

Kauai County E9-1-1 Status Report

January 1, 2020 – January 31, 2020



AKIMEKA

YOUR MISSION IS OUR MISSION

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

TABLE OF CONTENTS

1. PSAP Operations	4
9-1-1 Call Volume – January 2020	4
9-1-1 Call Volume – Calendar Year 2020	4
PSAP Operation Notes:.....	4
For Your Information.....	5
Text to 911 – Current Month – January 2020	6
Note:	6
Wireless PSAP Testing – January 2020.....	7
Notes:	7
2. MSAG (Master Street Address Guide)	8
MSAG Transactions Current Month/Year – January 2020.....	8
MSAG Current Month Notes:	9
Telephone Record (ALI) Transactions Current Month Notes:.....	9
Open Telephone Record (ALI) Discrepancy Status:.....	9
TNCR (Telephone Number Change Request) Current Status – January, 2020	10
Note:	10
Dispatchable Location – Status As Of – January 2020	11
Narrative:	11
Spectrum (Charter) 9-1-1 VoIP Database Verification Project - January 2020	12
Bandwidth 9-1-1 VoIP Database Verification Project – January 2020.....	13

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

3. Geographic Information System (GIS) – January 2020.....	14
Mapping Layers Updated (Part I)	14
Mapping Layers Updated (Part II)	15
Mapping Layers Updated (Part III).....	16
Mapping Layers Updated (Part IV).....	17
Note:	17
Geographic Information System (GIS) Narratives	18
GIS Key Activities/Updates.....	18
Spillman Project.....	18
MapFlex System	18
MapFlex Issues	19
DATE.....	19
ISSUE.....	19
DESCRIPTION	19
STATUS.....	19
Open Service Requests – January 2020	21
Note:	21
Service Request Year-to-Date (YTD) Summary – 2020.....	21
5. E9-1-1 Database Synchronization.....	22
Audit Summary Results – 2019-2020	23
Notes:	23
Audit Summary Results – January 1, 2020 MSAG vs. October 1, 2019 MSAG	24
Invalid MSAG Streets and Address Ranges – ESN X99 Records	25
Automatic Location Identification (ALI) Database Discrepancies	26

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

1. PSAP OPERATIONS

9-1-1 CALL VOLUME – JANUARY 2020

(Source :) Intrado Viper system

9-1-1 Call Volume																	
KAUAI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2020	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other	% of Total Calls
JAN	5,547	522	9.41%	3,906	70.42%	47.00%	53.00%	186	3.35%	0	0.00%	0	0.00%	933	16.82%	0	0.00%

9-1-1 CALL VOLUME – CALENDAR YEAR 2020

9-1-1 Call Volume																	
KAUAI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2020	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other	% of Total Calls
JAN	5,547	522	9.41%	3,906	70.42%	47.00%	53.00%	186	3.35%	0	0.00%	0	0.00%	933	16.82%	0	0.00%
FEB																	
MAR																	
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	5,547	522		3,906				186		0		0		933		0	
MON AVG	5,547	522	9.41%	3,906	70.42%	47.00%	53.00%	186	3.35%	0	0.00%	0	0.00%	933	16.82%	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 January 2020 = 0.00% - Statewide average for 2019 = 0.04%

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

FOR YOUR INFORMATION

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

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

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

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

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

TEXT TO 911 – CURRENT MONTH – JANUARY 2020

TEXT TO 911 Kauai County 2020	
Month	Total received
January	2
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	
YTD	2
Monthly Avg.	2.0

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

January 1, 2020 - January 31, 2020

WIRELESS PSAP TESTING – JANUARY 2020

KAUAI COUNTY - JANUARY 2020						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
1/16/2020	Sprint	3	3	Kauai PSAP	Pass	
1/17/2020	Sprint	3	3	Kauai PSAP	Pass	

NOTES:

- There were six (6) scheduled Wireless 911 test for the month of January 2020.
- Verizon Wireless has completed migrating their Wireless network database from Intrado to ComTech.
- During the 4th quarter of 2018, there was an increasing amount of “MOBL” class of service type of 911 calls delivered to the State of Hawaii PSAPs. On January 15th, 2019, Intrado completed the position source mapping for ComTech which appears to have resolved this issue.

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – JANUARY 2020

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	
2020									
JANUARY	123	123	0	0	0	158	0	0	0
FEBRUARY									
MARCH									
APRIL									
MAY									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	123	123	0	0	0				0
AVG PER MONTH	123	123	0	0	0	158	0	0	0

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.

