investigating and reporting on these ESN x99 MSAG records as a separate project and add-on to the Database Synchronization quarterly report.

Results of the data provided are as follows:

KAUAI	Invalid MSAG Records							
	9-1-1 MSAG Dated 1-01-17		9-1-1 MSAG Dated 04-01-17		9-1-1 MSAG Dated 07-01-17		9-1-1 MSAG Dated 10-01-17	
	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records
ESN 499	18	1.4%	6	0.5%	1	0.1%	0	0.0%

These invalid MSAG records represent **0%** of the Total MSAG records for Kauai County as of the October 1, 2017 MSAG as compared to **0.1%** as of the July 1, 2017 MSAG. The individual ALI records associated with these records are provided below.

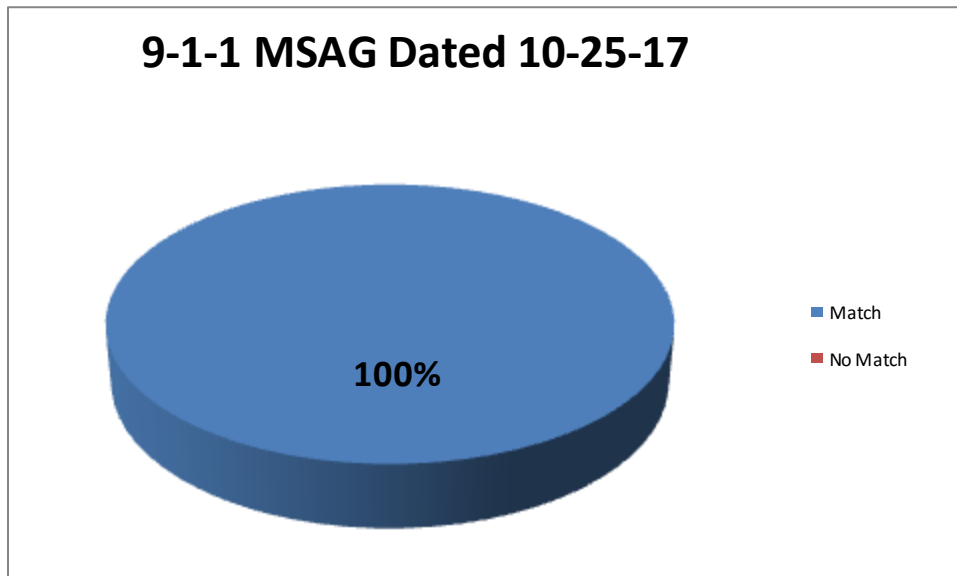
The decrease in the number of invalid MSAG records is a result of Akimeka’s research and validation of telephone numbers (TNs) assigned an invalid MSAG address. In order for a TN to be corrected, Akimeka submits the update to the Service Provider via West for approval.

Kauai County E9-1-1 Status Report

October 1, 2017 - October 31, 2017

AUTOMATIC LOCATION IDENTIFICATION (ALI) DATABASE DISCREPANCIES

As part of Akimeka’s ongoing database synchronization efforts, Akimeka reviewed and summarized the ALI discrepancies by community in 9-1-1Net for Kauai County. As of October 25, 2017, there are **zero (0)** ESN 499 ALI records. The number of ESN 499 ALI records remained at **100%** (0 to 0) from July 24, 2017 to October 25, 2017 respectively.



Although the ESN 499 is a “valid” MSAG utilized for overflow addressing, the voice portion of the 9-1-1 call will still be routed to the PSAP. However, the address information will present an invalid address/location to the dispatcher or a “No Record Found” condition which may affect the processing of the 9-1-1 response and/or cause confusion or delay during the dispatch of 9-1-1 resources to the caller’s location.

The goal, which requires the cooperation among all service providers, is to clean-up all ESN 499 MSAG records to a valid Kauai County ESN 400 – 448 to ensure that all ALI records assigned to the County of Kauai have an “MSAG valid address”.