August 1, 2019 – August 31, 2019



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AKIMEKA | HIGH PRIORITY, HIGH IMPACT.

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1. PSAP OPERATIONS

9-1-1 CALL VOLUME HAWAII COUNTY PSAPS - AUGUST 2019

Source: Intrado Viper system

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

	9-1-1 Call Volume																
HAWAII COUNTY PSAPs		Wire	eline		Wire	less		VC)IP	Calls No		Admir	n Calls	Aband Ca		Other	Calls
2019	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	18,258	2,714	14.86%	13,522	74.06%	41.94%	58.06%	775	4.24%	12	0.07%	0	0.00%	1,235	6.76%	0	0.00%

CALL VOLUME HAWAII COUNTY PSAP NOTES:

The percentage of Wireless Phase 2 calls (58.06%) has surpassed the number of Wireless Phase 1 calls (41.94%) in August 2019.

911 Calls with No ALI in August 2019 = 0.07% - Statewide average for 2018 = 0.09%

9-1-1 CALL VOLUME - CALENDAR YEAR 2019

								Call Vo	lume								
	AII COUNTY PSAPs		eline		Wire			VC		Calls v	vith No LI	Admir	Calls	Aband Ca	Ils	Other	Calls
2019	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	16,913	3,148	18.61%	12,155	71.87%	42.34%	57.66%	746	4.41%	14	0.08%	0	0.00%	850	5.03%	0	0.00%
FEB	16,724	2,829	16.92%	11,899	71.15%	41.31%	58.69%	765	4.57%	13	0.08%	0	0.00%	1,218	7.28%	0	0.00%
MAR	18,089	2,946	16.29%	12,950	71.59%	42.12%	57.88%	861	4.76%	10	0.06%	0	0.00%	1,322	7.31%	0	0.00%
APR	17,257	3,049	17.67%	12,166	70.50%	43.28%	56.72%	787	4.56%	13	0.08%	0	0.00%	1,242	7.20%	0	0.00%
MAY	17,912	2,768	15.45%	12,996	72.55%	43.80%	56.20%	816	4.56%	17	0.09%	0	0.00%	1,315	7.34%	0	0.00%
JUNE	17,668	2,638	14.93%	12,986	73.50%	43.21%	56.79%	774	4.38%	18	0.10%	0	0.00%	1,252	7.09%	0	0.00%
JULY	18,817	2,901	15.42%	13,724	72.93%	44.58%	55.42%	761	4.04%	58	0.31%	0	0.00%	1,373	7.30%	0	0.00%
AUG	18,258	2,714	14.86%	13,522	74.06%	41.94%	58.06%	775	4.24%	12	0.07%	0	0.00%	1,235	6.76%	0	0.00%
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	141,638	22,993		102,398				6,285		155		0		9,807		0	
MON AVG	17,705	2,874	16.27%	12,800	72.27%	42.82%	57.18%	786	4.44%	19	0.11%	0	0.00%	1,226	6.91%	0	0.00%

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9-1-1 CALL VOLUME BY AGENCY - AUGUST 2019

				9-1-1	Call Volui	me by Ag	ency				
2019		Hawaii	Police Dep	artment		Hawaii Fire Department					
2019	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	14,573	79.82%	0	1,216	0	2,450	13.42%	0	19	0	

9-1-1 CALL VOLUME BY AGENCY - CALENDAR YEAR 2019

				9-1-1	Call Volui	me by Ag	ency					
2040		Hawaii	Police Dep	artment		Hawaii Fire Department						
2019	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	13,504	79.84%	0	825	0	2,559	15.13%	0	25	0		
February	12,962	77.51%	0	1,178	0	2,544	15.21%	0	40	0		
March	15,426	85.28%	0	1,291	0	2,663	14.72%	0	31	0		
April	13,670	79.21%	0	1,219	0	2,345	13.59%	0	23	0		
Мау	14,041	78.39%	0	1,284	0	2,556	14.27%	0	31	0		
June	13,908	78.72%	0	1,226	0	2,508	14.20%	0	26	0		
July	14,731	78.29%	0	1,340	0	2,713	14.42%	0	33	0		
August	14,573	79.82%	0	1,216	0	2,450	13.42%	0	19	0		
September												
October												
November												
December												
YTD	112,815		0	9,579	0	20,338		0	228	0		
MON AVG	14,102	79.63%	0	1,197	0	2,542	14.37%	0	29	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 <u>not</u> included in the % of Total Calls.
- All VoIP (Voice over Internet Protocol) types of 911 calls are combined in the Call Volume statistic.