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

MSAG CURRENT MONTH NOTES:

A total of **123** MSAG transactions were processed in 9-1-1 Net during the current month. No requests were processed relating to the MSAG database. Changes can 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.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

Akimeka processed **123** TN CRs related to the Dispatchable Location Project during the current month.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently 158 Open TN CRs.**

One hundred and fifty-eight (**158**) 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 as of January 31, 2020**
- **There are currently no Open VoIP DRs as of January 31, 2020**

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

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

NOTE:

- 9-1-1 NET is a secure web-based application that provides access to request changes to the MSAG, ALI, TN, and ESN/ELT data supported and maintained by Intrado for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY INTRADO	OPENED TNCRS REFERRED TO TELCO BY INTRADO	TOTAL UNOPENED TNCR RECORDS
KAUAI	158	0	73	85

STATUS
<u>TOTAL TNCRs SUBMITTED</u> - The total number of TNCR requests for modification that have been submitted in 9-1-1
<u>PENDING STATUS</u> - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and are pending investigation whether the request is valid or invalid, and/or whether the request requires additional information to validate.
<u>REFERRED STATUS</u> - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and the request requires additional information to validate. The Intrado Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<u>TOTAL UNOPENED TNCR RECORDS STATUS</u> - The request is submitted by Akimeka on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

DISPATCHABLE LOCATION – STATUS AS OF – JANUARY 2020

NARRATIVE:

During the August 2015 State of Hawaii 911 Board meeting, Akimeka provided a “State of Hawaii PSAPs Proposed ALI Compliancy with FCC 15-9” presentation. Based on the 9-1-1 Board’s confirmation to add the “Dispatchable Location” information into the ALI database, Akimeka researched the format standards of each pertinent field, and tested the delivery of the data to the PSAP. After a few configuration adjustments (eliminating the TelCo comments field from appearing on the ALI Screen), Akimeka standardized an additional information data format to proceed with this project.

During the month of August 2015, Akimeka started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically the **Kukui Grove Center at 302600 Kaumualii 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. 123 transactions were submitted and 108 transaction were processed by Intrado in January 2020.

Dispatchable Location			
2020	Common Name Place MSAG Address	TNCR Transactions Submitted	Transactions Processed
Quarter 1			
2019 Carryover		4,485	4,078
January	Waipouli Town Center, 40771 Kuhio Hwy, Waipouli	0	38
	Waipouli Plaza, 40901 Kuhio Hwy, Waipouli	0	20
	The Iso Island Sky Ocean, 40796 Kuhio Hwy, Waipouli	0	10
	Kapaa Branch Library, 401464 Kuhio Hwy, Kapaa	3	3
	Kapaa Post Office, 401101 Kunio Hwy, Kapaa	5	5
	Kapaa Shopping Center, 401105 Kuhio Hwy, Kapaa	32	32
	Lihue Plaza, 3016 Umi St, Lihue	83	0
February			
March			
Q1		123	108
Total		4,608	4,186

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

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

Akimeka received the Automatic Location Identification (ALI) records from Spectrum (formally known as Charter Communications) which is the predominant Voice over Internet Protocol (VoIP) provider in the State of Hawaii. As Akimeka has access to these ALI Records, Akimeka is researching and verifying the VoIP records against an MSAG valid address and the GIS data. This research is a validation of the ALI Record to ensure that the location as provided by the VoIP provider matches the GIS Information utilized by the Public Safety Agencies within their specific County 9-1-1 Service Area. This validation reduces the potential of address or location dispute during a 9-1-1 call.

The analysis of the database records indicates that there are invalid MSAG addresses utilized by the VoIP Provider. These records are being identified, and will be sent back to Spectrum for corrective action.

