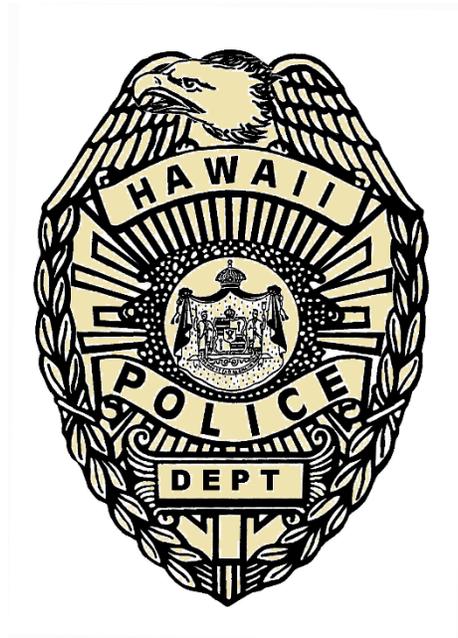


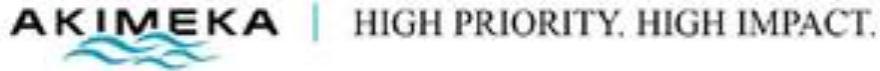
# Hawaii County E9-1-1 Status Report

*May 1, 2017 – May 31, 2017*



# Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017



## TABLE CONTENTS

1. PSAP Operations .....	5
9-1-1 Call Volume Hawaii County PSAPS – May 2017 .....	5
Call Volume Hawaii County PSAP Notes: .....	5
9-1-1 Call Volume – Calendar Year 2017 .....	5
9-1-1 Call Volume by Agency – May 2017 .....	6
9-1-1 Call Volume by Agency – Calendar Year 2017 .....	6
PSAP Operation Notes: .....	6
For your Information .....	7
Text to 911 – Current Month – May 2017 .....	7
Note: .....	7
Wireless PSAP Testing – May 2017 .....	8
Notes: .....	8
2. MSAG (Master Street Address Guide) .....	9
MSAG Transactions Current Month/Year – May 2017 .....	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 – May 2017 .....	11
Note: .....	11
Dispatchable Location – Status as of – May 2017 .....	12

# Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

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Narrative: .....	12
Charter Communications (Time Warner) VoIP Database TNCR .....	13
3. Geographic Information System (GIS) – May 2017 .....	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
Geographic Information System (GIS) Narratives .....	18
GIS Key Activities/Updates.....	18
Address Points and Street Centerlines Update Comparison .....	18
Note: .....	18
Police Beat Review .....	19
CAD System Deployment.....	20
MapFlex System .....	20
MapFlex Issues .....	21
Date.....	21
Issue .....	21
Description.....	21
Status.....	21
4. Service Requests Transactions .....	22
Open Service Requests – May 2017 .....	22
Note*.....	23
Service Request Year-to-Date (YTD) Summary – 2017.....	23
5. E9-1-1 Database Synchronization.....	23
Audit Summary Results – May 2017 .....	24
Audit Summary Results Comparision –May 1, 2017 vs February 1, 2017.....	25

# Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

---

Note: .....	26
Audit Summary Results .....	26
Comparison Notes:.....	26
Invalid MSAG Streets and Address Ranges – ESN x99 Records .....	26
Automatic Location Identification (ALI) Discrepancy Report .....	27

# Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME HAWAII COUNTY PSAPS – MAY 2017

(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	
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	No. of Other Calls	% of Total Calls
MAY	15,894	2,821	17.75%	11,118	69.95%	42.38%	57.62%	859	5.40%	14	0.09%	0	0.00%	1,082	6.81%	0	0.00%

### CALL VOLUME HAWAII COUNTY PSAP NOTES:

\*The percentage of Wireless Phase 2 calls (57.62%) has surpassed the number of Wireless Phase 1 calls (42.38%) in May 2017.