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FOR YOUR INFORMATION

	FYIFor Your Information											
	PSAP Operations											
		Ç	Statewide 9	11 Call Volս	umes							
PSAP	PSAP 2018 2017 2016 2015											
Oahu Civilian	Oahu Civilian 1,034,190 70.62% 1,022,818 72.16% 1,009,059 71.93% 1,019,402 70.94%											
RDC Pearl Harbor	37,068	2.53%	27,916	1.97%	N/A	N/A	N/A	N/A				
Hawaii County	206,648	14.11%	193,166	13.62%	205,412	14.64%	217,768	15.15%				
Maui County	133,869	9.14%	123,685	8.73%	137,333	9.80%	142,952	9.95%				
Kauai County	Kauai County 52,623 3.60% 49,902 3.52% 50,955 3.63% 56,874 3.96%											
Total	Total 1,464,398 100.00% 1,417,487 100.00% 1,402,759 100.00% 1,436,996 100.00%											
*2016 & 2015 Statewide avera	016 & 2015 Statewide average does not include Military 911 calls											

TEXT TO 911 - CURRENT MONTH - AUGUST 2019

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 2019										
Month	Received	Received at								
IVIOTITI	at Police	Fire								
January	29	2								
February	29	3								
March	27	2								
April	20	7								
May	20	2								
June	18	0								
July	21	0								
August	26	4								
September										
October										
November										
December										
YTD	190	20								
Monthly Avg.	23.75	2.50								

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WIRELESS PSAP TESTING - AUGUST 2019

	HAWAII COUNTY - AUGUST 2019										
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:					
08/15/19	Sprint	2	2	Hawaii PSAP	Pass						

NOTES:

- There was one (1) scheduled Wireless 911 Tests for the month of August 2019.
- Verizon Wireless has completed migrating their Wireless network database from Intrado to ComTech.
- During the 4th quarter of 2018, there was an increasing amount of "MOBL" class of service type of 911 calls delivered to the State of Hawaii PSAPs. On January 15th, 2019, Intrado completed the position source mapping for ComTech which appears to have resolved this issue.

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – AUGUST 2019

			9	-1-1 TR	ANSACT	IONS			
HAWAII COUNTY	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Sub	omitted				Customer Addresses
2019		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	Affected
JANUARY	184	157	12	9	6	322	0	0	82
FEBRUARY	61	12	26	17	6	193	0	0	12
MARCH	145	92	22	30	1	359	0	0	370
APRIL	60	25	21	13	1	254	0	0	24
MAY	305	278	17	7	3	473	0	0	37
JUNE	129	113	13	2	1	318	0	0	87
JULY	140	112	17	10	1	232	0	0	17
AUGUST	92	70	11	7	4	213	0	0	181
SEPTEMBER									
OCTOBER									
NOVEMBER			•						
DECEMBER									
TOTAL YTD	1,116	859	139	95	23	2,364	0	0	810
AVG PER MONTH	140	107	17	12	3	296	0	0	101

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.

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MSAG CURRENT MONTH NOTES:

A total of **92** 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 181 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

Seven (7) 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. 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 DRs were submitted as the result of a 9-1-1 call from a business in Hakalau. Three (3) VoIP Dr were submitted as a result of 9-1-1 calls, one (1) from a resident in Hawi and two (2) from businesses in Kelakekua and Keaau.