*Spectrum (Charter) 9-1-1 VoIP Database Verification Project					
PSAP	TOTAL RECORDS SUBMITTED BY SPECTRUM (A)	TOTAL RECORDS MATCHING & VERIFIED WITH 911 DATABASES (B)	TOTAL RECORDS NOT MATCHING	NON MATCHING RECORDS CORRECTED BY AKIMEKA (C)	PERCENT COMPLETED
HAWAII County	22,044	21,638 (98%)	406	406	100.00%
KAUAI County	8,936	8,695 (97%)	241	241	100.00%
MAUI County	18,256	17,517 (96%)	739	739	100.00%
OAHU Civilian	87,414	85,329 (98%)	2,085	2,085	100.00%
OAHU Military	3,663	710 (19%)	2,953	2,953	100.00%
TOTAL	140,313	**133,889	6,424	6,424	100.00%

* Spectrum VoIP Database received on June 21st, 2017

** Akimeka provided VoIP Records with Latitude/Longitude coordinates

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

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

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

Akimeka received the Automatic Location Identification (ALI) records from Bandwidth which is a Voice over Internet Protocol (VoIP) provider in the State of Hawaii. As Akimeka has access to these ALI Records, Akimeka researched and verified the VoIP records against an MSAG valid address and the GIS data. This research is a validation of the ALI Record to ensure that the location as provided by the VoIP provider matches the GIS Information utilized by the Public Safety Agencies within their specific County 9-1-1 Service Area. This validation reduces the potential of address or location dispute during a 9-1-1 call.

The analysis of the database records indicates that there were invalid MSAG addresses utilized by the VoIP Provider. These records were identified, and sent back to Bandwidth for corrective action.

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

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

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

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

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

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JANUARY 2020

MAPPING LAYERS UPDATED (PART I)

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

KAUAI COUNTY		
Type of Layer	Akimeka GIS Server	GIS Delivery Dates/Remarks
	Date Created/ Edits Performed	
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Address Points	1/30/2020 To 1/31/2020	Next Delivery 2/13/2020
		Spatially corrected nine (9) records in Puhi
		Added street name for one (1) record in Puhi
		Added address for fifty-six (56) records in Puhi
		Verified address for thirty-six (36) records in Puhi
	1/16/2020 To 1/29/2020	Delivered 1/30/2020
		Spatially corrected six (6) records in Kekaha
		Spatially corrected one (1) record in Nawiliwili
		Added address for one hundred and six (106) records in Nawiliwili
		Spatially corrected five (5) records in Koloa
		Verified address for two (2) records in Hanalei
		Verified address for one (1) record in Nawiliwili
		Updated name for three (3) records in Kilauea
		Added address for twenty-seven (27) records in Kilauea
		Corrected routingID, added location subtype for one (1) record in Kilauea
		Added location name for one (1) record in Waipouli
		Verified address for one hundred and six (106) records in Kapaa
		Added address for twenty-one (21) records in Hanamaulu
		Spatially corrected one (1) record in Kapaa
		Added location subtype for two (2) records in Hanamaulu
		Added address for sixty-two (62) records in Lihue
		Verified address for three (3) records in Mana
		Verified address for twenty-two (22) records in Kekaha
		Added address for twenty-six (26) records in Koloa
		Added address for eight (8) records in Waipouli
		Added duplicate address for two (2) records in Puhi
		Updated location name, added bldg info for one (1) record in Puhi
		Added address for twenty-six (26) records in Kapaa
		Spatially corrected two (2) records in Hanamaulu
		Added address for seventeen (17) records in Hanalei
		Verified address for three (3) records in Lihue
	1/2/2020 To 1/15/2020	Delivered 1/16/2020
		Verified address for eleven (11) records in Kapaa
		Updated location name, added bldg info for one (1) record in Puhi

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

MAPPING LAYERS UPDATED (PART II)

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

KAUAI COUNTY		
Type of Layer	Akimeka GIS Server	GIS Delivery Dates/Remarks
	Date Created/ Edits Performed	
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Address Points	1/2/2020 To 1/15/2020	Spatially corrected one (1) record in Kapaa
		Spatially corrected four hundred (400) records in Kapaa
		Updated location name,added bldg info for one (1) record in Puhi
		Updated location name for one (1) record in Puhi
		Updated location name, added bldg info for five (5) records in Puhi
		Verified address for one (1) record in Kalaheo
		Added bldg info for one (1) record in Puhi
		Spatially corrected two (2) records in Kalaheo
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		
Hospitals		

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

MAPPING LAYERS UPDATED (PART III)