\*911 Calls with No Ali in May 2017 = 0.09% - Statewide average for 2016 = 0.15%

### 9-1-1 CALL VOLUME – CALENDAR YEAR 2017

9-1-1 Call Volume																	
HAWAII COUNTY PSAPs		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	No. of Other Calls	% of Total Calls
JAN	17,004	3,088	18.16%	11,658	68.56%	45.79%	54.21%	961	5.65%	18	0.11%	0	0.00%	1,279	7.52%	0	0.00%
FEB	14,128	2,676	18.94%	9,675	68.48%	45.03%	54.97%	670	4.74%	29	0.21%	0	0.00%	1,078	7.63%	0	0.00%
MAR	16,310	2,859	17.53%	11,328	69.45%	44.99%	55.01%	966	5.92%	33	0.20%	0	0.00%	1,124	6.89%	0	2.69%
APR	15,277	2,981	19.51%	10,339	67.68%	42.99%	57.01%	852	5.58%	20	0.13%	0	5.73%	1,085	7.10%	0	1.96%
MAY	15,894	2,821	17.75%	11,118	69.95%	42.38%	57.62%	859	5.40%	14	0.09%	0	0.00%	1,082	6.81%	0	0.00%
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	78,613	14,425		54,118				4,308		114		0		5,648		0	
MON AVG	15,723	2,885	18.38%	10,824	68.82%	44.24%	55.76%	862	5.46%	23	0.15%	0	1.15%	1,130	7.19%	0	0.93%

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

### 9-1-1 CALL VOLUME BY AGENCY – MAY 2017

2017	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
May	12,605	79.31%	0	1,053	0	2,207	13.89%	0	29	0

### 9-1-1 CALL VOLUME BY AGENCY – CALENDAR YEAR 2017

2017	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	13,182	77.52%	0	1,237	0	2,543	14.96%	0	42	0
February	11,065	78.32%	0	1,048	0	1,985	14.05%	0	30	0
March	14,146	86.73%	0	1,097	0	2,164	13.27%	0	27	0
April	12,191	79.80%	0	1,065	0	2,001	13.10%	0	20	0
May	12,605	79.31%	0	1,053	0	2,207	13.89%	0	29	0
June										
July										
August										
September										
October										
November										
December										
<b>YTD</b>	<b>63,189</b>		<b>0</b>	<b>5,500</b>	<b>0</b>	<b>10,900</b>		<b>0</b>	<b>148</b>	<b>0</b>
<b>MON AVG</b>	<b>12,638</b>	<b>80.34%</b>	<b>0</b>	<b>1,100</b>	<b>0</b>	<b>2,180</b>	<b>13.85%</b>	<b>0</b>	<b>30</b>	<b>0</b>

#### 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.
- All VoIP (Voice over Internet Protocol) types of 911 calls are combined in the Call Volume statistic.

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

FOR YOUR INFORMATION

FYI ..... For Your Information				
PSAP Operations				
Statewide 911 Call Volumes for 2016 & 2015 compare				
PSAP	2016		2015	
Oahu Civilian	1,009,059	71.93%	1,019,402	70.94%
Hawaii County	205,412	14.64%	217,768	15.15%
Maui County	137,333	9.80%	142,952	9.95%
Kauai County	50,955	3.63%	56,874	3.96%
Total	1,402,759	100.00%	1,436,997	100.00%

**\*Statewide average does not include Military 911 calls.**

TEXT TO 911 – CURRENT MONTH – MAY 2017

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 2017		
Month	Received at Police	Received at Fire
January	27	1
February	37	2
March	32	1
April	25	2
May	24	1
June		
July		
August		
September		
October		
November		
December		
YTD	145	7
Monthly Avg.	29.00	1.40

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

### WIRELESS PSAP TESTING – MAY 2017

HAWAII COUNTY - MAY 2017						
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 May, 2017.

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

### 2. MSAG (MASTER STREET ADDRESS GUIDE)

#### MSAG TRANSACTIONS CURRENT MONTH/YEAR – MAY 2017

HAWAII COUNTY	9-1-1 TRANSACTIONS								
	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Submitted		Open ALI Discrepancy Records			Customer Addresses Affected
		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	
2017									
JANUARY	330	139	32	157	2	318	1	0	485
FEBRUARY	269	148	32	87	2	283	1	0	280
MARCH	302	216	28	57	1	203	1	0	423
APRIL	263	204	24	34	1	201	1	0	1,093
MAY	255	133	25	86	11	196	1	0	229
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
<b>TOTAL YTD</b>	<b>1,419</b>	<b>840</b>	<b>141</b>	<b>421</b>	<b>17</b>				<b>2,510</b>
AVG PER MONTH	284	168	28	84	3				502

#### 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

May 1, 2017 – May 31, 2017

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### MSAG CURRENT MONTH NOTES:

A total of **255** MSAG transactions were processed in 9-1-1 Net during the current month. Twenty-five (**25**) 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 **229** customer ANI/ALI (telephone number/address) records updated as a direct result.

### TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

**219** 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. Six (**6**) ALI DRs were submitted as the result of a 9-1-1 calls from residences in Keaau, Hilo, Honokaa and Captain Cook. Three (**3**) VoIP DRs were submitted as the result of 9-1-1 calls made from residences in Kurtistown, Kamuela and Laupahoehoe. Two (**2**) No Record Found (NRF) calls were submitted to Akimeka as the result of 9-1-1 calls made from Waikoloa and Hilo. Both telephone numbers were researched and are extensions of PBX telephone systems in which the main lines are assigned the correct address. No changes were made. Hawaii County Fire Department submitted these change requests to Akimeka to update the customer information and the discrepancy was corrected in 9-1-1 Net and by Charter Communications via email.

### OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently 196 Open TN CR Transactions.**
- **Refer to chart in the next section “TNCR Current Status”**

**196** 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 203 Referred records.

- **There is currently one (1) Open ALI-DR**

One Open ALI DR was submitted in July 2016 for a business in Kailua Kona. Akimeka will continue to monitor this discrepancy until it is updated.

- **There are currently no Open VoIP DRs.**

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

### TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – MAY 2017

**NOTE:**

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

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
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	196	125	53	18

STATUS
<b>TOTAL TNCRs SUBMITTED</b> - The total number of TNCR requests for modification that have been submitted in 9-1-1
<b>PENDING STATUS</b> - 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.
<b>REFERRED STATUS</b> - 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.
<b>TOTAL UNOPENED TNCR RECORDS STATUS</b> - 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

May 1, 2017 – May 31, 2017

### DISPATCHABLE LOCATION – STATUS AS OF – MAY 2017

#### 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 **1,961** Dispatchable Locations processed to date. There were **133** Dispatchable locations submitted and processed in May, 2017.

Dispatchable Location			
2017	Common Name Place MSAG Address	TNCR*	Transactions
Quarter 2		Transactions Submitted	Processed**
Quarter 1 Carryover		1,624	1,624
April	Keauhou Shopping Center, 786831 Alii Dr, Keauhou	204	204
May	Mauna Lani Shops, 681330 Mauna Lani Dr, Kamuela	12	12
	Alii Villas, 756016 Alii Dr, Kailua Kona	1	1
	Kona Coast Resort, 786842 Alii Dr, Keauhou	70	70
	Country Club Villas, 786920 Alii Dr, Keauhou	28	28
	Keauhou Palena, 787054 Kamehameha III Rd, Keauhou	22	22
June			
Quarter 2 Total		337	337
Total		1,961	1,961

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

### CHARTER COMMUNICATIONS (TIME WARNER) VOIP DATABASE TNCR

Akimeka received Automatic Location Identification (ALI) records from Charter Communications (formally known as Time Warner) which is the predominant Voice over Internet Protocol (VoIP) provider in the State of Hawaii. As Akimeka had access to these ALI Records, Akimeka was able to perform a three way comparison. This comparison is a validation of the ALI Record to ensure 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 indicated there were invalid MSAG addresses utilized by the VoIP Provider, however, the majority of these records were corrected, or sent back to Charter for further location clarifications. Akimeka was able to verify the majority of the VoIP records had a valid MSAG address assigned and matched with the GIS information. Akimeka has also initiated a correction process with Charter Communications on behalf of the PSAPs in order to perform timely corrections to the remaining VoIP 9-1-1 Records, and to ensure new VoIP customers receive valid MSAG addresses to improve their 9-1-1 location service.

<b>Charter Communications 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)</b>			
<b>PSAP</b>	<b>TOTAL RECORDS SUBMITTED BY CHARTER (A)</b>	<b>RECORDS REQUIRING FURTHER INFORMATION BY CHARTER (B)</b>	<b>RECORDS CORRECTED AND RETURNED TO CHARTER BY AKIMEKA (C)</b>
<b>HAWAII County</b>	<b>19,135</b>	<b>5</b>	<b>33</b>
<b>KAUAI County</b>	<b>7,911</b>	<b>7</b>	<b>39</b>
<b>MAUI County</b>	<b>15,629</b>	<b>0</b>	<b>7</b>
<b>OAHU Cilivian</b>	<b>82,256</b>	<b>5</b>	<b>66</b>
<b>TOTAL</b>	<b>124,931</b>	<b>17</b>	<b>145</b>

<b>(A)</b>	VoIP Database records submitted by Charter to Akimeka for research and MSAG address validation.
<b>(B)</b>	Akimeka was not able to determine an MSAG valid address with the information provided. Charter is advised to contact customer and provide Akimeka with a TMK or driving directions.
<b>(C)</b>	Akimeka researched and provided Charter with an MSAG valid address.

# Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – MAY 2017

### 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		
<b>CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH &amp; RESPONSE (Listed Alphabetically)</b>			
Address Points		<b>05/23/17</b>	
	5/18/2017		Added one (1) address point in Keaau
	5/18/2017		Deleted one (1) address point in Keaau
	5/18/2017		Corrected one (1) address in Pauilo
	5/17/2017		Added twenty-five (25) address points in Keauhou
	5/17/2017		Added one (1) address point in Keaau
	5/17/2017		Corrected seven (7) street type in Pahoa
	5/16/2017		Deleted one (1) address point in Kapaau
	5/16/2017		Deleted one (1) address point in Volcano
	5/16/2017		Added one (1) address point in Kamuela
	5/12/2017		Added one (1) address point in Hawi
	5/12/2017		Added two (2) address points in Kapaau
	5/12/2017		Added three (3) address points in Captain Cook
	5/12/2017		Added one (1) address point in Hakalau
	5/12/2017		Added seven (7) address points in Hilo
	5/12/2017		Added two (2) address points in Holualoa
	5/12/2017		Added six (6) address points in Honokaa
	5/12/2017		Added fourteen (14) address points in Kailua Kona
	5/12/2017		Added fourteen (14) address points in Kamuela
	5/12/2017		Added nineteen (19) address points in Keaau
	5/12/2017		Added eight (8) address points in Kurtistown
	5/12/2017		Added eight (8) address points in Mountain View
	5/12/2017		Added three (3) address points in Naalehu
	5/12/2017		Added one (1) address point in Ninole
	5/12/2017		Added thirteen (13) address points in Ocean View
	5/12/2017		Added ten (10) address points in Pahoa
	5/12/2017		Added four (4) address points in Papaikou
	5/12/2017		Added seven (7) address points in Volcano
5/12/2017		Completed monthly update on address points	
5/10/2017		Added one (1) address point in Pauilo	
		<b>05/09/17</b>	
5/8/2017			Corrected one (1) address in Pepeekeo
5/8/2017			Corrected one (1) address in Honomu

# Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

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		
<b>CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH &amp; RESPONSE (Listed Alphabetically)</b>			
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			
Medic Districts			

# Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

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			
<b>CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH &amp; RESPONSE (Listed Alphabetically)</b>				
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		<b>05/23/17</b>		
	5/17/2017		Added twenty-five (25) new common places in Keauhou	
Police Beats				
Police Districts				
Police Response Areas				
Police Stations				
Post Offices				
Schools				
Street Centerlines	5/31/2017		Spatially corrected one hundred thirteen (113) street segments in Hilo	
	5/30/2017		Spatially corrected one hundred ninety-three (193) streets segments in Hilo	
	5/26/2017		Spatially corrected one hundred twenty-seven (127) street segments in Hilo	
	5/25/2017		Deleted one (1) street segment in Hilo	
	5/25/2017		Spatially corrected one hundred eighty-two (182) street segments in Hilo	
	5/24/2017		Spatially corrected one hundred forty-eight (148) street segments in Hilo	
			<b>05/23/17</b>	
	5/23/2017		Spatially corrected two hundred twenty-four (224) street segments in Hilo	
	5/22/2017		Deleted three (3) street segments in Keaau	
	5/22/2017		Spatially corrected one hundred fifty-three (153) street segments in Hilo	
	5/19/2017		Spatially corrected one hundred eighty (180) street segments in Hilo	
	5/18/2017		Added sixteen (16) street segments in Keaau	
	5/18/2017		Split seven (7) street segments in Keaau	
5/18/2017		Spatially corrected one hundred thirteen (113) street segments in Hilo		

# Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

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		
<b>CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH &amp; RESPONSE (Listed Alphabetically)</b>			
Street Centerlines	5/17/2017		Corrected two (2) street type in Pahoa
	5/17/2017		Added seven (7) street segments in Keaau
	5/17/2017		Split five (5) street segments in Keaau
	5/17/2017		Spatially corrected one hundred two (102) street segments in Keaau
	5/16/2017		Spatially corrected one hundred thirty-eight (138) street segments in Keaau
	5/15/2017		Spatially corrected fifty-seven (57) street segments in Keaau
	5/12/2017		Spatially corrected eight (8) street segments in Keaau
	5/12/2017		Completed monthly update on street centerlines
	5/11/2017		Spatially corrected eighty-eight (88) street segments in Keaau
	5/11/2017		Corrected range for two (2) street segments in Kamuela
	5/11/2017		Added seven (7) ranges in Kailua Kona
	5/11/2017		Added one (1) range in Holualoa
	5/11/2017		Added one (1) range in Honokaa
	5/11/2017		Added six (6) street segments in Kailua Kona
	5/11/2017		Split one (1) street segment in Kailua Kona
	5/10/2017		Added three (3) street segments in Kurtistown
	5/10/2017		Split four (4) street segments in Kurtistown
	5/10/2017		Spatially corrected fifty-two (52) street segments in Kurtistown
	5/10/2017		Spatially corrected seventy (70) street segments in Keaau
	5/10/2017		Added three (3) street segments in Paauilo
		<b>05/09/17</b>	
	5/9/2017		Spatially corrected one hundred seven (107) street segments in Kurtistown
	5/8/2017		Spatially corrected one hundred ninety-two (192) street segments in Kurtistown
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors			
WSP Cell Towers			

# Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

## GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVES

### GIS KEY ACTIVITIES/UPDATES

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

Date	Key Activities/Updates
5/23/2017	Spillman deliverable which included the following updated layers: Address Points, Common Names Alt Table, Display Streets, Points of Interest, POI Alt Names, Street Centerlines, Street Alt Names, Street Routes
5/23/2017	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Points of Interest, and Street Centerlines
5/9/2017	Spillman deliverable which included the following updated layers: Address Points, Common Names Alt Table, Display Streets, Points of Interest, POI Alt Names, Street Centerlines, Street Alt Names, Street Routes
5/9/2017	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Points of Interest, and Street Centerlines

## 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 **May 12, 2017**. Results are as follows:

HAWAII COUNTY	Address Points Layer	Street Centerlines Layer
New Addresses Added	123	
Addresses Removed	0	
Address Street Name Changes	0	
Address Street Number Changes	0	
New Street Segments Added		6
Street Segments Removed		0
Street Segment Range Changes		3
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

May 1, 2017 – May 31, 2017

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## POLICE BEAT REVIEW

Beginning in late 2015 and continuing in January 2016, Akimeka has been conducting a Police Beats review process as part of an annual update and in addition, preparation for Hawaii County's CAD system deployment. During this time, the Police Beats are also reviewed with the written descriptions of the Hawaii Police Beat Boundaries, whereby corrections are made to the Police Beat GIS layer where applicable in an effort to synchronize the GIS layer with the written descriptions and provide the 911 centers in Hawaii with a more accurately defined boundary layer which align with operational jurisdictions.

1. To better service the public safety needs of Hawaii County, Akimeka compared the written descriptions of the Hawaii Police Beats as recorded in Document Number GO 204 with an effective date of June 27, 2011, and made corrections to the Police Beats GIS layer where needed. In addition, Akimeka has been documenting any recommendations for document description updates.
  - a. Akimeka reviewed the written descriptions for the Hawaii Police Beats and cross referenced it to the Police Beats GIS layer. The boundaries to all seventy-six police beats as well as the area falling within the jurisdiction of the Hawaii Volcanoes National Park were edited for greater accuracy.
  - b. Akimeka has documented all potential discrepancies between the written descriptions and GIS layer for a thorough review upon completion. Akimeka has also produced several maps to better illustrate some of the larger discrepancies.
  - c. Upon completion of the GIS editing procedures, Akimeka will participate in a Police Beat review process with the Hawaii Police Department to further refine the boundaries to the Police Beats GIS layer and the written descriptions for those boundaries. This process will finalize the synchronization between the GIS layer and the written descriptions; provide additional precision and accuracy to both the GIS layer and written descriptions; and eliminate all discrepancies so that confusion and/or misinterpretation of those boundaries do not hinder public safety needs.
  - d. During the month of February 2016, Akimeka corrected the boundaries to the GIS layers that are associated with the Police Beats so that proper alignment would occur between the associated layers. This included correcting boundaries to six ESNs and three Police Districts. Those corrected layers were delivered to MapFlex and made available to the dispatchers on February 17<sup>th</sup>.
  - e. During the month of March 2016, Akimeka corrected the boundaries to the Police Response Areas so they would be aligned properly with the Police Beats and be topologically error free. This included correcting the boundaries to all seventy-six police response areas as well as the area falling within the jurisdiction of the Hawaii Volcanoes National Park.
  - f. During the month of August 2016, Akimeka is awaiting the final review process of the Police Beat layer with the Hawaii Police Department. Besides the Police Beat layer, the review process with the Hawaii Police Department will also likely include a review process of the Police Districts layer as well as the Police Response Areas layer.
  - g. During the month of September 2016, Akimeka began creating a series of large-scale maps to illustrate in detail the police beat boundaries. The maps are anticipated to be completed during October 2016, at which time they will be made available for examination by the Hawaii Police Department for accuracy.
  - h. During the month of October 2016, Akimeka created the first draft of a series of seventy-seven large-scale maps – one map for each police beat as well as one map of the entire county. Besides police beat boundaries, streets, and aerial imagery, the maps also contain points of interest that are referenced within the written descriptions of the Hawaii

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

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Police Beat Boundaries, as well as other important features such as high schools, colleges, and major attractions so that the maps will be easier to validate the accuracy of. After reviewing the maps, Akimeka recognized enhancements that could be made to them to further their value as a communication device so that a more thorough review process can take place, which will ultimately result in greater informed decision making in regards to boundary and written description revisions.

