

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018



Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

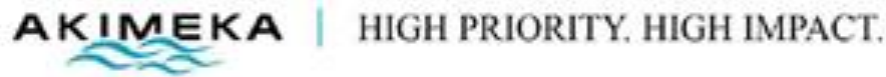


TABLE OF CONTENTS

1. PSAP Operations	5
9-1-1 Call Volume Hawaii County PSAPS – October 2018.....	5
Call Volume Hawaii County PSAP Notes:	5
9-1-1 Call Volume – Calendar Year 2018	5
9-1-1 Call Volume by Agency – October 2018	6
9-1-1 Call Volume by Agency – Calendar Year 2018	6
PSAP Operation Notes:.....	6
For your Information.....	7
Text to 911 – Current Month – October 2018.....	7
Note:	7
Wireless PSAP Testing – October 2018	8
Notes:	8
2. MSAG (Master Street Address Guide)	9
MSAG Transactions Current Month/Year – October 2018	9
MSAG Current Month Notes:	10
Telephone Record (ALI) Transactions current month notes:	10
Open Telephone Record (ALI) discrepancy Status:.....	10
TNCR (Telephone Number Change Request) Current Status – October 2018.....	11
Note:	11
Dispatchable Location – Status as of – October 2018.....	12

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

Narrative:	12
Spectrum (Charter) 9-1-1 VoIP Database Verification Project - October 2018.....	13
Bandwidth 9-1-1 VoIP Database Verification Project – October 2018	14
3. Geographic Information System (GIS) – October 2018	15
Mapping Layers Updated (Part I)	15
Mapping Layers Updated (Part II)	16
Mapping Layers Updated (Part III).....	17
Mapping Layers Updated (Part IV).....	18
Geographic Information System (GIS) Narratives	18
GIS Key Activities/Updates.....	18
Lava Flow and Alternate Routes.....	19
Fire Department IMT (Incident Management Team) Map	19
Address Points and Street Centerlines Update Comparison	20
Note:	20
CAD System Deployment.....	21
MapFlex System	23
MapFlex Issues	23
DATE.....	23
ISSUE	23
DESCRIPTION	23
STATUS.....	23
4. Service Requests Transactions.....	25
Open Service Requests – October 2018.....	25
Note*.....	25
Service Request Year-to-Date (YTD) Summary – 2018.....	25
5. E9-1-1 Database Synchronization.....	26

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

Audit Summary Results – November 2018 -- TBA.....	26
Audit Summary Results Comparision – November 1, 2018 vs August 1, 2018 -- TBA.....	26
Audit Summary Results -- TBA.....	26
Invalid MSAG Streets and Address Ranges – ESN x99 Records -- TBA	26
Automatic Location Identification (ALI) Discrepancy Report -- TBA.....	26

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

1. PSAP OPERATIONS

9-1-1 CALL VOLUME HAWAII COUNTY PSAPS – OCTOBER 2018

Source: West Safety Services Viper system

(*) Totals are based on calls to Primary PSAP.

9-1-1 Call Volume																	
HAWAII COUNTY PSAPs		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	No. of Other Calls	% of Total Calls
OCT	17,121	2,984	17.43%	11,976	69.95%	45.21%	54.79%	746	4.36%	13	0.08%	0	0.00%	1,402	8.19%	0	0.00%

CALL VOLUME HAWAII COUNTY PSAP NOTES:

*The percentage of Wireless Phase 2 calls (54.79%) has surpassed the number of Wireless Phase 1 calls (45.21%) in October 2018.

*911 Calls with No ALI in October 2018 = 0.08% - Statewide average for 2017 = 0.08%

