August 1, 2017 – August 31, 2017



August 1, 2017 – August 31, 2017

AKIMEKA | HIGH PRIORITY, HIGH IMPACT.

TABLE CONTENTS

1.	PSAP Operations	5
Ģ	9-1-1 Call Volume Hawaii County PSAPS – August 2017	5
	Call Volume Hawaii County PSAP Notes:	5
Ģ	9-1-1 Call Volume – Calendar Year 2017	5
Ģ	9-1-1 Call Volume by Agency – August 2017	6
Ģ	9-1-1 Call Volume by Agency – Calendar Year 2017	6
	PSAP Operation Notes:	6
]	For your Information	7
-	Text to 911 – Current Month – August 2017	7
	Note:	7
,	Wireless PSAP Testing – August 2017	8
	Notes:	8
2.	MSAG (Master Street Address Guide)	9
]	MSAG Transactions Current Month/Year – August 2017	9
	MSAG Current Month Notes:	10
	TELEPHONE RECORD (ALI) Transactions current month notes:	10
	OPEN TELEPHONE RECORD (ALI) discrepancy Status:	10
-	FNCR (Telephone Number Change Request) Current Status – August 2017	11
	Note:	11
]	Dispatchable Location – Status as of – August 2017	12

August 1, 2017 – August 31, 2017

	Narrative:	12
	Spectrum (Charter) 9-1-1 VoIP Database Verification Project - August 2017	13
3.	Geographic Information System (GIS) – August 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
	Mapping Layers Updated (Part V)	18
	Geographic Information System (GIS) Narratives	19
	GIS Key Activities/Updates	19
	Address Points and Street Centerlines Update Comparison	20
	Note:	20
	Police Beat Review	20
	CAD SYSTEM DEPLOYMENT	22
	MapFlex System	22
	MapFlex Issues	23
	DATE	23
	ISSUE	23
	DESCRIPTION	23
	STATUS	23
4.	Service Requests Transactions	24
	Open Service Requests – August 2017	25
	Note*	25
	Service Request Year-to-Date (YTD) Summary – 2017	25
5.	E9-1-1 Database Synchronization	26
	Audit Summary Results – August 2017	27



August 1, 2017 – August 31, 2017

Audit Summary Results Comparision - August 1, 2017 vs May 1, 2017	28
Note:	28
Audit Summary Results	
Comparison Notes: Invalid MSAG Streets and Address Ranges – ESN x99 Records Automatic Location Identification (ALI) Discrepancy Report	2

August 1, 2017 – August 31, 2017

1. PSAP OPERATIONS

9-1-1 CALL VOLUME HAWAII COUNTY PSAPS – AUGUST 2017

(Source: West Safety Services Viper system

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

	9-1-1 Call Volume																
HAWAII COUNTY PSAPs		Wir	eline		Wire	less		VC	OIP	Calls No		Admir	Calls	Aband Ca		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
AUG	16,545	2,879	17.40%	11,692	70.67%	41.76%	58.24%	847	5.12%	14	0.08%	0	0.00%	1,113	6.73%	0	0.00%

CALL VOLUME HAWAII COUNTY PSAP NOTES:

The percentage of Wireless Phase 2 calls (58.24%) has surpassed the number of Wireless Phase 1 calls (41.76%) in August 2017.

3911 Calls with No Ali in August 2017 = 0.08% - Statewide average for 2016 = 0.15%

9-1-1 CALL VOLUME - CALENDAR YEAR 2017

	9-1-1 Call Volume																
	AII 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	0.00%
APR	15,277	2,981	19.51%	10,339	67.68%	42.99%	57.01%	852	5.58%	20	0.13%	0	0.00%	1,085	7.10%	0	0.00%
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	15,204	2,906	19.11%	10,439	68.66%	41.08%	58.92%	804	5.29%	18	0.12%	0	0.00%	1,037	6.82%	0	0.00%
JULY	16,812	3,133	18.64%	11,694	69.56%	41.93%	58.07%	837	4.98%	16	0.10%	0	0.00%	1,132	6.73%	0	0.00%
AUG	16,545	2,879	17.40%	11,692	70.67%	41.76%	58.24%	847	5.12%	14	0.08%	0	0.00%	1,113	6.73%	0	0.00%
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	127,174	23,343		87,943				6,796		162		0		8,930		0	
MON AVG	15,897	2,918	18.38%	10,993	69.13%	43.24%	56.76%	850	5.34%	20	0.13%	0	0.00%	1,116	7.03%	0	0.00%

Page **5** of **30**

August 1, 2017 – August 31, 2017

9-1-1 CALL VOLUME BY AGENCY - AUGUST 2017

		9-1-1 Call Volume by Agency													
2017		Hawaii	Police Dep	artment	Hawaii Fire Department										
2017	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					
August	13,191	79.73%	0	1,082	0	2,241	13.54%	0	31	0					

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

				9-1-1	Call Volui	me by Agency						
2047		Hawaii	Police Dep	artment		Hawaii Fire Department						
2017	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		
Мау	12,605	79.31%	0	1,053	0	2,207	13.89%	0	29	0		
June	11,997	78.91%	0	1,015	0	2,170	14.27%	0	22	0		
July	13,180	78.40%	0	1,112	0	2,500	14.87%	0	20	0		
August	13,191	79.73%	0	1,082	0	2,241	13.54%	0	31	0		
September												
October												
November												
December												
YTD	101,557		0	8,709	0	17,811		0	221	0		
MON AVG	12,695	79.84%	0	1,089	0	2,226	13.99%	0	28	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.



August 1, 2017 – August 31, 2017

FOR YOUR INFORMATION

	FYI For Your Information											
PSAP Operations												
	Statewide 911 Cal	l Volumes for 2016	& 2015 compare									
PSAP												
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	Total 1,402,759 100.00% 1,436,997 100.00%											
*Statewide average do	oes not include Militar	y 911 calls.										

TEXT TO 911 - CURRENT MONTH - AUGUST 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 Ha	TEXT TO 911 Hawaii County PSAPs 2017										
Month	Received	Received at									
IVIOTILIT	at Police	Fire									
January	27	1									
February	37	2									
March	32	1									
April	25	2									
May	24	1									
June	29	2									
July	26	3									
August	30	4									
September											
October											
November											
December											
YTD	230	16									
Monthly Avg.	28.75	2.00									

Page 7 of 30

August 1, 2017 – August 31, 2017

WIRELESS PSAP TESTING - AUGUST 2017

	HAWAII COUNTY - AUGUST 2017												
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:							
08/15/17	T-Mobile	1	3	Hawaii PSAP	Pass	3 sectors to be re-tested							
08/17/17	T-Mobile	1	1	Hawaii PSAP	Pass	1 sector to be re-tested							
08/22/17	AT&T	1	3	Hawaii PSAP	Pass								
08/29/17	Verizon	1	3	Hawaii PSAP	Pass								
08/30/17	T-Mobile	2	4	Hawaii PSAP	Pass								

NOTES:

• There were five (5) scheduled Wireless 911 Tests for the month of August, 2017.

August 2017

Hawaii County E9-1-1 Status Report

August 1, 2017 – August 31, 2017

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - AUGUST 2017

		9-1-1 TRANSACTIONS											
HAWAII COUNTY	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Suk	ALI Submitted		Open ALI Discrepancy Records						
2017		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	Affected				
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	272	159	35	74	4	165	1	0	368				
JULY	270	150	26	93	1	164	0	0	259				
AUGUST	265	222	11	31	1	158	0	0	262				
SEPTEMBER													
OCTOBER													
NOVEMBER													
DECEMBER													
TOTAL YTD	2,226	1,371	213	619	23				3,399				
AVG PER MONTH	278	171	27	77	3				425				

Definitions

- (A) **D**ispatchable **L**ocation 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) **M**aster **S**treet **A**ddress **G**uide Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (C) **T**elephone **N**umber **C**hange **R**equest 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) **A**utomatic **L**ocation **I**nformation **D**iscrepancy **R**ecord 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



August 1, 2017 – August 31, 2017

MSAG CURRENT MONTH NOTES:

A total of **265** MSAG transactions were processed in 9-1-1 Net during the current month. Eleven (**11**) 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 262 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

253 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. One (1) ALI DR was submitted as the result of a 9-1-1 call from a residence in Naalehu. Hawaii County Fire Department submitted this change request to Akimeka to update the customer information and the discrepancy was corrected in 9-1-1 Net and by Spectrum via email.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are currently 158 Open TN CR Transactions.
- Refer to chart in the next section "TNCR Current Status"

158 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 164 Referred records.

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

August 1, 2017 – August 31, 2017

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS - AUGUST 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	158	112	28	18						

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.

<u>TOTAL UNOPENED TNCR RECORDS STATUS</u> - The request is submitted by Akimeka on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.

August 2017

Hawaii County E9-1-1 Status Report

August 1, 2017 – August 31, 2017

DISPATCHABLE LOCATION - STATUS AS OF - AUGUST 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 2,490 Dispatchable Locations processed to date. There were 222 Dispatchable locations submitted and processed in August, 2017.

Dispatchable Location						
2017	Common Name Place	TNCR*	Transactions Processed**			
Quarter 3	MSAG Address	Transactions Submitted				
Quarter 2 Carryover		2,120	2,120			
	Kolea Resort, 691000 Kolea Kai Cir, Waikoloa	49	49			
July	Vista Waikoloa, 691010 Keana Pl, Waikoloa	51	51			
	Kona Reef, 755888 Alii Dr, Kailua Kona	48	48			
	Aston Waikoloa, 690555 Waikoloa Beach Dr	52	52			
A	Hilton Waikoloa, 690425 Waikoloa Beach DR	140	140			
August	Mauna Lani Shops, 681330 Mauna Lani Dr	15	15			
	Queens Shops Waikoloa, 690201 Waikoloa Beach Dr	15	15			
September						
Total		370	370			
YTD Total		2,490	2,490			

Hawaii County

August 2017

Hawaii County E9-1-1 Status Report

August 1, 2017 – August 31, 2017

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

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

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

*Spectrum (Charter) 9-1-1 VoIP Database Verification Project						
	TOTAL RECORDS	TOTAL RECORDS MATCHING &	TOTAL RECORDS	NON MATCHING	PERCENT COMPLETED	
DC A D	SUBMITTED BY		NOT	RECORDS	COMILETED	
PSAP	SPECTRUM	911 DATABASES	MATCHING			
	(A)	(B)		BY AKIMEKA		
				(C)		
HAWAII County	22,044	21,638 (98%)	406	204	50.25%	
KAUAI County	8,936	8,695 (97%)	241	200	82.99%	
MAUI County	18,256	17,517 (96%)	739	599	81.06%	
OAHU Cilivian	87,414	85,329 (98%)	2,085	66	3.17%	
OAHU Military	3,663	710 (19%)	2,953	153	5.18%	
TOTAL	140,313	**133,889	6,424	1,222	44.5%	

^{*} Spectrum VoIP Database received on June 21st, 2017

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

Hawaii County

^{**} Akimeka provided VoIP Records with Latitude/Longitude coordinates

August 1, 2017 – August 31, 2017

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – AUGUST 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 Created/ Edits Performed	Date GIS Delivered	Other/Remarks	
Cl	RITICAL 9-1-1 I	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE	
		(Liste	d Alphabetically)	
	8/31/2017		Added six (6) Address Points for Ocean View	
	8/31/2017		Added three (3) Address Points for Naalehu.	
	8/31/2017		Added one (1) Address Point for Kailua Kona.	
	8/31/2017		Added one (1) Address Point for Kealakekua.	
	8/30/2017		Added six (6) Address Points for Captain Cook.	
	8/30/2017		Added twelve (12) Address Points for Ocean View.	
	8/30/2017		Added one (1) Address Point for Kealakekua.	
	8/30/2017		Added three (3) Address Points for Holualoa.	
	8/30/2017		Added one (1) Address Point for Keauhou.	
	8/30/2017		Added nine (9) Address Points for Kailua Kona.	
	8/30/2017		Added five (5) Address Points for Waikoloa.	
	8/30/2017		Added eight (8) Address Points for Kamuela.	
	8/30/2017		Added two (2) Address Points for Hawi.	
	8/30/2017		Added one (1) Address Point for Kapaau.	
	8/30/2017		Added three (3) Address Points for Honokaa.	
	8/30/2017		Added one (1) Address Point for Paauilo.	
A 11 D.:	8/30/2017		Added one (1) Address Point for Ookala.	
Address Points	8/30/2017		Added one (1) Address Point for Ninole.	
	8/30/2017		Added three (3) Address Points for Pepeekeo.	
	8/30/2017		Added six (6) Address Points for Volcano.	
	8/30/2017		Added six (6) Address Points for Mountain View.	
	8/30/2017		Added eleven (11) Address Points for Kurtistown.	
	8/30/2017		Added one (1) Address Point for Keaau.	
		08/29/17		
	8/29/2017		Added three (3) Address Points for Kurtistown.	
	8/29/2017		Added fourteen (14) Address Points for Keaau.	
	8/29/2017		Added eight (8) Address Points for Pahoa.	
	8/28/2017		Added six (6) Address Points for Keaau.	
	8/28/2017		Added twenty four (24) Address Points for Pahoa.	
	8/25/2017		Added nine (9) Address Points for Hilo.	
	8/25/2017		Added one (1) Address Point for Mountain View.	
	8/25/2017		Added three (3) Address Points for Volcano.	
	8/25/2017		Added one (1) Address Point for Pahoa.	
	8/24/2017		Added one (1) Address Point for Keaau.	

Page 14 of 30



August 1, 2017 – August 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 Created/ Edits Performed	Date GIS Delivered	Other/Remarks
Cl	RITICAL 9-1-1 F	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
		(Liste	d Alphabetically)
	8/24/2017		Added six (6) Address Points for Hilo.
	8/24/2017		Added one (1) Address Point for Volcano.
	8/24/2017		Corrected one (1) Address Point for Holualoa.
	8/24/2017		Corrected two (2) Address Points for Pahoa.
	8/24/2017		Corrected one (1) Address Point for Honomu.
	8/17/2017		Added one (1) Address Point for Kurtistown.
Address Points	8/16/2017		Corrected one (1) Address Point for Papaaloa.
		08/15/17	
	8/11/2017		Added one (1) Address Point for Holualoa.
	8/4/2017		Added one (1) Address Point for Hilo.
		08/01/17	
	8/1/2017		Added two (2) Address Points for Captain Cook.
	8/1/2017		Added one (1) Address Point for Hilo.
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation			
Centers			
Emergency Shelters			
		08/15/17	
ESZ/ESN	8/15/2017		Corrected ESN 204, 205, and 208
Fire Beats			
Fire Districts			
		08/29/17	
Fire Response Areas	8/29/2017		Corrected FRA for 31,32, 25, 38, 22, and 34.
Fire Stations			



August 1, 2017 - August 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 Created/ Edits Performed	Date GIS Delivered	Other/Remarks
CI			Y LAYERS FOR DISPATCH & RESPONSE d Alphabetically)
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			
Medic Response Areas			
Medic Stations			
Medical Facilities			
Milepost Markers			
		08/29/17	
	8/29/2017		Corrected MSAG Boundary for Hawi and Kapaau.
MSAG Communities	8/28/2017		Corrected MSAG Boundary for Hawi and Kapaau.
WISAG Communities		08/15/17	
	8/15/2017		Corrected MSAG Boundary for Kamuela and Honokaa.
		08/01/17	
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
Points of Interest			



August 1, 2017 – August 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 Created/ Edits Performed	Date GIS Delivered	Other/Remarks	
Cl	RITICAL 9-1-1 P		Y LAYERS FOR DISPATCH & RESPONSE	
		(Liste	d Alphabetically)	
		08/29/17		
	8/29/2017		Corrected Police Beats Boundary for 533 and 534.	
	8/28/2017		Corrected Police Beats 431, 430, 532, 533, and 534.	
Police Beats	8/16/2017		Corrected Police Beats for 533 and 534.	
Tonce Beats		08/15/17		
	8/15/2017		Corrected Police Beats for 334, 430, 431, 336, 532, 533, and 534.	
	8/4/2017		Corrected Beat Boundaries for 335 and 336.	
		08/01/17		
Police Districts				
Police Response Areas				
Police Stations				
Post Offices				
Schools				
	8/31/2017		Spatially Corrected forty three (43) Street Centerlines for Kamuela.	
		08/29/17		
	8/25/2017		Spatially Corrected ninety one (91) Street Centerlines for Kamuela.	
	8/24/2017		Spatially Corrected sixty (60) Street Centerlines for Kamuela.	
	8/21/2017		Spatially Corrected ninety three (93) Street Centerlines for Kamuela.	
	8/18/2017		Spatially Corrected twenty five (25) Street Centerlines for Hawi.	
	8/18/2017		Spatially Corrected ten (10) Street Centerlines for Kamuela.	
	8/17/2017		Spatially Corrected sixty three (63) Street Centerlines for Hawi.	
	8/17/2017		Added one (1) Street Centerline for Kamuela.	
Street Centerlines	8/17/2017		Spatially Corrected two (2) Street Centerlines for Kamuela.	
Street Centermies	8/16/2017		Spatially Corrected sixty one (61) Street Centerlines for Hawi.	
		08/15/17		
	8/14/2017		Spatially Corrected twenty one (21) Street Centerlines for Kapaau.	
	8/14/2017		Spatially Corrected thirty one (31) Street Centerlines for Hawi.	
	8/14/2017		Spatially Corrected three (3) Street Centerlines for Honokaa and Updated Ranges and Address Points.	
	8/11/2017		Spatially Corrected forty (40) Street Centerlines for Kapaau.	
	8/10/2017		Spatially Corrected seventy nine (79) Street Centerlines for Kapaau.	
	8/9/2017		Spatially Corrected seventy three (73) Street Centerlines for Kapaau.	
	8/8/2017		Spatially Corrected nine (9) Street Centerlines for Kapaau.	

August 1, 2017 - August 31, 2017

MAPPING LAYERS UPDATED (PART V)

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 Created/	Date GIS Delivered	Other/Remarks	
	Edits Performed	Benvereu		
CF	RITICAL 9-1-1 I	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE	
		(Liste	d Alphabetically)	
	8/8/2017		Spatially Corrected twenty (20) Street Centerlines for Honokaa.	
	8/7/2017		Corrected thirty (30) Street Centerlines for Honokaa.	
	8/4/2017		Spatially Corrected twenty nine (29) Street Centerlines in Honokaa.	
Street Centerlines	8/3/2017		Corrected thirty one (31) Street Centerlines for Honokaa.	
	8/2/2017		Corrected twenty (20) Street Centerlines for Honokaa	
		08/01/17		
	8/1/2017		Corrected three (3) Street Centerlines for Honokaa	
Subdivisions				
Tow Jurisdictions				
Tsunami Evacuation Zones				
Tsunami Heights				
Waste Water Plants				
WSP Cell Sectors		08/29/17		
WOI OCH OCCIOIS	8/29/2017		Per AT&T CRS	
WSP Cell Towers		08/29/17		
war cen rowers	8/29/2017		Per AT&T CRS	

Page 18 of 30

August 1, 2017 – August 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
8/29/2017	Completed monthly update on address points
8/29/2017	Completed monthly update on street centerlines
8/29/2017	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Points of Interest, Street Centerlines, ESN, and MSAG Communities
8/29/2017	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, City, Fire EMS Zone, First In, Police Zones
8/15/2017	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Points of Interest, Street Centerlines, ESN, and MSAG Communities
8/15/2017	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, City, Police Zones
8/1/2017	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Points of Interest, and Street Centerlines
8/1/2017	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

Page 19 of 30



August 1, 2017 – August 31, 2017

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 **August 29, 2017**. Results are as follows:

HAWAII COUNTY	Address Points Layer	Street Centerlines Layer
New Addresses Added	172	
Addresses Removed	0	
Address Street Name Changes	2	
Address Street Number Changes	4	
New Street Segments Added		0
Street Segments Removed		0
Street Segment Range Changes		0
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.

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.

Page 20 of 30

August 1, 2017 - August 31, 2017

- 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 17th.
 - 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 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

Page 21 of 30

August 1, 2017 – August 31, 2017

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 August 2017, HPD had notified Akimeka of some beat boundaries which were not in alignment with the General Orders (GO). Akimeka immediately began reviewing these areas in question to determine what may be needed. Any boundaries that require an update will be made during the month of September 2017.

CAD SYSTEM DEPLOYMENT

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

Throughout the month of August 2017, HPD had some opportunities to work on the Spillman in a test environment to validate various functions of the CAD and to identify any areas that could potentially be improved. Based on the review process, there were a couple items that may require additional work to the GIS, configurations within the system, or a combination of the two.

- 1. P-Codes were not attached to the call nature
 - a. Spillman responded that they need to be entered to the command line entry or do not click the drop-down and type p-code into the nature box
- 2. Unable to search mile markers
 - a. Spillman let HPD know that Akimeka has included these in the data and need to be searched starting with "MM". For example, MM 130-4. It can also be entered as 130-4.
 - b. If format requires a change, it can be made via the data.
- 3. Dispatch unable to search just the street names without having a valid address. Dispatch also noted that they are unable to click in the map to create an incident.
 - a. Akimeka and Spillman had discussed some potential solutions. Akimeka recommended this be handled through an additional locator within Spillman. Spillman had initially recommended adding points along a street with each having a unique name that can be searched. Akimeka's hesitancy on that solution is that dispatch would have to remember each unique name and for streets which are lengthy, the extent could be several miles away.
 - b. Regardless, this item will be reviewed during September 2017.
- General Order review and Boundary
 - a. Dispatch had identified some boundaries which aren't aligned with the GO. Akimeka began an initial review on this during the end of August and will continue into September 2017. The initial review showed that some boundaries could be slightly modified. Some others require discussion with HPD since the GO could be interpreted differently based on general descriptions.
- 5. Unable to search intersections with a "/" separator
 - a. Spillman applied update to CAD to allow this
 - b. Akimeka also added this into the Locator within the geodatabase for an ongoing and more permanent fix for the Spillman

MAPFLEX SYSTEM

August 1, 2017 – August 31, 2017

During the month of August 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 August 2017
 - a. **Hawaii County** August 1st, 2017, August 15th and August 29th, 2017
 - b. **Maui County** August 2nd, 2017, August 16th and August 30th, 2017
 - c. **Kauai County** August 3rd, 2017, August 17th and August 31st, 2017
 - d. **Honolulu** August 4th, 2017 and August 18th

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	Resolved (Dec 2016)

Page 23 of 30



August 1, 2017 – August 31, 2017

11/2016	Wireless Confidence	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. Sprint calls coming across with unusually high confidence. Coordination is taking place with Sprint and West. West	According to PSAPs, it's not fully resolved. The icon of the tower still doesn't plot for Phase I. Pending
1/18/2017	RDC MapFlex	provides the PDE services for Sprint. During a meeting between Akimeka and RDC, it was identified that HPD GIS data was contained within the RDC MapFlex and was missing RDC's data. Due to the proprietary nature of the GIS data provided by Akimeka for the civilian PSAP's mapping systems and the confidential information contained to support HPD operations, it was concerning. Actions were taken to request West to stop this and to pull RDC's archive data. West has since replied that they never knew RDC was military and functioned separately from the civilian PSAPs. HPD, RDC, and Akimeka have taken corrective actions to construct GIS data that will be used as a baseline for the RDC and to remove sensitive information supplied for the RDC MapFlex.	Pending – Akimeka notified West that they had data ready on June 28, 2017. Akimeka was given notice that they could proceed on July 7 th . The updated GIS data was loaded into the RDC MapFlex on July 24 and 25.
3/22/2017	ArcGIS Address Locator	The locators in MapFlex have a configurations which does not include ESNs. A reported issue has occurred with the Sheraton in Waikiki. The address locator does not differentiate between the Sheraton hotel and the surf break and plots on the surf break. The bigger issue is that this same issue will occur with complexes that have same primary address.	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.	West is currently researching their configurations (May - June 2017). Aside from the MapFlex, Akimeka is working with Spectrum (previously Time Warner) to correct their Lat/Longs on a mass scale
5/17/2017	Landline Calls Producing X/Y on calls	It was determined that for normal landline calls, the X/Y coordinates are being sent. The PSAPs have asked where these are being generated and why would they be sent for landline calls.	West is looking into this (May - June 2017)

4. SERVICE REQUESTS TRANSACTIONS

August 1, 2017 – August 31, 2017

OPEN SERVICE REQUESTS - AUGUST 2017

#	Date	Ticket#	Description	PSAP Urgency		Comments
			None			

Note* There are no (0) opened service request pending for August 2017.

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

H	AWAII CO	UNTY		MSAG SERVICE REQUEST CATEGORIES						
2047	TOT	ΓAL	Open	WIRELINE		WIRELESS		VoIP		
2017	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	4	4	1	2	2	0	0	2	2	
July	2	3	0	1	2	0	0	1	1	
August	3	3	0	1	1	0	0	2	2	
September										
October										
November										
December										
TOTAL	27	28	0	17	18	0	0	10	10	

* 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.

	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.				
<u>Definitions:</u>	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				



August 1, 2017 – August 31, 2017

5. E9-1-1 DATABASE SYNCHRONIZATION

(<u>Reference:</u> 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 **August 2017**.

The database synchronization effort included comparing Hawaii County's 9-1-1 MSAG against its GIS Street Centerline data. A total number of **4,537** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on August 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 it ongoing maintenance process. Results of the database synchronization audit will be included and reported in the Monthly Status Report (MSR) accordingly.

Page 26 of 30

August 1, 2017 – August 31, 2017

AUDIT SUMMARY RESULTS - AUGUST 2017

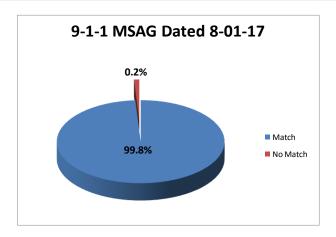
	Notes	As of November 1, 2016 9-1-1 MSAG Dated 11-01-16		As of February 1, 2017 9-1-1 MSAG Dated 02-01-17		As of May 1, 2017 9-1-1 MSAG Dated 05-01-17		As of August 1, 2017 9-1-1 MSAG Dated 08-01-17	
9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS									
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		4,488		4,503		4,520		4,537	
Less: 9-1-1 MSAG Exception Records	(1)	48	1.1%	46	1.0%	51	1.1%	51	1.1%
Net 9-1-1 MSAG Records Eligible for Comparison		4,440		4,457		4,469		4,486	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG – GIS Match – No Corrections Required)		4,438	100.0%	4,446	99.8%	4,460	99.8%	4,476	99.8%
9-1-1 MSAG GIS No Match Minor Correction Required	(2)	2	0.0%	9	0.2%	8	0.2%	9	0.2%
9-1-1 MSAG Record With No GIS Record	(3)	0	0.0%	2	0.0%	1	0.0%	1	0.0%
Total 9-1-1 MSAG Records No Match		2	0.0%	11	0.2%	9	0.2%	10	0.2%

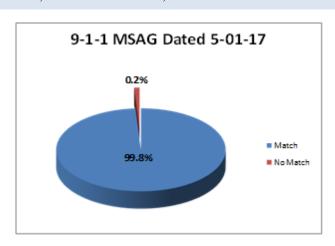
Notes:

- (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.

August 1, 2017 – August 31, 2017

AUDIT SUMMARY RESULTS COMPARISION - AUGUST 1, 2017 VS MAY 1, 2017





NOTE:

Hawaii County's level of accuracy or 9-1-1 Match percentage remained constant

from 99.8% as of August 1, 2017 to 99.8% as of May1, 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" increased from nine (9) to ten (10) records from May 2017 to August 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" increased from eight (8) to nine (9) records from May 2017 to August 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 November 2017 reanalysis
- GIS Record with No Matching MSAG Record" increased from five (5) to seven (7) records from May 2017 to August 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" remained zero records from May 2017 to August 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".

Page 28 of 30

August 1, 2017 – August 31, 2017

INVALID MSAG STREETS AND ADDRESS RANGES - ESN X99 RECORDS

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:

	Invalid MSAG Records									
	9-1-1 MSAG D	ated 02-01-17	9-1-1 MSAG [Dated 05-01-17	9-1-1 MSAG Dated 08-01-17					
HAWAII	Number of Records	% of Total Inlavid MSAG Records	Number of Records	% of Total Inlavid MSAG Records	Number of Records	% of Total Inlavid MSAG Records				
ESN 299	398	8.8%	356	7.9%	327	6.8%				

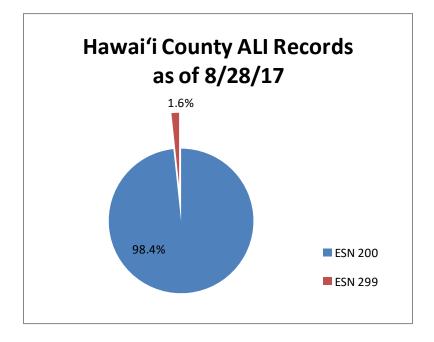
These invalid MSAG records represent **6.8%** of the Total MSAG records for Hawai'i County. The individual ALI records associated with these records are provided below.

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.

August 1, 2017 – August 31, 2017

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT

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 August 28, 2017, **1,088** ESN 299 records, representing **1.6%** 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.



Page 30 of 30

Hawaii County