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

KAUAI COUNTY		
Type of Layer	Akimeka GIS Server	GIS Delivery Dates/Remarks
	Date Created/ Edits Performed	
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
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	1/16/2020 To 1/29/2020	Delivered 1/30/2020
		Updated location name for one (1) record in Hanamaulu
		Added POI for one (1) record in Koloa
		Verified address for one (1) record in Nawiliwili
		Spatially corrected three (3) records in Kapaa
		Spatially corrected one (1) record in Nawiliwili
		Added POI for nine (9) records in Waipouli
		Added POI for two (2) records in Puhi
	1/2/2020 To 1/15/2020	Verified address for one (1) record in Koloa
		Delivered 1/16/2020
		Spatially corrected one (1) record in Kalaheo
		Added bldg info for one (1) record in Puhi
	Updated POI name, added bldg info for nine (9) records in Puhi	
	Updated POI name for one (1) record in Puhi	
Police Beats		
Police Districts		

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

MAPPING LAYERS UPDATED (PART IV)

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

KAUAI COUNTY		
Type of Layer	Akimeka GIS Server	GIS Delivery Dates/Remarks
	Date Created/ Edits Performed	
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)		
Police Response Areas		
Police Stations		
Post Offices		
Schools		
Street Centerlines	1/16/2020 To 1/29/2020	Delivered 1/30/2020
		Spatially corrected one (1) record in Kapaa
	1/2/2020 To 1/15/2020	Delivered 1/16/2020
		Verified address for one (1) record in Kapaa
		Spatially corrected four (4) records in Kapaa
		Corrected police beat, spatial correction for one (1) record in Kapaa
		Partial spatial correction for six (6) records in Kapaa
		Spatially corrected forty-one (41) records in Kapaa
		Corrected range for one (1) record in Kapaa
		Spatially corrected one (1) record in Kalaheo
Partial spatial correction for one (1) record in Kalaheo		
Subdivisions		
Tow Jurisdictions		
Tsunami Evacuation Zones		
Tsunami Heights		
Waste Water Plants		
WSP Cell Sectors	1/2/2020 To 1/15/2020	Delivered 1/16/2020
		Added three (3) sectors per AT&T CRS
WSP Cell Towers	1/2/2020 To 1/15/2020	Delivered 1/16/2020
		Added one (1) tower per AT&T 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

January 1, 2020 - January 31, 2020

GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVES

GIS KEY ACTIVITIES/UPDATES

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

Date	Key Activities/Updates
1/1/2020 To 1/31/2020	Updated Spillman deliverable process to deliver both building and apartment number data, by populating the Spillman UnitNumber field with building number, followed by a dash ("-"), followed by the unit/apartment number.
1/30/2020	Delivered updated data for Spillman which included Address Points, Points of Interest, and Street Centerlines.
1/30/2020	Delivered updated data for MapFlex which included Address Points, Points of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers.
1/16/2020	Delivered updated data for Spillman which included Address Points, Points of Interest, and Street Centerlines.
1/16/2020	Delivered updated data for MapFlex which included Address Points, Points of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers.
1/2/2020	Delivered updated data for Spillman which included Address Points, Points of Interest, and Street Centerlines.
1/2/2020	Delivered updated data for MapFlex which included Address Points, Points of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers.