9-1-1 CALL VOLUME – CALENDAR YEAR 2018

9-1-1 Call Volume																	
HAWAII COUNTY PSAPs		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	No. of Other Calls	% of Total Calls
JAN	18,334	3,344	18.24%	12,601	68.73%	46.04%	53.96%	874	4.77%	39	0.21%	0	0.00%	1,476	8.05%	0	0.00%
FEB	16,434	2,927	17.81%	11,395	69.34%	44.55%	55.45%	785	4.78%	17	0.10%	0	0.00%	1,310	7.97%	0	0.00%
MAR	17,309	3,256	18.81%	11,957	69.08%	44.69%	55.31%	846	4.89%	21	0.12%	0	0.00%	1,229	7.10%	0	0.00%
APR	16,313	2,893	17.73%	11,402	69.90%	47.71%	52.29%	738	4.52%	14	0.09%	0	0.00%	1,266	7.76%	0	0.00%
MAY	17,714	2,930	16.54%	12,625	71.27%	45.27%	54.73%	823	4.65%	20	0.11%	0	0.00%	1,316	7.43%	0	0.00%
JUNE	16,449	2,692	16.37%	11,690	71.07%	43.61%	56.39%	798	4.85%	16	0.10%	0	0.00%	1,253	7.62%	0	0.00%
JULY	16,802	2,757	16.41%	12,108	72.06%	44.32%	55.68%	786	4.68%	10	0.06%	0	0.00%	1,141	6.79%	0	0.00%
AUG	17,959	3,098	17.25%	12,723	70.84%	44.50%	55.50%	822	4.58%	8	0.04%	0	0.00%	1,308	7.28%	0	0.00%
SEPT	16,681	2,802	16.80%	11,864	71.12%	45.91%	54.09%	762	4.57%	21	0.13%	0	0.00%	1,232	7.39%	0	0.00%
OCT	17,121	2,984	17.43%	11,976	69.95%	45.21%	54.79%	746	4.36%	13	0.08%	0	0.00%	1,402	8.19%	0	0.00%
NOV																	
DEC																	
YTD	171,116	29,683		120,341				7,980		179		0		12,933		0	
MON AVG	17,112	2,968	17.34%	12,034	70.34%	45.18%	54.82%	798	4.66%	18	0.10%	0	0.00%	1,293	7.56%	0	0.00%

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

9-1-1 CALL VOLUME BY AGENCY – OCTOBER 2018

2018	9-1-1 Call Volume by Agency									
	Hawaii Police Department					Hawaii Fire Department				
	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls
October	13,463	78.63%	0	1,371	0	2,256	13.18%	0	31	0

9-1-1 CALL VOLUME BY AGENCY – CALENDAR YEAR 2018

2018	9-1-1 Call Volume by Agency									
	Hawaii Police Department					Hawaii Fire Department				
	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls
January	14,408	78.59%	0	1,451	0	2,450	13.36%	0	25	0
February	12,884	78.40%	0	1,286	0	2,240	13.63%	0	24	0
March	14,890	86.02%	0	1,202	0	2,419	13.98%	0	27	0
April	12,959	79.44%	0	1,248	0	2,088	12.80%	0	18	0
May	14,007	79.07%	0	1,294	0	2,391	13.50%	0	22	0
June	12,962	78.80%	0	1,223	0	2,234	13.58%	0	30	0
July	13,444	80.01%	0	1,125	0	2,217	13.19%	0	16	0
August	13,805	76.87%	0	1,280	0	2,846	15.85%	0	28	0
September	13,146	78.81%	0	1,214	0	2,303	13.81%	0	18	0
October	13,463	78.63%	0	1,371	0	2,256	13.18%	0	31	0
November										
December										
YTD	135,968		0	12,694	0	23,444		0	239	0
MON AVG	13,597	79.46%	0	1,269	0	2,344	13.69%	0	24	0

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. Abandoned Calls are **not** included in the % of Total Calls.
- All VoIP (Voice over Internet Protocol) types of 911 calls are combined in the Call Volume statistic.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

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

NOTE:

- 911 Text messages received at the Fire Department are transfers from the Police Department.
- Although there is a “Text to 911” plot on the MapFlex, the location of the plot is not reliable. Text to 911 Dispatchers should use their skills to ascertain the exact location of the emergency response.