- i. During the month of December 2016, Akimeka proposed boundary modifications to Police Beats 148, 430, and 435 to the Hawaii Police Department. The proposed boundary modifications would have the affected beats intersect between the new Daniel K Inouye Hwy and Mile Marker 43, rather than the southern boundary of the Kilohana Girl Scout Camp. To help illustrate the boundary modifications, Akimeka sent the Hawaii Police Department a map detailing the current and proposed boundaries of the area that would be affected by the change. The Hawaii Police Department notified Akimeka that such a change would require a process of reviews and proposals. Akimeka is now awaiting the results of this process, at which time the final drafts of the Police Beat Maps will be completed and ready for examination.
- j. During the month of January 2017, Akimeka was awaiting the results of the reviews and proposals process by the Hawaii Police Department.
- k. During the month of February 2017, Akimeka was awaiting the results of the reviews and proposals process by the Hawaii Police Department.
- l. During the month of March 2017, Akimeka was awaiting the results of the reviews and proposals process by the Hawaii Police Department.
- m. During the month of April 2017, Akimeka was awaiting the results of the reviews and proposals process by the Hawaii Police Department.
- n. During the month of May 2017, Akimeka was awaiting the results of the reviews and proposals process by the Hawaii Police Department.

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### CAD SYSTEM DEPLOYMENT

Pending further developments.

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### MAPFLEX SYSTEM

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

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

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

1. Akimeka delivered GIS data to the MapFlex system on the following dates in May 2017
  - a. **Hawaii County** – May 9<sup>th</sup>, 2017 and May 23<sup>rd</sup>, 2017
  - b. **Maui County** – May 10<sup>th</sup>, 2017 and May 24<sup>th</sup>, 2017
  - c. **Kauai County** – May 11<sup>th</sup>, 2017 and May 25<sup>th</sup>, 2017
  - d. **Honolulu** – May 12<sup>th</sup>, 2017 and May 26<sup>th</sup>, 2017

### MAPFLEX ISSUES

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

DATE	ISSUE	DESCRIPTION	STATUS
7/24/2016	Automatic Uploads Malfunctioning	It was identified that the Automatic uploads were creating issues within the MapFlex systems, where locators were not being published, etc. as a result of a scripting error at West. Manual uploads have been taking place of the GIS as necessary and agreed by all PSAPs.	Pending, however as of April 2017, West/HT has decided to implement a process to upload data the following week after GIS uploads (manually)
7/24/2016	Blank MapFlex Screen	The MapFlex screen went blank and there was no mapping capability, similar to what had occurred with Maui PD. Resulted from West's automatic update script. All of the PSAPs agreed to hold off on all GIS updates in MapFlex until West has resolved the issue.	Resolved (Nov 2016) There have been no reported blank screens
8/2016	Wireless Addresses	MapFlex system began displaying wireless information incorrectly. MapFlex system is doing a reverse query for additional information in the GIS and this is overriding the ALI information with the closest address in the GIS.	Partially Resolved (Nov 2016) The overriding ALI with updated Lat/Longs from the GIS is still occurring
8/2016	Text-to-911 Icons	Icons for text calls have stopped displaying. Previously when calls came in as a text call, there would be an icon displaying "TEXT" where the call was plotted.	Resolved (Nov 2016)
11/2016	Phase I Display	Wireless Phase I calls plotting at centroid of coverage area and landing in the ocean. After installation of new MapFlex version to correct other issues, the configurations for Wireless Phase I were not set up properly by West, in which the mapping did not point to the correct information in MapFlex.	Resolved (Dec 2016)
11/2016	Wireless Confidence	Sprint calls coming across with unusually high confidence. Coordination is taking place with Sprint and West. West provides the PDE services for Sprint.	Pending
1/18/2017	RDC MapFlex	During a meeting between Akimeka and RDC, it was identified that HPD GIS data was contained within the RDC	Pending – Notified by West in Feb 2017 that they are still

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

		<p>MapFlex and was missing RDC's data. Due to the proprietary nature of the GIS data provided by Akimeka for the civilian PSAP's mapping systems and the confidential information contained to support HPD operations, it was concerning. Actions were taken to request West to stop this and to pull RDC's archive data. West has since replied that they never knew RDC was military and functioned separately from the civilian PSAPs.</p> <p>HPD, RDC, and Akimeka have taken corrective actions to construct GIS data that will be used as a baseline for the RDC and to remove sensitive information supplied for the RDC MapFlex.</p>	<p>planning this with HT and should be able to move forward soon.</p>
3/22/2017	ArcGIS Address Locator	<p>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.</p>	<p>A new SP 5.4 update by West is aimed to correct this issue.</p>
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>West is currently researching their configurations (May 2017)</p>
5/17/2017	Landline Calls Producing X/Y on calls	<p>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.</p>	<p>West is looking into this (May 2017)</p>

