

Kauai County E9-1-1 Status Report

July 1, 2017 – July 31, 2017



AKIMEKA | HIGH PRIORITY. HIGH IMPACT.

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

TABLE OF CONTENTS

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

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

Mapping Layers Updated (Part IV).....	14
Note:	15
Geographic Information System (GIS) Narratives	15
GIS Key Activities/Updates.....	16
MapFlex System	16
MapFlex Issues	16
DATE.....	17
ISSUE.....	17
DESCRIPTION	17
STATUS.....	17
Spillman Project.....	18
GeoComm GeoLynx System	18
Lihue Airport boundaries	18
Open Service Requests – July 2017	18
Note:	19
Service Request Year-to-Date (YTD) Summary – 2017.....	19
5. E9-1-1 Database Synchronization.....	19
Audit Summary Results – 2017	20
Notes:	21
Audit Summary Results – July 1, 2017 MSAG vs. April 1, 2017 MSAG -- TBA	21
Invalid MSAG Streets and Address Ranges – ESN X99 Records	22
Automatic Location Identification (ALI) Database Discrepancies	23

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

1. PSAP OPERATIONS

9-1-1 CALL VOLUME – JULY 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
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%

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																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	28,526	4,746		18,650				1088		61		0		3,981		0	
MON AVG	4,075	678	16.61%	2,664	65.31%	38.83%	61.17%	155	3.85%	9	0.22%	0	0.00%	569	14.01%	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 July 2017 = 0.14% - Statewide average for 2016 = 0.15%

Kauai County E9-1-1 Status Report

July 1, 2017 - July 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 – JULY 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	
September	
October	
November	
December	
YTD	50
Monthly Avg.	7.1

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

July 1, 2017 - July 31, 2017

WIRELESS PSAP TESTING – JULY 2017

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

NOTES:

- There were no scheduled Wireless 911 testing for the month of July, 2107, for the Kauai PSAP.

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – JULY 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									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	1,180	999	30	148	3				557
AVG PER MONTH	169	143	4	21	0				80

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

July 1, 2017 - July 31, 2017

MSAG CURRENT MONTH NOTES:

A total of **98** Dispatchable Location transactions and four (**4**) MSAG transactions were processed in 9-1-1 Net during the current month. Four (**4**) requests were processed relating to the MSAG database, which included deleting the last invalid ESN 499 record.

As of the current month, Akimeka has submitted **666** Dispatchable Location transactions for Kauai County.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

As a continuation of the ESN 499 clean-up effort, Akimeka completed one (**1**) ESN 499 ALI record, and as a result, the last ESN 499 street record was deleted from the MSAG database.

Akimeka processed **98** TN CRs related to the Dispatchable Location Project during the current month. One (**1**) VoIP DR was submitted as the result of a 9-1-1 call from a residence in Hanamaulu. Kauai Police submitted this request to Akimeka to update the customer information and the discrepancy was corrected by Spectrum.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently no Open TN CRs.**
- **There are currently no Open ALI-DRs.**
- **There are currently no Open VoIP DRs.**

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 **1,919** telephone records are complete and being submitted as allocated by West for the State of Hawaii. Ninety-eight (**98**) previously prepared transactions were submitted and processed during the current month.

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – JULY, 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	0	0	0	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 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

July 1, 2017 - July 31, 2017

DISPATCHABLE LOCATION – STATUS AS OF – JULY 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 **1,919** telephone records are complete and being submitted as allocated by West for the State of Hawaii. **98** previously prepared transactions were submitted and processed in July 2017.

Dispatchable Location				
2017	Common Name Place MSAG Address	TNCR Transactions Prepared	TNCR Transactions Submitted	Transactions Processed
Quarter 3				
Quarter 2 Carryover		1919	470	470
July	HALE LANI VILLAGE, 1970 HANALIMA ST, PUHI		23	23
	LAE NANI CONDOS, 410 PAPALOA RD, WAILUA		46	46
	LANIKAI CONDOS, 390 PAPALOA RD, WAILUA		17	17
	PRINCE KUHIO RESORT, 5061 LAWAI RD, KUKUIULA		12	12
August				
September				
Quarter 3 Total		0	98	98
Total		1919	666	666

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

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 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)	RECORDS VERIFIED BY AKIMEKA (B)	PERCENT COMPLETE (C)
HAWAII County	22,044	4,017	18.22%
KAUAI County	8,936	2,622	29.34%
MAUI County	18,256	5,312	29.10%
OAHU Civilian	87,414	0	0.00%
OAHU Military	3,663	0	0.00%
TOTAL	140,313	11951	

* Spectrum VoIP Database received on June 21st, 2017

(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 by Percentage.