TEXT TO 911 Hawaii County PSAPs 2018		
Month	Received at Police	Received at Fire
January	27	4
February	14	2
March	19	1
April	19	0
May	25	2
June	19	2
July	26	1
August	18	2
September	30	3
October	38	2
November		
December		
YTD	235	19
Monthly Avg.	23.50	1.90

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

WIRELESS PSAP TESTING – OCTOBER 2018

HAWAII COUNTY - OCTOBER 2018						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:

NOTES:

- There were no (0) scheduled Wireless 911 Tests for the month of October 2018.
- Verizon Wireless is currently migrating their Wireless network database from West to ComTech.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – OCTOBER 2018

HAWAII COUNTY	9-1-1 TRANSACTIONS								
	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Submitted		Open ALI Discrepancy Records			Customer Addresses Affected
2018		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	
JANUARY	243	201	12	25	5	185	0	0	214
FEBRUARY	175	104	15	53	3	161	0	0	190
MARCH	236	133	39	60	4	181	0	0	209
APRIL	128	87	12	25	4	252	0	1	47
MAY	150	90	31	28	1	275	0	1	201
JUNE	284	215	26	42	1	503	0	1	57
JULY	195	178	15	2	0	618	0	1	78
AUGUST	195	56	16	123	0	758	0	1	119
SEPTEMBER	162	100	11	51	0	892	0	1	311
OCTOBER	153	128	22	0	3	1,003	0	2	495
NOVEMBER									
DECEMBER									
TOTAL YTD	1,921	1,292	199	409	21				1,921
AVG PER MONTH	192	129	20	41	2				192

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.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

MSAG CURRENT MONTH NOTES:

A total of **153** MSAG transactions were processed in 9-1-1 Net during the current month. Twenty-two (**22**) requests were processed relating to the MSAG database. Changes include: changes to high – low street ranges, combining street records, deletion of invalid records, splitting street records to align with Police, Fire, EMS and Military response areas, and inserting new MSAG records.

There were **495** customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

128 Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 299 clean-up effort and the Dispatchable Location Project. ESN 299 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently 1,003 Open TN CR Transactions.**
- **Refer to chart in the next section “TNCR Current Status”**

673 Open TN CR transactions are a direct result of the ESN 299 clean-up and are awaiting approval from Hawaiian Telcom, Inc. Once a telephone number is submitted to West for correction, it is verified against HT records and/or by the customer. West's internal process requires calling each telephone customer individually for verification to update an address in the 9-1-1 database. Akimeka continues to monitor and track the progress of the remaining 1,003 Referred records.

- **There are currently no Open ALI-DRs.**
- **There are currently two (2) Open VoIP DRs**

Time Warner Cable is investigating 9-1-1 calls made from residences in Kailua Kona, but plotted at the University of Hilo College of Pharmacy, and one in Keaau. Akimeka will continue to follow up with Time Warner until the telephone number is corrected.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

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)

County	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
HAWAII	1,003	134	20	849

STATUS

TOTAL TNCRs SUBMITTED - The total number of TNCR requests for modification that have been submitted in 9-1-1

PENDING STATUS - 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.

REFERRED STATUS - 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.

TOTAL UNOPENED TNCR RECORDS STATUS - 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.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

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 September 2015, Akimeka started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically the **Kings Shops at 690250 Waikoloa Beach Dr., Waikoloa**. 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. There are a total of **3,780** Dispatchable Locations processed to date. There were **128** Dispatchable locations submitted and **0** were processed in October 2018.

Dispatchable Location			
2018	Common Name Place MSAG Address	TNCR* Transactions Submitted	Transactions Processed**
Quarter 4			
Quarter 3 Carryover		4,325	3,780
October	Hale Aloha Nazarene School, 595 Kupulau Rd, Hilo	5	0
	Kaumana Elementary School, 1710 Kaumana Dr, Hilo	11	0
	Keaau Elementary, 160680 Keaau Pahoa Rd, Keaau	14	0
	Keaau High, 160725 Keaau Pahoa Rd, Keaau	24	0
	Keaau Middle, 160565 Keaau Pahoa Rd, Keaau	32	0
	Malamalama Waldorf School, 151834 Makuu Dr, Keaau	2	0
	Waiakea Middle, 200 W Puainako St, Hilo	24	0
	Waiakeawaena Elementary, 2420 Kilauea Ave, Hilo	16	0
November			
December			
Q4 Total		128	0
Total		4,453	3,780

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

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.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

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.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – OCTOBER 2018

MAPPING LAYERS UPDATED (PART I)