### 4. SERVICE REQUESTS TRANSACTIONS

#### OPEN SERVICE REQUESTS – MAY 2017

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

#	Date	Ticket #	Description	PSAP	Urgency	Comments
1	07/13/16	856	Updated Address	FIRE	Normal	TN has been referred to telco via email by West Safety Services (Intrado). RMS
2						
3						

Note\* There is one (1) opened service request pending for May 2017.

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

HAWAII COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2017	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2016 Carryover*			1						
January	3	3	1	2	2	0	0	1	1
February	2	2	1	2	2	0	0	0	0
March	1	1	1	1	1	0	0	0	0
April	1	1	1	0	0	0	0	1	1
May	11	11	1	8	8	0	0	3	3
June									
July									
August									
September									
October									
November									
December									
<b>TOTAL</b>	<b>18</b>	<b>18</b>	<b>1</b>	<b>13</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>5</b>

<b>Note:</b>	* The 2016 Carryover row indicated the number of Service Requests that were opened in 2016 and brought forward into 2017 in an effort to track the service request until completion. Detailed information on service tickets are available upon request.
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<b>Definitions:</b>	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

### 5. E9-1-1 DATABASE SYNCHRONIZATION

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

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**(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 quarterly database synchronization audit for Hawaii County in **May 2017**.

The database synchronization effort included comparing Hawaii County's 9-1-1 MSAG against its GIS Street Centerline data. A total number of **4,520** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on May 1, 2017 for Hawaii County are reported below.

Database synchronization should be part of an ongoing and continuous process to ensure that the databases remain current and synchronized. Since neither database is static in nature, the synchronization process will never yield a 100 percent match rate. As such, NENA's recommended minimum match rate is **98%**.

The database synchronization process is essential to monitor and ensure the level of accuracy of the E9-1-1 databases and prepare for Next Generation 9-1-1 (NG9-1-1). As such, Akimeka will perform database synchronization audits on a quarterly basis as part of its ongoing maintenance process. Results of the database synchronization audit will be included and reported in the Monthly Status Report (MSR) accordingly.

### AUDIT SUMMARY RESULTS – MAY 2017

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of August 1, 2016		As of November 1, 2016		As of February 1, 2017		As of May 1, 2017	
		9-1-1 MSAG Dated 08-01-16		9-1-1 MSAG Dated 11-01-16		9-1-1 MSAG Dated 02-01-17		9-1-1 MSAG Dated 05-01-17	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
<b>Total 9-1-1 MSAG Records Reviewed</b>		4,482		4,488		4,503		4,520	
<b>Less: 9-1-1 MSAG Exception Records</b>	(1)	49	1.1%	48	1.1%	46	1.0%	51	1.1%
<b>Net 9-1-1 MSAG Records Eligible for Comparison</b>		4,433		4,440		4,457		4,469	
<b>Total 9-1-1 MSAG Records Match (9-1-1 MSAG – GIS Match – No Corrections Required)</b>		4,431	100.0%	4,438	100.0%	4,446	99.8%	4,460	99.8%
<b>9-1-1 MSAG -- GIS No Match Minor Correction Required</b>	(2)	2	0.0%	2	0.0%	9	0.2%	8	0.2%
<b>9-1-1 MSAG Record With No GIS Record</b>	(3)	0	0.0%	0	0.0%	2	0.0%	1	0.0%
<b>Total 9-1-1 MSAG Records No Match</b>		2	0.0%	2	0.0%	11	0.2%	9	0.2%

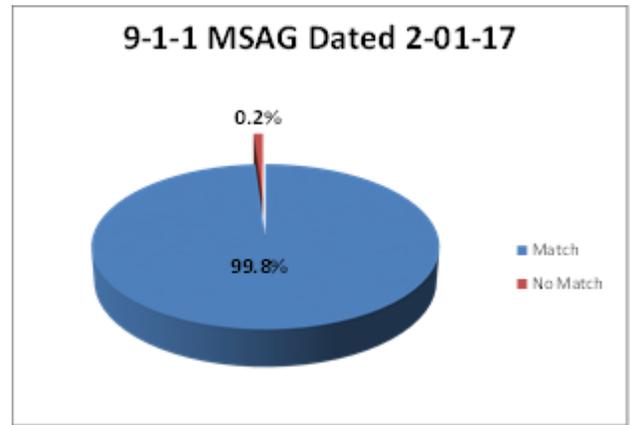
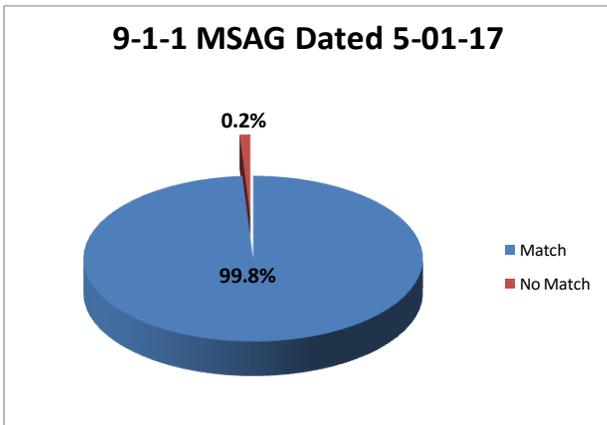
**Notes:**

- (1) 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.
- (2) 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.).
- (3) An MSAG Record that does not have a corresponding GIS Record and will require additional research and validation. The GIS Section will assist with this effort.

AUDIT SUMMARY RESULTS COMPARISON –MAY 1, 2017 VS FEBRUARY 1, 2017

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017



**NOTE:**

**Hawaii County’s level of accuracy or 9-1-1 Match percentage remained constant from 99.8% as of May 1, 2017 to 99.8% as of February 1, 2017**  
**NENA Recommended Match Rate = 98%**

**AUDIT SUMMARY RESULTS**

**COMPARISON NOTES:**

- ❖ There continues to be a tremendous work effort to synchronize the MSAG and GIS data. Akimeka continues to work closely with County Planning to address problem areas. Hawai`i County has worked very hard to assign addresses and name and range street centerlines which have helped facilitate Akimeka’s synchronization efforts.
- ❖ “MSAG - MSAG with Missing GIS Records” decreased from eleven (11) to nine (9) records from February 2017 to May 2017. MSAG records with missing record were due primarily to the verification of the MSAG records against multiple GIS databases to determine if the roads are existing within Hawaii County.
- ❖ “MSAG - GIS Minor Corrections” decreased from nine (9) to eight (8) records from February 2017 to May 2017. The non-match condition of the nine records are a result in which MSAG records submitted in 9-1-1 Net were not completed prior to the end of month. The MSAG section will monitor these records to ensure they are processed in 9-1-1Net prior to the August 2017 re-analysis
- ❖ “GIS Record with No Matching MSAG Record” decreased from eight (8) to five (5) records from February 2017 to May 2017. This includes GIS records that have no MSAG records, and/or GIS records that do not match the MSAG record exactly.
- ❖ “GIS Record with No MSAG Record” decreased from two (2) to zero records from February 2017 to May 2017. This was primarily the result of edits made to the GIS Street Centerlines layer in order to meet new NG9-1-1 requirements.
- ❖ Ongoing maintenance is critical to ensure the database synchronized level of address accuracy is maintained each time an MSAG or GIS record is “touched”.

**INVALID MSAG STREETS AND ADDRESS RANGES – ESN X99 RECORDS**

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

At the request of the County of Hawai‘i Chief of Police, Hawaiian Telcom, Inc. (HTI) provided Hawai‘i 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. Results of the data provided are as follows:

HAWAII	Invalid MSAG Records			
	9-1-1 MSAG Dated 02-01-17		9-1-1 MSAG Dated 05-01-17	
	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records
<b>ESN 299</b>	<b>398</b>	<b>8.8%</b>	<b>356</b>	<b>7.9%</b>

These invalid MSAG records represent **7.9%** of the Total MSAG records for Hawai‘i County. The individual ALI records associated with these records are provided below.

TN CRs are submitted by Akimeka when valid MSAG addresses are identified and validated against the GIS data. Akimeka will continue to investigate and report on these ESN 299 MSAG records as a separate project and add-on to the Database Synchronization quarterly report.

## Hawaii County E9-1-1 Status Report

May 1, 2017 – May 31, 2017

As part of Akimeka’s ongoing database synchronization efforts, Akimeka reviewed and summarized the ALI discrepancy reports by community for Hawai‘i County. As of May 26, 2017, **1,217** ESN 299 records, representing **1.7%** of Hawai‘i County’s total ALI records, require research and corrective action, if needed. These ALI discrepancy reports may result in a No Record Found (NRF) condition during a 9-1-1 call.