Akimeka submitted seventy (70) TN CRs related to the Dispatchable Location Project during the current month

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are currently 213 Open TN CR Transactions.
- Refer to chart in the next section "TNCR Current Status"

213 Open TN CR transactions are a direct result of the dispatchable location project and are awaiting approval from Hawaiian Telcom, Inc. Once a telephone number is submitted to Intrado for correction, it is verified against HT records and/or by the customer. Intrado's internal process requires calling each telephone customer individually for verification to update an address in the 9-1-1 database.

- There are currently no Open ALI-DRs as August 31, 2019
- There are currently no Open VoIP DRs as August 31, 2019

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS - AUGUST 2019

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NOTE:

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

	PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)										
County	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY INTRADO	OPENED TNCRS REFERRED TO TELCO BY INTRADO	TOTAL UNOPENED TNCR RECORDS							
HAWAII 213 120 69 24											

STATUS

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

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 Intrado Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.

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

DISPATCHABLE LOCATION – STATUS AS OF – AUGUST 2019

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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 5,075 Dispatchable Locations processed to date. There were 81 Dispatchable locations submitted and 70 were processed in August 2019.

Dispatchable Location					
2019	Common Name Place	TNCR*	Transactions		
Quarter 3	MSAG Address	Transactions Submitted	Processed**		
Quarter 2 Carryover		5,421	4,893		
	Kona Inn Shopping Village, 755744 Alii Dr, Kailua Kona	0	101		
	Kona Baptist Church, 787156 Puuloa Rd, Keauhou	0	3		
	Holualoa Inn, 765932 Mamalahoa Hwy, Holualoa	0	5		
July	Kona Hotel, 765908 Mamalahoa Hwy, Holualoa	0	2		
	The Kona Billfisher, 755841 Alii Dr, Kailua Kona	1	1		
	Coconut Grove Marketplace, 755819 Alii Dr, Kailua Kona	7	0		
	Alii Sunset Plaza, 755799 Alii Dr, Kailua Kona	17	0		
	Hale Kui Plaza, 734976 Kamanu St, N Bldg, Kailua Kona	42	41		
August	Hale Kui Plaza, 735619 Kauhola St, S Bldg, Kailua Kona	25	25		
	Ilima Court, 755629 Kuakini Hwy, Kailua Kona	14	4		
September					
Q3 Total		106	182		
Total		5,527	5,075		

SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT - AUGUST 2019

August 1, 2019 – August 31, 2019

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

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

*Spectrum (Charter) 9-1-1 VoIP Database Verification Project							
PSAP	P TOTAL RECORDS TOTAL NON PERCENT RECORDS MATCHING & RECORDS SUBMITTED BY SPECTRUM (A) (B) MATCHING BY AKIMEKA (C)						
HAWAII County	22,044	21,638 (98%)	406	406	100.00%		
KAUAI County	8,936	8,695 (97%)	241	241	100.00%		
MAUI County	18,256	17,517 (96%)	739	739	100.00%		
OAHU Cilivian	87,414	85,329 (98%)	2,085	2,085	100.00%		
OAHU Military	3,663	710 (19%)	2,953	2,953	100.00%		
TOTAL	140,313	**133,889	6,424	6,424	100.00%		