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

HAWAII 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	10/29/2018		Updated Routing ID and Address for two (2) Addresses in Kailua Kona.
	10/29/2018		Researched Businesses in Hawaii County.
		10/17/18	
	10/16/2018		Spatially Corrected eighty three (83) Address Points in Hilo.
	10/16/2018		Spatially Corrected sixty two (62) Address Points in Honokaa.
	10/16/2018		Spatially Corrected seventeen (17) Address Points in Hakalau.
	10/16/2018		Updated one (1) Address in Kailua Kona.
	10/16/2018		Updated TMK and Routing ID for one (1) Address in Hilo.
	10/16/2018		Updated one (1) Address Zipcode and Postal Community in Mountain View.
	10/15/2018		Spatially Corrected one hundred and thirty two (132) Address Points in Hilo.
	10/12/2018		Spatially Corrected one hundred and twenty one (121) Address Points in Honomu.
		10/09/18	
	10/4/2018		Added three (3) Addresses in Naalehu.
	10/4/2018		Added two (2) Addresses in Kamuela.
	10/4/2018		Added six (6) Addresses in Pahoa.
	10/4/2018		Added two (2) Addresses in Holualoa.
	10/4/2018		Added nine (9) Addresses in Hilo.
	10/4/2018		Added three (3) Addresses in Ocean View.
	10/4/2018		Added two (2) Addresses in Hawi.
	10/4/2018		Added two (2) Addresses in Kealahou.
	10/4/2018		Added nineteen (19) Addresses in Kurtistown.
	10/4/2018		Added ten (10) Addresses in Mountain View.
	10/4/2018		Added four (4) Addresses in Volcano.
	10/4/2018		Added one (1) Address in Kailua Kona.
	10/4/2018		Added one (1) Address in Laupahoehoe.
	10/4/2018		Added one (1) Address in Keaau.
	10/4/2018		Added one (1) Address in Captain Cook.
	10/1/2018		Spatially Corrected one hundred and sixteen (116) Address Points in Mountain View.
	10/1/2018		Updated one (1) Address in Hilo.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

MAPPING LAYERS UPDATED (PART II)

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

HAWAII 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			
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			
Hydrants			
Hyrdology Layers			
Incident Response Areas			
Lodging			
Major Roads			
Medic Beats			

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

MAPPING LAYERS UPDATED (PART III)

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

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Medic 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			
Police Beats	10/31/2018		Researched and corrected Beats located within Kona District.
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines	10/30/2018		Split one (1) Segment in Volcano.
	10/30/2018		Added one (1) Street in Volcano
		10/09/18	
	10/1/2018		Added one (1) Street and Updated range in Hilo.
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Volcanic Lava Flow			
Waste Water Plants			

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

MAPPING LAYERS UPDATED (PART IV)

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

HAWAII 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)			
WSP Cell Sectors		10/17/18	
	10/10/2018		Per Sprint CRS
WSP Cell Towers		10/17/18	
	10/10/2018		Per Sprint CRS

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
10/30/2018	Updated MAPSAG for Hawaii County
10/17/2018	Address Points, Cell Sectors, Cell Towers, Points of Interest, Street Centerlines, ESN, and Common Places for Hawaii County Mapflex.
10/17/2018	Address Points, City, Common Names Alt Table, Display Streets, Fire EMS Zone, First In, Points of Interest, POI Alt Names, Police Zones, Street Centerlines, Street Alt Names, Street Routes for Hawaii County Spillman.
10/9/2018	Address Points, Cell Sectors, Cell Towers, Points of Interest, Street Centerlines, ESN, and Common Places for Hawaii County Mapflex
10/9/2018	Address Points, City, Common Names Alt Table, Display Streets, Fire EMS Zone, First In, Points of Interest, POI Alt Names, Police Zones, Street Centerlines, Street Alt Names, and Street Routes for Hawaii Spillman

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

LAVA FLOW AND ALTERNATE ROUTES

On May 7, 2018, Akimeka created a new GIS layer detailing the lava flow activity near the Leilani Estates area to provide the 911 centers on Hawaii, a valuable resource in identifying current road closures and alternate routes.