SPILLMAN PROJECT

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

MAPFLEX SYSTEM

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

Hawaii County – January 14th, 2020 and January 28th, 2020

Maui County – December 31st, 2019, January 15th, 2020 and January 29th, 2020

Kauai County – January 2nd, 2020, January 16th, 2020, and January 30th, 2020

Honolulu – January 3th, 2020, January 17th, 2020, and January 31st

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

MAPFLEX ISSUES

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

DATE	ISSUE	DESCRIPTION	STATUS
8/2016	Wireless Addresses	MapFlex system began displaying wireless information incorrectly. MapFlex system is doing a reverse query for additional information in the GIS and this is overriding the ALI information with the closest address in the GIS.	Partially Resolved (Nov 2016) The overriding ALI with updated Lat/Longs from the GIS is still occurring
11/2016	Phase I Display	Wireless Phase I calls plotting at centroid of coverage area and landing in the ocean. After installation of new MapFlex version to correct other issues, the configurations for Wireless Phase I were not set up properly by Intrado, in which the mapping did not point to the correct information in MapFlex.	Partially Resolved (Dec 2016) According to PSAPs, it's not fully resolved. The icon of the tower still doesn't plot for Phase I.
11/2016	Wireless Confidence	Sprint calls coming across with unusually high confidence. Coordination is taking place with Sprint and Intrado. Intrado provides the PDE services for Sprint.	Pending
3/22/2017	ArcGIS Address Locator	The locators in MapFlex have a configurations which does not include ESNs. A reported issue has occurred with the Sheraton in Waikiki. The address locator does not differentiate between the Sheraton hotel and the surf break and plots on the surf break. The bigger issue is that this same issue will occur with complexes that have same primary address.	Pending A new SP 5.4 update by Intrado is aimed to correct this issue.
5/17/2017	VoIP Calls Plotting Incorrectly	Recognized in late April and early May 2017, the PSAPs have been receiving several VoIP calls which are plotting in the incorrect locations. After further research it was determined that it is because MapFlex is configured to plot the received Lat/Long. The problem is that these are not always maintained properly and that ideally the system should first choose to match with the GIS data based on the provided address. During the September 20, 2017 PSAP conference call, HT relayed there was confirmation that the Time Warner records were in fact passing through the Intrado FMCC.	Partially Resolved – the Lat/Longs are no longer being plotted in MapFlex due to a software release.
5/17/2017	Landline Calls Producing X/Y on calls	It was determined that for normal landline calls, the X/Y coordinates are being sent. The PSAPs have asked where these are being generated and why would they be sent for landline calls.	Intrado is looking into this (May - June 2017)
5/23/2018	Phase I & Phase II coverage area	Phase I calls received at the Kihei Maui PSAP are displaying a circular circumference area rather than a cone shaped directional coverage. Phase II calls are not plotting the COF meters correctly.	Pending
5/24/2018	Incorrect Addresses	MapFlex system began displaying incorrect addresses in the bubble display when an Address Point is right mouse clicked to see information by the PSAPs. However, the address in the data is still correct as shown on the left hand side.	Pending

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

6/27/2018	Moving Labels	It was brought up during the PSAP teleconference with Hawaiian Tel and Intrado that the Hawaii Fire Department submitted a trouble ticket regarding the parcel labels. When the base map is checked on for viewing the owner's names on the parcel layer, the names of some of the parcels will follow and leave their parcel as the map is panned following streets. This problem was also recreated at the Hawaii Police Department.	Pending
-----------	---------------	--	---------

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

OPEN SERVICE REQUESTS – JANUARY 2020

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

NOTE:

There are no (0) open service request for January 2020.

SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY – 2020

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

Note:

* The 2019 Carryover row indicates the number of Service Requests that were opened in 2019; however, were brought forward into 2020 in an effort to track the service request until completion.

Definitions:	Category	Description
	Wireline	Telephone Number (ALI) Discrepancies from land line phones that have been submitted to Intrado via 9-1-1 Net for correction.
	Wireless	Telephone Number (ALI) Discrepancies from phones that were land lines at one time, and were ported out to a wireless carrier. However, the phone number was never removed from the MSAG database.
	VoIP	Telephone Number (ALI) Discrepancies from VoIP phones that have been submitted to Time Warner Cable (TWCBL) or other VoIP providers for correction

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

5. E9-1-1 DATABASE SYNCHRONIZATION

(Reference: NENA 71-501, Version 1.1 – NENA Information Document for Synchronizing Geographic Information System databases with MSAG & ALI)

As part of Akimeka's value added services, Akimeka conducted a database synchronization audit for Kauai County in January 2020.

The database synchronization effort included comparing Kauai County's 9-1-1 MSAG received from the 911 Database provider, West on January 1, 2020, against its 9-1-1 GIS Street Centerline data. A total number of **1,393** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on January 1, 2020 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%.

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

AUDIT SUMMARY RESULTS – 2019-2020

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of April 1 , 2019		As of July 1 , 2019		As of October 1 , 2019		As of January 1 , 2020	
		9-1-1 MSAG Dated 4-01-19		9-1-1 MSAG Dated 7-01-19		9-1-1 MSAG Dated 10-01-19		9-1-1 MSAG Dated 1-01-20	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		1,353		1,363		1,364		1,393	
Less: 9-1-1 MSAG Exception Records	(1)	57	4.2%	58	4.3%	67	4.9%	64	4.6%
Net 9-1-1 MSAG Records Eligible for Comparison		1,296		1,305		1,297		1,329	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		1,291	99.6%	1,296	99.3%	1,297	100.0%	1,328	100.0%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	1	0.1%	1	0.1%	0	0.0%	1	0.1%
9-1-1 MSAG Record With No GIS Record	(3)	4	0.3%	8	0.6%	0	0.0%	0	0.0%
Total 9-1-1 MSAG Records No Match		5	0.4%	9	0.7%	0	0.0%	1	0.1%