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

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

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

BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT – AUGUST 2019

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

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

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

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

^{*}Bandwidth VoIP Database received on April 5th, 2018

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

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – AUGUST 2019

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

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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	GIS Delivery Dates/Remarks
	CRITICAL 9-1	I-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE
		(Listed Alphabetically)
		Next Delivery 9/10/2019
		Added alias for one (1) record in Papaaloa
		Corrected spatial for one (1) record in Kealakekua
		Corrected spatial for five (5) records in Honokaa
	8/27/19	Corrected spatial for three (3) records in Kailua Kona
	То	Corrected spatial for twenty-eight (28) records in Pahala
	8/31/19	Corrected spatial for seven (7) records in Mountain View
		Corrected spatial and corrected TMK for one (1) record in Papaaloa
		Updated location name for one (1) record in Kapaau
		Corrected spatial for two (2) records in Hilo
		Corrected spatial for twelve (12) records in Papaaloa
		Delivered 8/27/2019
		Added address for one (1) record in Honokaa
		Added address for two (2) records in Naalehu
		Added address for thirty (30) records in Pahoa
Address Points		Added address for two (2) records in Pepeekeo
Address I onits		Added address for one (1) record in Honomu
		Added address for one (1) record in Kapaau
		Added address for three (3) records in Captain Cook
		Added POI for one (1) record in Ookala
	8/13/19	Updated address for two (2) records in Pepeekeo
	То	Added address for one (1) record in Keauhou
	8/26/19	Corrected spatial for eleven (11) records in Waikoloa
		Added address for twelve (12) records in Volcano
		Added address for two (2) records in Holualoa
		Corrected spatial for eight (8) records in Kailua Kona
		Added POI for one (1) record in Laupahoehoe
		Added POI for one (1) record in Volcano
		Corrected TMK for one (1) record in Kamuela
		Added address for twenty (20) records in Ocean View
		Added address for thirteen (13) records in Hilo
		Added address for two (2) records in Kealakekua

MAPPING LAYERS UPDATED (PART II)

August 1, 2019 – August 31, 2019

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	GIS Delivery Dates/Remarks			
	CRITICAL 9-1	-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE			
		(Listed Alphabetically)			
		Added address for one (1) record in Hawi			
		Added POI for four (4) records in Hilo			
		Added address for five (5) records in Kailua Kona			
		Corrected spatial and corrected TMK for one (1) record in Waikoloa			
		Corrected spatial for thirty-one (31) records in Mountain View			
		Updated location name for two (2) records in Keaau			
		Added alias for one (1) record in Pahoa			
		Added POI for one (1) record in Paauilo			
	8/13/19	Corrected spatial for one (1) record in Kamuela			
	То	Added POI for one (1) record in Pahala			
	8/26/19	Added address for one (1) record in Hakalau			
		Added address for thirty-eight (38) records in Keaau			
		Added address for twenty-eight (28) records in Mountain View			
		Added address for nine (9) records in Kamuela			
		Added address for two (2) records in Paauilo			
Address Points		Corrected spatial for one (1) record in Hilo			
Address Points		Added address for twenty-two (22) records in Kurtistown			
		Added POI for nine (9) records in Kamuela			
		Added POI for one (1) record in Kailua Kona			
		Delivered 8/13/2019			
		Corrected spatial for three (3) records in Hawi			
		Added address point for one (1) record in Keaau			
		Corrected spatial and corrected TMK for two (2) records in Kamuela			
		Corrected spatial and corrected TMK for one (1) record in Hawi			
	8/1/19	Corrected spatial for four (4) records in Pahoa			
	То	Updated location name and corrected TMK for one (1) record in Hilo			
	8/12/19	Corrected spatial for three (3) records in Holualoa			
		Updated routingID and TMK, added to AP, corrected address, corrected spatial for one (1) record			
		in Captain Cook			
		Corrected spatial for five (5) records in Waikoloa			
		Verified address for one (1) record in Kamuela			
		Corrected TMK for one (1) record in Captain Cook			

MAPPING LAYERS UPDATED (PART III)