1. Because of the potential consequences to public safety from the current lava flow, Akimeka created a new layer, “Lava Flows” for the PSAPs to be utilized when receiving 911 calls pertaining to this event.
 - a. Akimeka created the layer “Lava Flows” which details the up-to-date progress of the lava activity over the roadways in the Leilani Estates area.
 - b. The initial Lava Flow layer was delivered for upload into the MapFlex mapping system, and the Spillman CAD Mapping system, on May 8, 2018. This visual mapping feature and pertinent updates will be available for viewing by the 911 dispatchers when the Akimeka delivered GIS mapping updates are uploaded by their vendor support personnel into their respective mapping systems.
 - c. During the month of October, 2018, there were no Lava Flow activity pertinent to 911 and Public Safety to update the Spillman Mapping system. Akimeka will resume to deliver updates should the event start up again.

FIRE DEPARTMENT IMT (INCIDENT MANAGEMENT TEAM) MAP

As requested by the Hilo Department, Akimeka created an Incident Management Team (IMT) jurisdictional map for the lava flow activity at the Leilani Estates area. This team consists of County, State, and Federal agencies that are involved with all operational procedures affected by the volcanic activity. Map layers identifying roadblocks, highway markers, lava fissures, and evacuated areas, were created by Akimeka and delivered to the Fire Departments mapping vendor on May 31st, 2018. Akimeka will update these GIS layers upon request by the Hilo Fire Department.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

ADDRESS POINTS AND STREET CENTERLINES UPDATE COMPARISON

On a routine basis, upon receipt of Hawai'i County Planning Department's Address Points and Street Centerlines layer updates, Akimeka compares and incorporates any of the County's additions, changes, and deletions into the Akimeka Address Points and Street Centerlines layers that appear necessary for the dispatch and response of 911 personnel.

The Address Points and Street Centerlines layer comparative analysis was completed on the updates received from the Hawai'i County Planning Department on **October 9, 2018**. Results are as follows:

HAWAII COUNTY	Address Points Layer	Street Centerlines Layer
New Addresses Added	130	
Addresses Removed	0	
Address Street Name Changes	28	
Address Street Number Changes	13	
New Street Segments Added		5
Street Segments Removed		0
Street Segment Range Changes		6
Street Segment Name Changes		0

NOTE:

Some Address Points have multiple updates that are required, including Street Name and Street Number. These updates are counted as separate actions since the changes are required in order to make the GIS layers "9-1-1 capable" for CAD system recommendations affecting public safety dispatch and response operations.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

CAD SYSTEM DEPLOYMENT

The system has not gone live yet but has received regular GIS updates, as scheduled.

1. On September 28, 2017, Akimeka and Spillman held a conference call to discuss some of the items in the training sessions, noted above. There were two key topics discussed; the Street Name searches and an additional item not previously discussed – the ability to search street names with first 5 characters.
 - a. Spillman discussed a workflow they saw being used to make these changes in the GIS. Akimeka reserved a slight hesitation with the workflows because there is room for potential discrepancies for the PSAP. The proposed solution for the Street Names, for instance, requires the creation of a midpoint location on a particular street within a given community. One of the issues with this, is that for several streets in Hawaii County the midpoint will be entirely unrelated to the potential caller's location, and may add time to the call process.
 - b. Akimeka identified the proposed solution as a potential fix to a system limitation but may only be a partial solution, leaving a potential gap where during a 9-1-1 call the "solution" may not be of help. Akimeka thought it was best to discuss the items in more detail and include HPD for their approval and awareness of the potential risk involved.
2. On October 5, 2017, HPD had asked Akimeka to hold on the requested updates until the system has gone live and they could test it at that point.
3. On October 11, 2017, after Akimeka had provided the GIS data for delivery, Spillman followed up to query if the changes to include the proposed solution were included.
 - a. Akimeka had replied that HPD had asked us not to proceed until further discussed.
 - b. Spillman had questioned the rationale of the decision
4. On October 31, 2017, HPD, HFD, Akimeka, and Spillman held a conference call to further discuss the item.
 - a. Overview of the request and the issue
 - i. These are almost entirely for non-emergency calls or wireless phase I calls
 - ii. According to Spillman, hardware or software issues may be involved in the transferring of calls from HPD if calls are dropped
 - iii. During traffic stops, officers are often times only giving street names. Issue is that Spillman requires a validated address.
 - iv. Discussion of standards were highlighted. Akimeka is obligated to follow industry standards regarding data accuracy. Similarly Spillman briefed that they are required to follow standards. This proposed solution negates both objectives so neither cannot make the change without HPD approving the request.
 - v. Akimeka briefed that the solution is likely not all encompassing and will likely open other issues not being recognized before put into a live environment. Their focus is on the GIS data accuracy so if the proposed solution accommodates a portion of scenarios but not all of them, there is a concern with it and what those impacts may be.
 - b. Address Locator and GIS changes were discussed
 - i. The concern with creating a point in the GIS which represents the center of a given street within a particular community was discussed. For streets which are short in length, this proposed solution may suffice. The issue, discussed by Akimeka, is with regards to longer streets which span across an entire community like Mamalahoa Hwy. The extent to which the map will pan, may require the dispatcher to spend a significant time locating within the map, features which can be used for the validated address. Using the street as the validated address will likely cause issues.
 - ii. An additional concern brought forward was that this solution will likely degrade the quality of data being cataloged in RMS. Incidents recorded for just a street name will likely lose some pertinent information on specific addresses.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