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JULY 2017

MAPPING LAYERS UPDATED (PART I)

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

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	7/25/2017		Spatially corrected six (6) address points in Anahola	
	7/25/2017		Added three (3) addresses in Anahola	
	7/25/2017		Added one (1) address in Eleele	
	7/25/2017		Added one (1) address in Haena	
	7/25/2017		Spatially corrected three (3) address points in Hanalei	
	7/25/2017		Added seven (7) addresses in Hanalei	
	7/25/2017		Added Location Name to one (1) address in Hanamaulu	
	7/25/2017		Spatially corrected thirty-nine (39) address points in Hanamaulu	
	7/25/2017		Added two (2) addresses in Hanapepe	
	7/25/2017		Spatially corrected three (3) address points in Kalaheo	
	7/25/2017		Added nine (9) addresses in Kalaheo	
	7/25/2017		Added one (1) address in Kalihiwai	
	7/25/2017		Added one (1) address in Waipouli	
	7/25/2017		Spatially corrected one (1) address point in Wailua	
	7/25/2017		Updated Location Name for one (1) address in Wailua	
	7/25/2017		Spatially corrected three (3) address points in Nawiliwili	
	7/25/2017		Added Location Name for one (1) address in Nawiliwili	
	7/25/2017		Updated Location Name for two (2) addresses in Lihue	
	7/25/2017		Spatially corrected two (2) address points in Lihue	
	7/25/2017		Spatially corrected six (6) address points in Lawai	
	7/25/2017		Added one (1) address in Kokee	
	7/25/2017		Spatially corrected three (3) address points in Kapaia	
	7/25/2017		Added Location Name for one (1) address in Kapaa	
	7/25/2017		Spatially corrected fifty-five (55) address points in Kapaa	
	7/25/2017		Added fourteen (14) addresses in Kapaa	
			07/20/17	
	7/19/2017			Spatially corrected seventeen (17) address points in Anahola
	7/19/2017			Added three (3) addresses in Anahola
	7/19/2017			Added two (2) addresses in Eleele
	7/19/2017			Spatially corrected one (1) address point in Haena
7/19/2017			Added one (1) address in Haena	
7/19/2017			Added one (1) address in Kalaheo	

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 E9-1-1 Status Report

July 1, 2017 - July 31, 2017

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	7/11/2017		Added one (1) address in Anahola
	7/11/2017		Spatially corrected five (5) address points in Anahola
	7/11/2017		Spatially corrected eight (8) address points in Kapaa
	7/11/2017		Added one (1) address in Kokee
	7/11/2017		Changed one (1) address in Niumalu
	7/11/2017		Spatially corrected seven (7) address points in Wailua
	7/11/2017		Added one (1) address in Wailua
		07/06/17	
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN			
Fire Beats			
Fire Districts			
Fire Response Areas			
Fire Stations			
Food & Beverage			
Gas Stations			
Gate Codes			
Government Buildings			
Harbors			
Helipads			
Hiking Trails			

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 E9-1-1 Status Report

July 1, 2017 - July 31, 2017

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)			
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			
Parks Polygon			
Points of Interest	7/25/2017		Added two (2) POI in Hanalei
	7/25/2017		Spatially corrected one (1) POI in Hanalei
	7/25/2017		Added ten (10) POI in Kokee
	7/25/2017		Updated one (1) POI name in Lihue
	7/25/2017		Added one (1) POI in Nawiliwili
	7/25/2017		Spatially corrected one (1) POI in Wailua
	7/25/2017		Updated one (1) Location Name in Wailua
	7/25/2017		Updated one (1) POI name in Waipouli
		07/20/17	
	7/19/2017		Spatially corrected six (6) POI in Kalaheo
	07/06/17		
Police Beats			
Police Districts			
Police Response Areas			

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 E9-1-1 Status Report

July 1, 2017 - July 31, 2017

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)			
Police Stations			
Post Offices			
Schools			
Street Centerlines	7/25/2017	07/20/17	Spatially corrected five (5) street centerlines in Paia
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors	7/24/2017	07/20/17	Per Verizon CRS
WSP Cell Towers	7/24/2017	07/20/17	Per Verizon CRS

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

July 1, 2017 - July 31, 2017

GIS KEY ACTIVITIES/UPDATES

GIS Key activities include the events such as GIS deliverables, meetings, agreements, etc.