August 1, 2019 – August 31, 2019

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	GIS Delivery Dates/Remarks			
	CRITICAL 9-1	-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE			
		(Listed Alphabetically)			
		Corrected location name, changed street name for one (1) record in Captain Cook			
		Corrected TMK for three (3) records in Mountain View			
		Corrected spatial for twenty-six (26) records in Kailua Kona			
		Corrected spatial and corrected TMK for one (1) record in Pahoa			
		Corrected TMK for two (2) records in Naalehu			
		Added new address for one (1) record in Ocean View			
		Corrected TMK for one (1) record in Kealakekua			
		Corrected TMK for one (1) record in Hawi			
		Corrected zipcode, for one (1) record in Ocean View			
		Corrected spatial for twenty-two (22) records in Captain Cook			
		Corrected spatial for five (5) records in Kapaau			
		Updated routingid for one (1) record in Hilo			
		Verified address for two (2) records in Kailua Kona			
Address Points		Updated location name and routingid for one (1) record in Captain Cook			
	8/1/19	Verified address for one (1) record in Waikoloa			
	То	Corrected spatial for one (1) record in Kealakekua			
	8/12/19	Updated address for one (1) record in Hilo			
		Updated routingID for one (1) record in Hilo			
		Corrected spatial for two (2) records in Ocean View			
		Corrected spatial and corrected TMK for one (1) record in Waikoloa			
		Corrected spatial for ten (10) records in Pahala			
		Updated island, county, added address point for one (1) record in Keaau			
		Corrected spatial for two (2) records in Keaau			
		Corrected spatial for one (1) record in Papaikou			
		Corrected spatial for fourteen (14) records in Kamuela			
		Corrected spatial for thirteen (13) records in Hilo			
		Verified address for one (1) record in Laupahoehoe			
		Updated routingid for thirteen (13) records in Kailua Kona			
		Corrected spatial for two (2) records in Naalehu			
		Corrected spatial for twenty-five (25) records in Mountain View			
		Corrected spatial for ten (10) records in Laupahoehoe			
		Corrected TMK for two (2) records in Kamuela			

MAPPING LAYERS UPDATED (PART IV)

August 1, 2019 – August 31, 2019

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	GIS Delivery Dates/Remarks	
	CRITICAL 9-1	-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE	
		(Listed Alphabetically)	
Address Points	8/1/19 To 8/12/19	Corrected TMK, added to AP, corrected address, corrected spatial for one (1) record in Captain Cook Corrected spatial and corrected TMK for two (2) records in Kailua Kona Verified address for one (1) record in Hilo Verified address for one (1) record in Keaau Added address for one (1) record in Captain Cook	
Airports		react dualess for one (1) record in captain cook	
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			

MAPPING LAYERS UPDATED (PART V)

August 1, 2019 – August 31, 2019

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	GIS Delivery Dates/Remarks
	CRITICAL 9-1	1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)
***	1	(Listed Alphabeticany)
Hydrants		
Hyrdology Layers		
Incident Response Areas		
Lodging		
Major Roads		
Medic Beats		
Medic Districts		
Medic Response Areas		
Medic Stations		
Medical Facilities		
Milepost Markers		
MSAG Communities		
Net Junctions		
Ocean Rescue Boundaries		
Ocean Safety		
Parcels		
Parks		
Parks Polygon		
Points of Interest		
D.II. D		
Police Beats		
Police Districts		
Police Response Areas		
Police Stations		
Post Offices		
Schools		
Street Centerlines	8/27/19 To	Next Delivery 9/10/2019
	8/31/19	Updated range for one (1) record in Kailua Kona
	8/13/19	Delivered 8/27/2019
Street Gentermies	70 To	Updated street name for one (1) record in Holualoa
	8/26/19	Updated range and corrected spatial for one (1) record in Kailua Kona
		Updated MSAGcommunity for one (1) record in Kailua Kona

MAPPING LAYERS UPDATED (PART VI)

