

Kauai County E9-1-1 Status Report

October 1, 2018 – October 31, 2018



AKIMEKA | HIGH PRIORITY. HIGH IMPACT.

Kauai County E9-1-1 Status Report

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1. PSAP OPERATIONS

9-1-1 CALL VOLUME – OCTOBER 2018

(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	
2018	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	4,514	501	11.10%	3,149	69.76%	43.63%	56.37%	138	3.06%	3	0.07%	0	0.00%	723	16.02%	0	0.00%

9-1-1 CALL VOLUME – CALENDAR YEAR 2018

9-1-1 Call Volume																	
KAUAI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2018	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	4,613	664	14.39%	3,054	66.20%	46.43%	53.57%	157	3.40%	5	0.11%	0	0.00%	733	15.89%	0	0.00%
FEB	1,757	242	13.77%	1,211	68.92%	43.27%	56.73%	54	3.07%	0	0.00%	0	0.00%	250	14.23%	0	0.00%
MAR	4,632	682	14.72%	3,094	66.80%	46.57%	53.43%	146	3.15%	14	0.30%	0	0.00%	696	15.03%	0	0.00%
APR	4,519	600	13.28%	3,086	68.29%	43.03%	56.97%	173	3.83%	5	0.11%	0	0.00%	655	14.49%	0	0.00%
MAY	4,406	560	12.71%	3,010	68.32%	43.16%	56.84%	144	3.27%	8	0.18%	0	0.00%	684	15.52%	0	0.00%
JUNE	4,512	559	12.39%	3,107	68.86%	44.90%	55.10%	169	3.75%	8	0.18%	0	0.00%	669	14.83%	0	0.00%
JULY	4,922	620	12.60%	3,347	68.00%	48.73%	51.27%	173	3.51%	6	0.12%	0	0.00%	776	15.77%	0	0.00%
AUG	4,622	553	11.96%	3,196	69.15%	45.99%	54.01%	170	3.68%	7	0.15%	0	0.00%	696	15.06%	0	0.00%
SEPT	4,458	497	11.15%	3,130	70.21%	50.29%	49.71%	150	3.36%	5	0.11%	0	0.00%	676	15.16%	0	0.00%
OCT	4,514	501	11.10%	3,149	69.76%	43.63%	56.37%	138	3.06%	3	0.07%	0	0.00%	723	16.02%	0	0.00%
NOV																	
DEC																	
YTD	42,955	5,478		29,384				1474		61		0		6,558		0	
MON AVG	4,296	548	12.81%	2,938	68.45%	45.60%	54.40%	147	3.41%	6	0.13%	0	0.00%	656	15.20%	0	0.00%

PSAP OPERATION NOTES:

- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Dropped Calls are hang ups after transfers.
- Abandoned Calls are included in the 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 2018 = 0.07% - Statewide average for 2017 = 0.08%

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FOR YOUR INFORMATION

FYI For Your Information						
PSAP Operations						
Statewide 911 Call Volumes						
PSAP	2017		2016		2015	
Oahu Civilian	1,022,818	72.16%	1,009,059	71.93%	1,019,402	70.94%
RDC Pearl Harbor	27,916	1.97%	N/A	N/A	N/A	N/A
Hawaii County	193,166	13.63%	205,412	14.64%	217,768	15.15%
Maui County	123,685	8.73%	137,333	9.80%	142,952	9.95%
Kauai County	49,902	3.52%	50,955	3.63%	56,874	3.96%
Total	1,417,487	100.00%	1,402,759	100.00%	1,436,997	100.00%
2016 & 2015 Statewide average does not include Military 911 calls.						

TEXT TO 911 – CURRENT MONTH – OCTOBER 2018

TEXT TO 911 Kauai County 2018	
Month	Total received
January	3
February	0
March	1
April	12
May	7
June	10
July	7
August	8
September	10
October	8
November	
December	
YTD	66
Monthly Avg.	6.6

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.

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WIRELESS PSAP TESTING – OCTOBER 2018

KAUAI COUNTY - OCTOBER 2018						
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 2018.
- Verizon Wireless is currently migrating their Wireless network database from West to ComTech.