Date	Key Activities/Updates
7/20/2017	Delivered updated data for MapFlex which included Address Points, ESN, Fire Response Areas, Medic Response Areas, MSAG Communities, Police Response Areas, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
7/20/2017	Delivered updated data for Spillman which included Address Points, ESN, Fire Beats, Medic Beats, MSAG Communities, Police Beats, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
7/10/2017	Delivered updated data for MapFlex which included Address Points, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
7/6/2017	Prepared updated data for MapFlex which included Address Points, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
7/6/2017	Delivered updated data for Spillman which included Address Points and Street Centerlines

MAPFLEX SYSTEM

During the month of July 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 July 2017
 - a. **Hawaii County** – July 3rd, 2017 and July 18th, 2017
 - b. **Maui County** – July 5th, 2017 and July 19th, 2017
 - c. **Kauai County** – July 6th, 2017 and July 20th, 2017
 - d. **Honolulu** – July 7th, 2017 and July 21st, 2017

MAPFLEX ISSUES

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

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

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.	Pending, however 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.	Pending – Akimeka notified West that they had data ready on June 28, 2017. Akimeka was given notice that they could proceed on July 7 th . The updated GIS data was loaded into the RDC MapFlex on July 24 and 25.
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	A new SP 5.4 update by West is aimed to correct this issue.

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

		and plots on the surf break. The bigger issue is that this same issue will occur with complexes that have same primary address.	
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.	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
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 July 2017.

GEOCOMM GEOLYNX SYSTEM

On February 22, 2017, Akimeka officially received notice that the GIS deliverables for the GeoLynx system are no longer needed. With the system implementation of the Spillman Technologies CAD system, the GeoLynx system has been phased out and is no longer needed.

The GIS Deliverables will no longer be continued, however Akimeka has archived the deliverables and the necessary schemas to support this system should there need to be a continuation of those deliverable in the future.

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.

OPEN SERVICE REQUESTS – JULY 2017

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

NOTE:

There are no open service requests for July 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									
September									
October									
November									
December									
TOTAL	3	3	0	2	2	0	0	1	1

<u>Note:</u>	* 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

5. E9-1-1 DATABASE SYNCHRONIZATION

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

(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 July 2017.

The database synchronization effort included comparing Kauai County's 9-1-1 MSAG received from the 911 Database provider, West on July 1, 2017, against its 9-1-1 GIS Street Centerline data. A total number of **1,351** 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

July 1, 2017 - July 31, 2017

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of October 1 , 2016		As of January 1 , 2017		As of April 1 , 2017		As of July 1 , 2017	
		9-1-1 MSAG Dated 10-01-16		9-1-1 MSAG Dated 1-01-17		9-1-1 MSAG Dated 4-01-17		9-1-1 MSAG Dated 7-01-17	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		1,346		1,349		1,351		1,351	
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		1,262		1,265		1,267		1,267	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		1,262	100.0%	1,265	100.0%	1,264	99.8%	1,267	100.0%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	0	0.0%	0	0.0%	2	0.2%	0	0.0%
9-1-1 MSAG Record With No GIS Record	(3)	0	0.0%	0	0.0%	1	0.1%	0	0.0%
Total 9-1-1 MSAG Records No Match		0	0.0%	0	0.0%	3	0.2%	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 July 2017 with a 100% Match Rate to a 99.8% Match Rate as of April 2017.

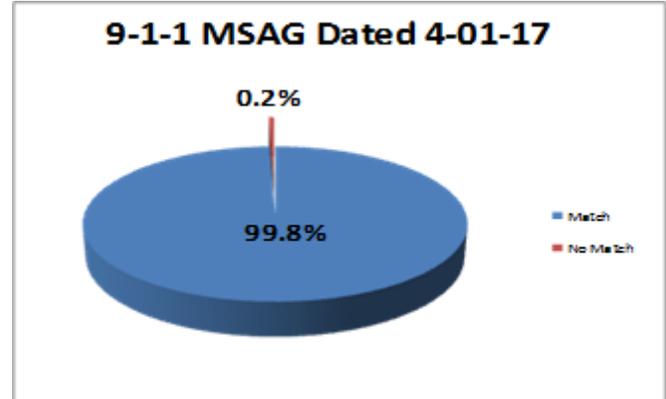
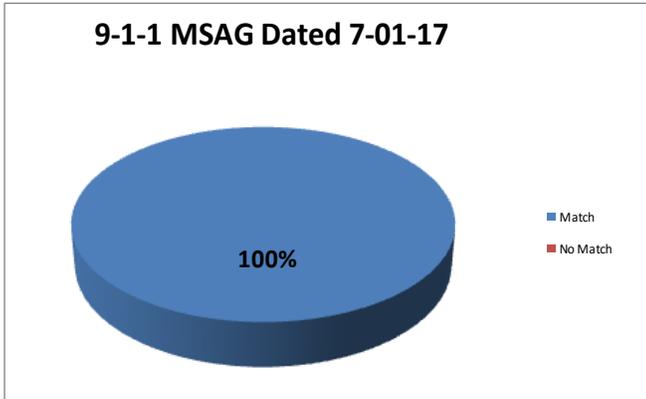
NOTES:

- 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.

AUDIT SUMMARY RESULTS – JULY 1, 2017 MSAG VS. APRIL 1, 2017 MSAG -- TBA

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017



Kauai County level of accuracy for 9-1-1 Match percentage remained consistent with a 100% as of July 1, 2017 compared to 99.8% as of April 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” decreased **100%** (3 to 0) from April 2017 to July 2017 respectively.
- ❖ “MSAG record with no GIS record” increased (1 to 0) from April 2017 to July 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” increased (2 to 0) from April 2017 to July 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.

INVALID MSAG STREETS AND ADDRESS RANGES – ESN X99 RECORDS

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

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	
	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%

These invalid MSAG records represent **0.1%** of the Total MSAG records for Kauai County as of the July 1, 2017 MSAG as compared to **0.5%** as of the April 1, 2017 MSAG. The individual ALI records associated with these records are provided below.

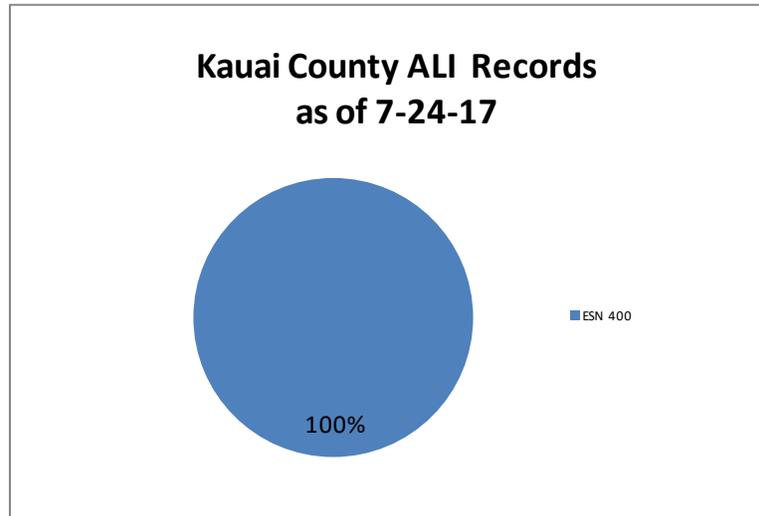
The decrease in the number of invalid MSAG records is a result of Akimeka’s research and validation of telephone numbers (TNs) assigned an invalid MSAG address. In order for a TN to be corrected, Akimeka submits the update to the Service Provider via West for approval.

AUTOMATIC LOCATION IDENTIFICATION (ALI) DATABASE DISCREPANCIES

Kauai County E9-1-1 Status Report

July 1, 2017 - July 31, 2017

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 July 24, 2017, there are **zero (0)** ESN 499 ALI records. The number of ESN 499 ALI records was reduced by **100%** (7 to 0) from April 27, 2017 to July 24, 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".