August 1, 2019 – August 31, 2019

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	GIS Delivery Dates/Remarks
	CRITICAL 9-1	-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)
		2 2
	0/40/40	Updated range for four (4) records in Hilo Updated range for seven (7) records in Kailua Kona
	8/13/19 To	Updated range for one (1) record in Hakalau
	8/26/19	Corrected spatial for one (1) record in Hilo
Street Centerlines	0,20,10	Updated segment for one (1) record in Kailua Kona
	0/4/40	Delivered 8/13/2019
	8/1/19 To	Added segment for one (1) record in Hilo
	8/12/19	Split segment for and updated range for one (1) record in Hilo
Subdivisions		Spire segment for and updated range for one (1) record in time
Tow Jurisdictions		
Tsunami Evacuation Zones		
Tsunami Heights		
Waste Water Plants		
		Delivered 8/27/2019
	8/13/19	Added four (4) sectors per Verizon Wireless CRS
	To 8/26/19	Updated one (1) sector per Verizon Wireless CRS
	0/20/19	Added thirteen (13) sectors per AT&T CRS
WSP Cell Sectors		Delivered 8/13/2019
	8/1/19	Updated seven (7) sectors per Sprint CRS
	То	Added twenty (20) sectors per AT&T CRS
	8/12/19	Added one (1) sector per Sprint CRS
		Updated eight (8) sectors per AT&T CRS
WSP Cell Towers	8/13/19	Delivered 8/27/2019
	To 8/26/19	Updated one (1) tower per Verizon Wireless CRS
		Updated three (3) towers per AT&T CRS
wor den rowers	8/1/19	Delivered 8/13/2019
	То	Updated three (3) towers per Sprint CRS
	8/12/19	Updated two (2) towers per AT&T CRS

GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVES

GIS KEY ACTIVITIES/UPDATES

August 1, 2019 – August 31, 2019

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

Date	Key Activities/Updates
8/27/2019	Delivered Address Points, Cell Sectors, Cell Towers, Points of Interest, Street
	Centerlines, ESN, and Common Places for Mapflex in Hawaii County
8/27/2019	Delivered Address Points, City, Common Names Alt Table, Display Streets, Fire
	EMS Zone, First In, Points of Interest, POI Alt Names, Police Zones, Street
	Centerlines, Street Alt Names, Street Routes for Spillman for Hawaii County.
8/13/2019	Delivered Address Points, Cell Sectors, Cell Towers, Points of Interest, Street
	Centerlines, ESN, and Common Places for Mapflex in Hawaii County
8/13/2019	Delivered Address Points, City, Common Names Alt Table, Display Streets, Fire
	EMS Zone, First In, Points of Interest, POI Alt Names, Police Zones, Street
	Centerlines, Street Alt Names, Street Routes for Spillman for Hawaii County.

LAVA FLOW AND ALTERNATE ROUTES

Historical events are archived in the 2018 Monthly Status Reports.

Akimeka will resume to deliver updates should the event start up again.

FIRE DEPARTMENT IMT (INCIDENT MANAGEMENT TEAM) MAP

Historical events are archived in the 2018 Monthly Status Reports.

Akimeka will update these GIS layers upon request by the Hilo Fire Department.

ADDRESS POINTS AND STREET CENTERLINES UPDATE COMPARISON

August 1, 2019 – August 31, 2019

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 new Address Points and Street Centerlines geodatabase comparative analysis was received from the Hawai'i County Planning Department on **August 22**, **2019**. A new compare process was developed by Akimeka to perform this analysis.

HAWAII COUNTY	Address Points Layer	Street Centerlines Layer		
New Addresses Added	195			
Addresses Removed	0			
Address Street Name Changes	1			
Address Street Number Changes	2			
New Street Segments Added		4		
Street Segments Removed		0		
Street Segment Range Changes		6		
Street Segment Name Changes		0		

NOTE:

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

CAD SYSTEM DEPLOYMENT

On September 18th, 2018, the Hawaii Police and Fire Department went live on the new Spillman CAD and mapping systems. There have been no major GIS data configuration changes requested. Historical events are archived in the 2018 Monthly Status Reports.

MAPFLEX SYSTEM

Akimeka delivered GIS data to the MapFlex system on the following dates in August 2019

Hawaii County – August 13th, 2019 and August 27thth, 2019

Maui County - August 14th, 2019, and August 28th, 2019

Kauai County – August 1st, 2019, August 15th, 2019, and August 29th, 2019

Honolulu – August 2nd, 2019, August 16th, 2019 and August 30th, 2019

MAPFLEX ISSUES

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

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August 1, 2019 – August 31, 2019

DATE	ISSUE	DESCRIPTION	STATUS
8/2016	Wireless Addresses	MapFlex system began displaying wireless information incorrectly. MapFlex system is doing a reverse query for additional information in the GIS and this is overriding the ALI information with the closest address in the GIS.	Partially Resolved (Nov 2016) The overriding ALI with updated Lat/Longs from the GIS is still occurring
11/2016	Phase I Display	Wireless Phase I calls plotting at centroid of coverage area and landing in the ocean. After installation of new MapFlex version to correct other issues, the configurations for Wireless Phase I were not set up properly by Intrado, in which the mapping did not point to the correct information in MapFlex.	Partially Resolved (Dec 2016) According to PSAPs, it's not fully resolved. The icon of the tower still doesn't plot for Phase I.
11/2016	Wireless Confidence	Sprint calls coming across with unusually high confidence. Coordination is taking place with Sprint and Intrado. Intrado provides the PDE services for Sprint.	Pending
3/22/2017	ArcGIS Address Locator	The locators in MapFlex have a configurations which does not include ESNs. A reported issue has occurred with the Sheraton in Waikiki. The address locator does not differentiate between the Sheraton hotel and the surf break and plots on the surf break. The bigger issue is that this same issue will occur with complexes that have same primary address.	Pending A new SP 5.4 update by Intrado is aimed to correct this issue.
5/17/2017	VoIP Calls Plotting Incorrectly	Recognized in late April and early May 2017, the PSAPs have been receiving several VoIP calls which are plotting in the incorrect locations. After further research it was determined that it is because MapFlex is configured to plot the received Lat/Long. The problem is that these are not always maintained properly and that ideally the system should first choose to match with the GIS data based on the provided address. During the September 20, 2017 PSAP conference call, HT relayed there was confirmation that the Time Warner records were in fact passing through the Intrado FMCC.	Partially Resolved – the Lat/Longs are no longer being plotted in MapFlex due to a software release.
5/17/2017	Landline Calls Producing X/Y on calls	It was determined that for normal landline calls, the X/Y coordinates are being sent. The PSAPs have asked where these are being generated and why would they be sent for landline calls.	Intrado is looking into this (May - June 2017)
5/23/2018	Phase I & Phase II coverage area	Phase I calls received at the Kihei Maui PSAP are displaying a circular circumference area rather than a cone shaped directional coverage. Phase II calls are not plotting the COF meters correctly.	Pending
5/24/2018	Incorrect Addresses	MapFlex system began displaying incorrect addresses in the bubble display when an Address Point is right mouse clicked to see information by the PSAPs. However, the address in the data is still correct as shown on the left hand side.	Pending
6/27/2018	Moving Labels	It was brought up during the PSAP teleconference with Hawaiian Tel and Intrado that the Hawaii Fire Department submitted a trouble ticket regarding the parcel labels. When the base map is checked on for viewing the owner's names	Pending

Hawaii County



August 1, 2019 – August 31, 2019

	on the parcel layer, the names of some of the parcels will	
	follow and leave their parcel as the map is panned following	
	streets. This problem was also recreated at the Hawaii	
	Police Department.	

4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – AUGUST 2019

August 1, 2019 – August 31, 2019

#	Date	Ticket #	Description	PSAP	Urgency	Comments
1	01/23/19	1007	Incorrect Address	Hawaii Fire	Normal	Confirmation pending from Inteliquent.com 8/31/2019 JBC
2	08/12/19	2/19 1008 Incorrect Address		Hawaii Fire	Normal	Confirmation pending from Inteliquent.com 8/31/2019 JBC
3	8/12/19	1009	Incorrect Address	Hawaii Fire	Normal	Confirmation pending from Inteliquent.com 8/31/2019 JBC

Note* There is one (3) opened service request pending for August 2019.

SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY – 2019

H	MSAG SERVICE REQUEST CATEGORIES								
2040	TOTAL		Onen	WIRELINE		WIRELESS		VoIP	
2019	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed
2018 Carryover*			0						
January	6	5	1	2	2	0	0	3	2
February	6	4	3	3	3	0	0	3	1
March	1	1	3	1	1	0	0	0	0
April	1	3	1	1	1	0	0	0	2
May	3	3	1	3	3	0	0	0	0
June	1	1	1	1	1	0	0	0	0
July	1	1	1	1	1	0	0	0	0
August	4	2	2	1	1	0	0	3	1
September									
October									
November									
December									·
TOTAL	23	20	3	13	13	0	0	9	6

* The 2018 Carryover row indicated the number of Service Requests that were opened in 2018 and brought forward into 2019 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 Intrado 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) or other VoIP providers for correction				

5. E9-1-1 DATABASE SYNCHRONIZATION



August 1, 2019 – August 31, 2019

(<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 2019**.

The database synchronization effort included comparing Hawaii County's 9-1-1 MSAG against its GIS Street Centerline data. A total number of **4,595** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on August 1, 2019 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 remain at a 100 percent match rate. It can be expected that the percentage will fluctuate by a small degree. As such, NENA's recommended minimum match rate is 98%.

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.

AUDIT SUMMARY RESULTS - AUGUST 2019



August 1, 2019 – August 31, 2019

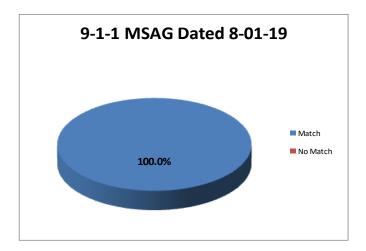
		As of November 1, 2018		As of February 1, 2019		As of May 1, 2019		As of August 1, 2019	
9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	9-1-1 MSAG Dated 11-01-18		9-1-1 MSAG Dated 2-01-19		9-1-1 MSAG Dated 5-01-19		9-1-1 MSAG Dated 8-01-19	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		4,580		4,578		4,592		4,595	
Less: 9-1-1 MSAG Exception Records	(1)	51	1.1%	45	1.0%	44	1.0%	44	1.0%
Net 9-1-1 MSAG Records Eligible for Comparison		4,529		4,533		4,548		4,551	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG GIS Match No Corrections Required)		4,520	99.8%	4,515	99.6%	4,547	100.0%	4,551	100.0%
9-1-1 MSAG GIS No Match Minor Correction Required	(2)	5	0.1%	11	0.2%	1	0.0%	0	0.0%
9-1-1 MSAG Record With No GIS Record	(3)	4	0.1%	7	0.2%	0	0.0%	0	0.0%
Total 9-1-1 MSAG Records No Match		9	0.2%	18	0.4%	1	0.0%	0	0.0%

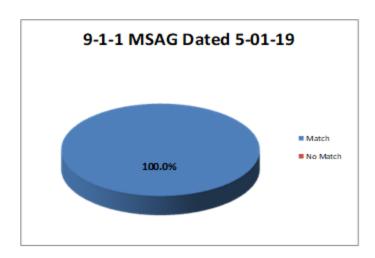
Notes:

- (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 COMPARISION - AUGUST 1, 2019 VS MAY 1, 2019

August 1, 2019 – August 31, 2019





NOTE:

Hawaii County's level of accuracy or 9-1-1 Match percentage remained consistent from 100% as of August 1, 2019 to 100% as of May 1, 2019 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" remained consistent from zero (0) to zero (0) records from May 2019 to August 2019. MSAG records with missing record were zero 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 one (1) to zero (0) records from May 2019 to August 2019. The non-match condition of the eleven records are a result in which MSAG records submitted in 9-1-1 Net were not completed prior to the end of month.
- GIS Record with No Matching MSAG Record" decreased from one (1) to zero (0) records from May 2019 to August 2019. 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 one (1) to zero (0) records from May 2019 to August 2019. 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



August 1, 2019 – August 31, 2019

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 02-01-19	9-1-1 MSAG [)ated 05-01-19	9-1-1 MSAG Dated 08-01-19				
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	199	4.2%	188	4.0%	177	3.7%			

These invalid MSAG records represent 3.7% 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.

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT

August 1, 2019 – August 31, 2019

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, 2019, 569 ESN 299 records, representing .8% 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.