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – OCTOBER 2018

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	
2018									
JANUARY	353	347	6	0	0	22	0	0	355
FEBRUARY	168	166	1	0	1	6	0	0	202
MARCH	270	261	9	0	0	77	0	0	285
APRIL	124	118	6	0	0	65	0	0	105
MAY	115	107	8	0	0	102	0	0	100
JUNE	107	101	6	0	0	170	0	0	57
JULY	107	95	12	0	0	163	0	0	153
AUGUST	128	127	1	0	0	203	0	0	97
SEPTEMBER	156	155	1	0	0	308	0	0	74
OCTOBER	192	191	1	0	0	461	0	0	103
NOVEMBER									
DECEMBER									
TOTAL YTD	1,720	1,668	51	0	1				1,531
AVG PER MONTH	172	167	5	0	0				153

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 499 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.

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MSAG CURRENT MONTH NOTES:

A total of **192** MSAG transactions were processed in 9-1-1 Net during the current month. One (**1**) request was processed relating to the MSAG database. Changes include: changes to high – low street ranges, combining street records, deletion of invalid records, splitting street records to align with Police, Fire, EMS, and inserting new MSAG records. As of the current month, Akimeka has submitted **3,247** Dispatchable Location transactions for Kauai County.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

Akimeka processed **191** TN CRs related to the Dispatchable Location Project during the current month. In July, Akimeka began processing Dispatchable Location for commercial and business sites, starting in Lihue, working clockwise around the island and continued working in Lihue throughout the month of September. This progress will be updated in the Dispatchable Location chart each month.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently 461 Open TN CRs.**

461 Open TN CR transactions are a result of the Dispatchable Location project. 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 currently no Open ALI-DRs.**
- **There are currently no Open VoIP DRs.**

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TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – OCTOBER, 2018

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	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES	TOTAL UNOPENED TNCR RECORDS
KAUAI	461	1	1	459

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.

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DISPATCHABLE LOCATION – STATUS AS OF – OCTOBER 2018

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.

191 transactions were submitted and 0 transactions were processed by West in October 2018.

Dispatchable Location			
2018	Common Name Place MSAG Address	TNCR Transactions Submitted	Transactions Processed
Quarter 4			
Quarter 3 Carryover		3056	2786
October	Multiple Business, Aukele St, Lihue	138	0
	Multiple Business, Peleke St, Lihue	53	0
November			
December			
Quarter 4 Total		191	0
Total		3247	2786

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SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT - OCTOBER 2018

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	1,950	93.53%
OAHU Military	3,663	710 (19%)	2,953	2,940	99.56%
TOTAL	140,313	**133,889	6,424	6,276	98.62%

* 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.

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BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT – OCTOBER 2018

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.

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3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – OCTOBER 2018

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	10/30/2018		Added Routing ID for four hundred sixty-four (464) addresses
	10/29/2018		Added Routing ID for five hundred seventy-two (572) addresses
	10/26/2018		Added Routing ID for two hundred fifty (250) addresses
		10/25/18	
	10/25/2018		Added Routing ID for two hundred eighty-eight (288) addresses
	10/15/2018		Spatially corrected ten (10) address points in Lawai
	10/15/2018		Spatially corrected four (4) address points in Omao
	10/15/2018		Added two (2) addresses in Puhī
	10/15/2018		Updated two (2) addresses in Puhī
	10/15/2018		Spatially corrected thirty-eight (38) address points in Puhī
		10/11/18	
	10/11/2018		Added Location Name for one (1) address in Omao
	10/10/2018		Added Location Name for two (2) addresses in Hanapepe
	10/10/2018		Corrected Location Name for one (1) address in Kapaa
	10/10/2018		Added one (1) address in Kaumakani
	10/10/2018		Spatially corrected one (1) address point in Kaumakani
	10/10/2018		Updated Location Name of one (1) address in Koloa
	10/10/2018		Added Location Name for one (1) address in Lihue
	10/10/2018		Spatially corrected two (2) address points in Lihue
	10/10/2018		Updated one (1) address in Port Allen
	10/10/2018		Updated Location Name for one (1) address in Wailua
	10/10/2018		Updated Location Name for one (1) address in Waipouli
	10/10/2018		Spatially corrected one (1) address point in Waipouli
	10/5/2018		Added two (2) addresses in Kalaheo
	10/5/2018		Spatially corrected twenty-seven (27) address points in Kalaheo
	10/5/2018		Added four (4) addresses in Lawai
	10/5/2018		Spatially corrected one hundred one (101) address points in Lawai
	10/5/2018		Added one (1) address in Omao
	10/5/2018		Spatially corrected one hundred two (102) address points in Omao
	10/1/2018		Spatially corrected forty-eight (48) address points in Lawai
10/1/2018		Spatially corrected one hundred (100) address points in Omao	

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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)			
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches		10/11/18	
	10/1/2018		Added two (2) churches in Hanalei
	10/1/2018		Added two (2) churches in Hanapepe
	10/1/2018		Added two (2) churches in Waimea
	10/1/2018		Added three (3) churches in Kapaa
	10/1/2018		Added three (3) churches in Wailua
	10/1/2018		Added one (1) church in Kalaheo
	10/1/2018		Added one (1) church in Kapaia
	10/1/2018		Added one (1) church in Kokee
10/1/2018		Added one (1) church in Lihue	
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN		10/25/18	
	10/15/2018		Modified ESN 424, 426, 433, 434 to match spatially corrected street centerlines
Fire Beats			
Fire Districts			
Fire Response Areas			
Fire Stations			
Food & Beverage			
Gas Stations			

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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)			
Gate Codes			
Government Buildings			
Harbors			
Helipads			
Hiking Trails			
Hospitals			
Hydrants			
Hyrdology Layers			
Incident Response Areas			
		10/11/18	
Lodging	10/11/2018		Updated one (1) hotel name in Waipouli
	10/10/2018		Updated one (1) hotel name in Wailua
Major Roads			
Medic Beats			
Medic Districts			
Medic Response Areas			
Medic Stations			
Medical Facilities			
Milepost Markers			
		10/25/18	
MSAG Communities	10/15/2018		Modified boundary of Puhi, Omao, Lawai, Koloa to match spatially corrected street centerlines
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
		10/25/18	
Parcels	10/15/2018		Updated Parcel layer using data from the County of Kauai.
Parks	10/25/2018	10/25/18	Added one (1) park in Waimea
	10/29/2018		Added address info for one (1) park in Koloa
Parks Polygon		10/25/18	
	10/25/2018		Added one (1) park in Waimea

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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)			
Points of Interest		10/25/18	
	10/25/2018		Updated one (1) POI address in Waimea
		10/11/18	
	10/11/2018		Added one (1) POI in Omao
	10/10/2018		Added two (2) POI in Hanapepe
	10/10/2018		Added one (1) POI in Kaumakani
	10/10/2018		Updated one (1) POI name in Koloa
	10/10/2018		Added one (1) POI in Lihue
	10/10/2018		Updated one (1) POI address in Port Allen
	10/10/2018		Updated one (1) POI name in Wailua
			Updated one (1) POI name in Waipouli
Police Beats			
Police Districts			
Police Response Areas		10/25/18	
	10/15/2018		Modified RA 9 & 10 to match spatially corrected street centerlines
Police Stations			
Post Offices			
Schools			
Street Centerlines	10/26/2018		Modified two (2) street centerline segment ranges in Hanalei
	10/26/2018		Modified two (2) street centerline segment ranges in Kalaheo
	10/26/2018		Modified two (2) street centerline segment ranges in Kapaa
		10/25/18	
	10/25/2018		Modified four (4) street centerline ranges in Kapaa
	10/25/2018		Spatially corrected one (1) street centerline segment in Kapaa
	10/15/2018		Partial spatial correction of one (1) street centerline segment in Koloa
	10/15/2018		Partial spatial correction of one (1) street centerline segment in Lawai
	10/15/2018		Spatially corrected fifteen (15) street centerline segments in Omao
	10/15/2018		Partial spatial correction of one (1) street centerline segment in Omao
	10/15/2018		Spatially corrected eight (8) street centerline segments in Puhi
	10/15/2018		Partial spatial correction of five (5) street centerline segments in Koloa
10/15/2018		Updated speed limit for one (1) street centerline segment in Puhi	

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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.

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		10/11/18	
	10/10/2018		Spatially corrected two (2) street centerline segments in Lihue
	10/1/2018		Extended range of one (1) street centerline segment in Lawai
	10/1/2018		Spatially corrected one (1) street centerline segment in Kalaheo
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors		10/11/18	
	10/3/2018		Per ATT CRS
WSP Cell Towers		10/11/18	
	10/3/2018		Per ATT 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.

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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
10/11/2018	Delivered updated data for Spillman which included Address Points, Common Names, Lodging, and Street Centerlines
10/11/2018	Delivered updated data for MapFlex which included Address Points, Churches, Lodging, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
10/25/2018	Delivered updated data for MapFlex which included Address Points, ESN, MSAG Communities, Parcels, Parks, Parks Polygon, Points Of Interest, Police Response Areas, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
10/25/2018	Delivered updated data for Spillman which included Address Points, Common Names, MSAG Communities, Parks and Street Centerlines

SPILLMAN PROJECT

The Kauai County Spillman project is considered consistent and has not had any major issues reported during October 2018.

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MAPFLEX SYSTEM

During the month of October 2018, 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 through 2017 years.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in October 2018
 - a. **Hawaii County** – October 9th, 2018 and October 17th, 2018
 - b. **Maui County** – October 10th, 2018 and October 24th, 2018
 - c. **Kauai County** – October 11th, 2018, and October 25th, 2018
 - d. **Honolulu** – October 12th, 2018, and October 26th, 2018

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.

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5/17/2017	VoIP Calls Plotting Incorrectly	<p>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.</p> <p>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.</p>	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
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

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OPEN SERVICE REQUESTS – OCTOBER 2018

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

NOTE:

There are no open service requests for October 2018.

SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY – 2018

KAUAI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2018	TOTAL		Open	WIRESLINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2017 Carryover*			0						
January	0	0	0	0	0	0	0	0	0
February	1	1	0	0	0	0	0	1	1
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	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0
November									
December									
TOTAL	1	1	0	0	0	0	0	1	1

Note:

* The 2017 Carryover row indicates the number of Service Requests that were opened in 2017; however, were brought forward into 2018 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 Spectrum - Time Warner Cable (TWCBL) for correction.

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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 2018.

The database synchronization effort included comparing Kauai County's 9-1-1 MSAG received from the 911 Database provider, West on October 1, 2018, against its 9-1-1 GIS Street Centerline data. A total number of **1,357** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on October 1, 2018 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 remain at a 100 percent match rate. It can be expected that the percentage will fluctuate by a small degree. As such, NENA's recommended minimum match rate is 98%.

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AUDIT SUMMARY RESULTS – 2018

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of January 1 , 2018		As of April 1 , 2018		As of July 1 , 2018		As of October 1 , 2018	
		9-1-1 MSAG Dated 1-01-18		9-1-1 MSAG Dated 4-01-18		9-1-1 MSAG Dated 7-01-18		9-1-1 MSAG Dated 10-01-18	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		1,352		1,353		1,355		1,357	
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		1,268		1,269		1,271		1,273	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		1,268	100.0%	1,266	99.8%	1,262	99.3%	1,273	100.0%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	7	0.6%	3	0.2%	8	0.6%	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		7	0.6%	3	0.2%	9	0.7%	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 improved from October 2018 with a 100% Match Rate to a 99.8% Match Rate as of July 2018.

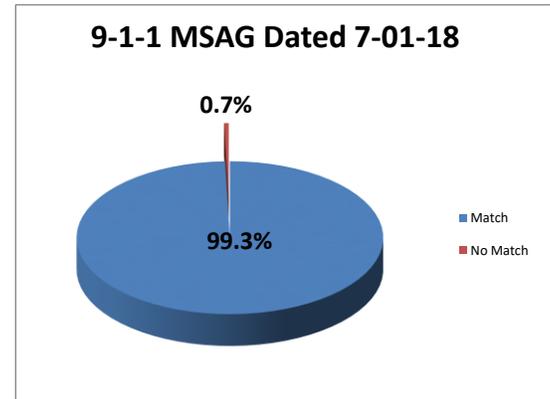
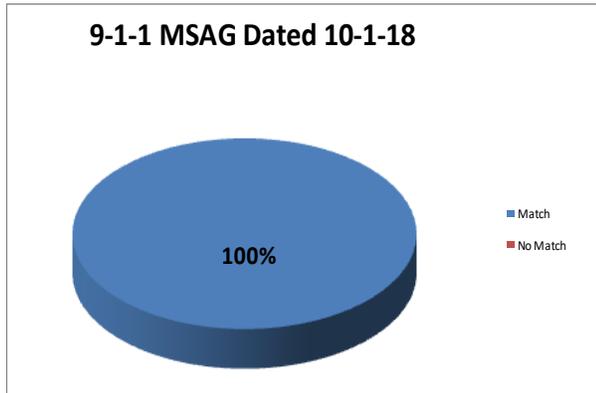
NOTES:

- 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.

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AUDIT SUMMARY RESULTS – OCTOBER 1, 2018 MSAG VS. JULY 1, 2018 MSAG



Kauai County level of accuracy for 9-1-1 Match percentage improved with a 100% as of October 1, 2018 compared to 99.8% as of July 1, 2018

- ❖ 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 (8 to 0) from July 2018 to October 2018. The non-match condition is also a result in which MSAG transactions were not completed prior to the running of the end of month report.
- ❖ “MSAG record with no GIS record” decreased (1 to 0) from July 2018 to October 2018. 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” decreased (7 to 0) from July 2018 to October 2018. 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.

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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 1-01-18		9-1-1 MSAG Dated 04-01-18		9-1-1 MSAG Dated 07-01-18		9-1-1 MSAG Dated 10-01-18	
	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	0	0.0%	0	0.0%	0	0.0%	0	0.0%

These invalid MSAG records represent **0%** of the Total MSAG records for Kauai County as of the October 1, 2018.

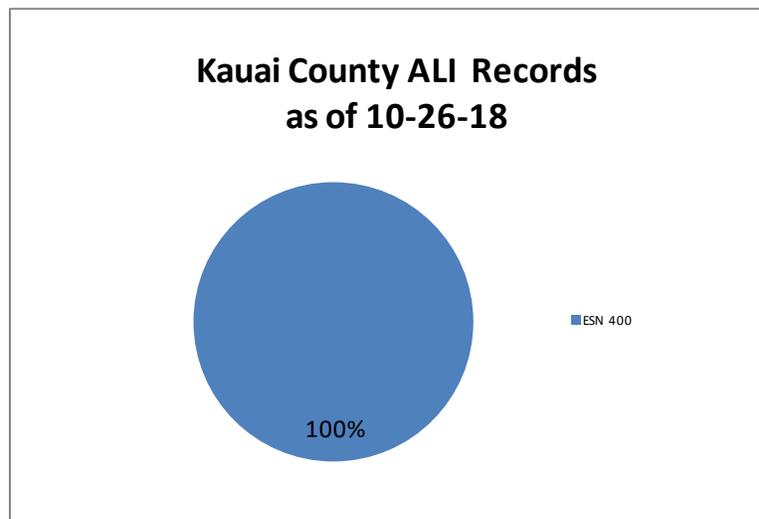
The cleanup of invalid MSAG records is a result of Akimeka’s research and validation of telephone numbers (TNs) assigned an invalid MSAG address. In order for a TN to be corrected, Akimeka submitted the update to the Service Provider via West for approval.

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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 26, 2018, there are **zero (0)** ESN 499 ALI records. The number of ESN 499 ALI records remained at **100%** (0 to 0) from **October 26, 2017 to July 25 2018**.



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".