- iii. Spillman briefed why their system could not do this natively without modifying the data
 - 1. Akimeka asked why Spillman is the only CAD or Mapping System in the State that has difficulty with this feature.
 - c. Timeline and Next Steps
 - i. HPD mentioned that their go-live date is in one (1) month so if any changes are needed, there is a compressed timeline.
 - 1. Akimeka briefed that if this is desired and approved by HPD, we would make sure it is finished beforehand.
 - ii. Spillman was asked for references of other PSAPs which have implemented this solution so that they can be asked of its use case and any potential issues.
 - iii. During the call there was a verbal approval from HPD for Akimeka to move forward with the proposed solution, which could later be tested by HPD and HFD.
 - iv. Agreement was made to hold off on the 5 character street name aliases until the first item could be looked at.
- 5. On November 7, 2017 Akimeka and Spillman held a quick conference call to verify the requirements of the proposed modification. All information was captured and Akimeka prepared the data shortly after the meeting.
- 6. During November, there were no PSAP references provided to ensure this fix works properly so the modification was asked not to be provided until that occurs.
- 7. On January 23, 2018, a request was made from Hilo Fire to Akimeka for Water Response Areas to be added for the Spillman CAD.
 - a. Akimeka provided HFD with the correspondence with Spillman from October 21, 2016 where the requested layers were provided during the installation/configuration period. Akimeka was unsure why the data was never configured for HFD but prepared a newer dataset to be delivered to Spillman.
 - i. The Water Response Areas were sent to Spillman on January 31, 2018.
 - ii. One item which Akimeka had recommended was that a revision to the Zone Codes will likely need to be made so that the boundaries are distinct in CAD and the proper equipment can be configured for recommendations. HFD and Akimeka will likely be coordinating during February 2018 on this.
- 8. On February 13, 2018 the HPD leadership and Akimeka met to further discuss the proposed street search modification.
 - a. It was agreed that testing the system to accept various classes of service into CAD would be a good initial test to see if the search were needed. Akimeka agreed to be on site to help in the testing. The meeting is tentatively scheduled in March 2018.
- 9. On February 14, 2018 Akimeka ran a computer simulation of several streets to represent how the Spillman will pull recommendations using the proposed street search modification. As they had briefed, the results indicated a potentially large discrepancy with how recommendations may be provided.
- 10. On March 29, 2018, representatives from HPD, HFD, Akimeka, and Spillman met to discuss the potential for modifying the GIS by adding a point to the center of the street segment. Akimeka expressed their concerns with modifying the GIS data outside of the 9-1-1 GIS data model, and the NG911 Data model as NENA Standards directs. At the end of the meeting, Akimeka recommended against the requested change by Spillman, and the decision was accepted by those in attendance at the meeting. The end-to-end testing of the Spillman CAD unit recommendations feature was also postponed. During the meeting, these items were discussed and will require further investigation:
 - a. It was introduced that the Spillman CAD mapping system can now display a Phase I wireless 9-1-1 call. Although the Spillman CAD plots the location of the Tower site, the Spillman CAD does not display the theoretical coverage area of the potential 9-1-1 wireless caller. Because of this, Mr. Ramirez of Akimeka explained that the West MapFlex 911 mapping system is utilized to “locate” wireless 9-1-1 callers, and the Spillman CAD GIS function is to “validate” the location.