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 January 2020 with a 100% Match Rate to a 100% Match Rate as of October 2019.**

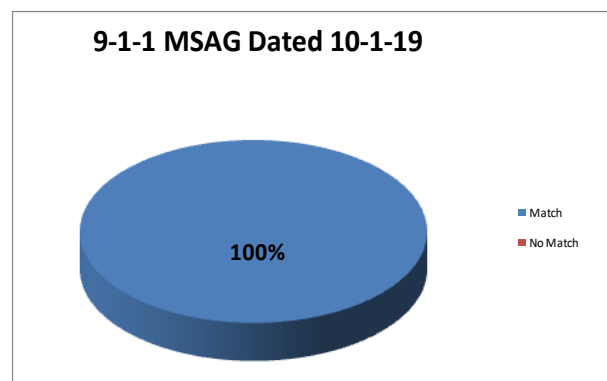
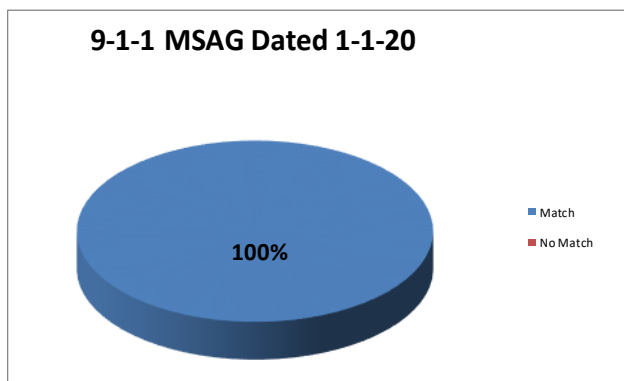
NOTES:

- 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

January 1, 2020 - January 31, 2020

AUDIT SUMMARY RESULTS – JANUARY 1, 2020 MSAG VS. OCTOBER 1, 2019 MSAG



Kauai County level of accuracy for 9-1-1 Match percentage remained consistent with a 100% match as of January 1, 2020 and a 100% on October 1, 2019

- ❖ 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” increased (0 to 1) from October 2019 to January 2020. A 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” remained consistent (0 to 0) from October 2019 to January 2020. 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 consistent (0 to 0) from October 2019 to January 2020. 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

January 1, 2020 - January 31, 2020

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 1-01-20	
	Number of Records	% of Total Invalid MSAG Records
ESN 499	0	0.0%

These invalid MSAG records represent **0%** of the Total MSAG records for Kauai County as of January 1, 2020.

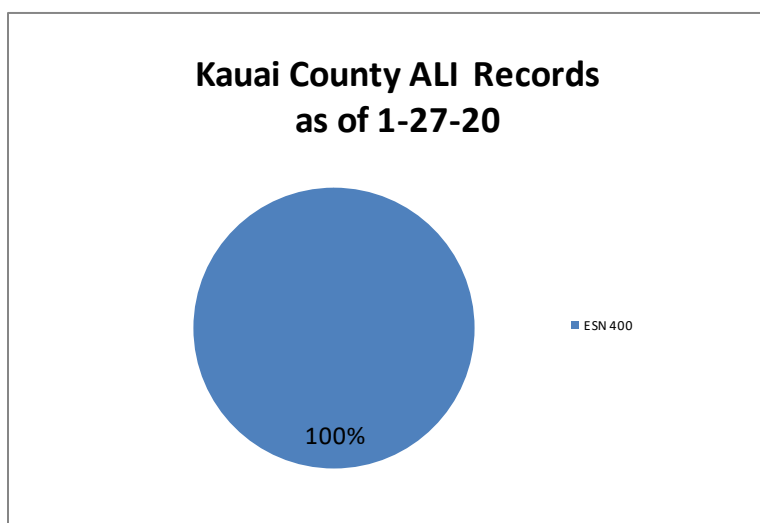
The cleanup of invalid MSAG records is a result of Akimeka's research and validation of telephone numbers (TNs) assigned an invalid MSAG address. In order for a TN to be corrected, Akimeka submitted the update to the Service Provider via Intrado for approval.

Kauai County E9-1-1 Status Report

January 1, 2020 - January 31, 2020

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 **January 27, 2020**, there are **zero (0)** ESN 499 ALI records. The number of ESN 499 ALI records remained at **100%** (0 to 0) from **January 27, 2019 to October 26, 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”.