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

- b. A discussion took place regarding enhanced GIS Training. Mr. Ramirez offered to establish a GIS webinar training session to focus on utilizing advanced GIS search functions to assist in locating wireless 9-1-1 callers.
- c. A discussion took place regarding the Dispatch Supervisors from Hawaii Police and Hawaii Fire to visit the Kauai PSAP to observe the Spillman CAD in a live environment and to talk to dispatchers from Kauai on the operation of the system.
- d. There were no significant updates reported in April 2018.
- e. There were no significant updates reported in May 2018.
- f. There were no significant updates reported in June 2018.
- g. There were no significant updates reported in July 2018.
- h. On July 19, 2018, personnel from the Hawaii Police and Fire Department traveled to the Kauai Police Department to observe and question the Kauai Police Department's 911 Dispatch Center's staff on the Spillman CAD's operational procedures.
- i. There were no significant updates reported in August 2018.
- j. On September 18th, 2018, the Hawaii Police and Fire Department went live on the new Spillman CAD and mapping systems. There have been no major GIS data configuration changes requested.
- k. There were no incidents or GIS configuration change requests in October 2018.

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	Partially Resolved (Dec 2016)

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

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

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – OCTOBER 2018

#	Date	Ticket #	Description	PSAP	Urgency	Comments
1	04/02/18	970	Incorrect Drop In	Hawaii Fire	Normal	TN has been submitted to Century Link/Time Warner Communications via email. RMS Akimeka requested a status update. TN still in Referred Status. 4/27/2018 RMS TN sent back to TWCBL on 4/27/18. TN is still being researched as of 5/29/18. RMS TN is still being researched by TWCBL as of July 31, 2018. RMS TN is still Referred to Telco, pending research. RMS
2	09/11/18	9/11/2018	Incorrect Address	Hawaii Fire	Normal	TN submitted to Time Warner/Spectrum for Update. RMS TN Referred to Time Warner as of 9/27/18. RMS

Note* There are two (2) opened service request pending for October 2018.

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

HAWAII COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2018	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2017 Carryover*			0						
January	5	5	0	3	3	0	0	2	2
February	3	3	0	2	2	0	0	1	1
March	4	4	0	3	3	0	0	1	1
April	4	3	1	2	2	0	0	2	1
May	1	1	1	1	1	0	0	0	0
June	1	1	1	1	1	0	0	0	0
July	1	1	1	1	1	0	0	0	0
August	0	0	1	0	0	0	0	0	0
September	1	0	2	0	0	0	0	1	0
October	3	3	2	3	3	0	0	0	0
November									
December									
TOTAL	23	21	2	16	16	0	0	7	5

Note:

* The 2017 Carryover row indicated the number of Service Requests that were opened in 2017 and brought forward into 2018 in an effort to track the service request until completion. Detailed information on service tickets are available upon request.

Definitions:

Category

Description

Wireline

Telephone Number (ALI) Discrepancies from land line phones that have been submitted to West Safety Services via 9-1-1 Net for correction.

Wireless

Telephone Number (ALI) Discrepancies from phones that were land lines at one time, and were ported out to a wireless carrier. However, the phone number was never removed from the MSAG database.

VoIP

Telephone Number (ALI) Discrepancies from VoIP phones that have been submitted to Time Warner Cable (TWCBL) for correction

Hawaii County E9-1-1 Status Report

October 1, 2018 – October 31, 2018

5. E9-1-1 DATABASE SYNCHRONIZATION

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

Next Scheduled Database Synchronization – November 2018

AUDIT SUMMARY RESULTS – NOVEMBER 2018 -- TBA

AUDIT SUMMARY RESULTS COMPARISION – NOVEMBER 1, 2018 VS AUGUST 1, 2018 -- TBA

AUDIT SUMMARY RESULTS -- TBA

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

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA