March 1, 2019 - March 31, 2019



# March 1, 2019 - March 31, 2019

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## March 1, 2019 - March 31, 2019

## 1. PSAP OPERATIONS

## 9-1-1 CALL VOLUME MAUI PSAP - MARCH 2019

**Source:** West Safety Services Viper system

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

							9-1-	-1 Call V	olume								
MAU	JI PSAP	Wir	eline		Wir	eless		vo	IP	Calls V		Admir	n Calls	Abandoned Calls		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 WPH2 Calls	No. of VoIP Calls		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
MAR	12,403	1,626	13.11%	9,022	72.74%	58.93%	41.07%	360	2.90%	6	0.05%	0	0.00%	1,389	11.20%	0	0.00%

## CALL VOLUME MAUI PSAP NOTES:

\*Calls with No ALI for March 2019 = 0.05% - Statewide average for 2018 = 0.09%

## 9-1-1 CALL VOLUME MAUI PSAP – CALENDAR YEAR 2019

							9-1-	-1 Call V	olume'								
MAU	JI PSAP	Wir	eline		Wir	eless		VO		Calls w	LI	Admir	n Calls	Ca	doned Ills	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		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	11,085	1,607	14.50%	8,204	74.01%	60.68%	39.32%	295	2.66%	3	0.03%	0	0.00%	976	8.80%	0	0.00%
FEB	10,875	1,606	14.77%	7,841	72.10%	59.60%	40.40%	312	2.87%	4	0.04%	0	0.00%	1,112	10.23%	0	0.00%
MAR	12,403	1,626	13.11%	9,022	72.74%	58.93%	41.07%	360	2.90%	6	0.05%	0	0.00%	1,389	11.20%	0	0.00%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	34,363	4,839		25,067				967		13		0		3,477		0	
MON AVG	11,454	1,613	14.12%	8,356	72.95%	59.74%	40.26%	322	2.81%	4	0.04%	0	0.00%	1,159	10.08%	0.00	0.00%

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Maui County March 2019

## March 1, 2019 - March 31, 2019

## 9-1-1 CALL VOLUME MOLOKAI PSAP - MARCH 2019

							9-1	-1 Call V	olume								
-	LOKAI PSAP	Wir	reline		Wir	eless		vo	IP	Calls W		Admir	Calls		doned alls	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		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
MAR	484	135	27.89%	279	57.64%	62.72%	37.28%	2	0.41%	2	0.41%	0	0.00%	66	13.64%	0	0.00%

## CALL VOLUME MOLOKAI PSAP NOTES:

Calls with No ALI for March 2019 = 0.41% - Statewide average for 2018 = 0.09%

## 9-1-1 CALL VOLUME MOLOKAI PSAP - CALENDAR YEAR 2019

							9-1	-1 Call V	olume/								
-	LOKAI PSAP	Wir	eline		Wir	eless		VO	IP	Calls v		Admii	n Calls		doned Ills	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	Other Calls	% of Total Calls
JAN	474	145	30.59%	285	60.13%	55.79%	44.21%	1	0.21%	0	0.00%	0	0.00%	43	9.07%	0	0.00%
FEB	574	222	38.68%	266	46.34%	62.03%	37.97%	5	0.87%	0	0.00%	0	0.00%	81	14.11%	0	0.00%
MAR	484	135	27.89%	279	57.64%	62.72%	37.28%	2	0.41%	2	0.41%	0	0.00%	66	13.64%	0	0.00%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	1,532	502		830				8		2		0		190		0	
MON AVG	511	167	32.39%	277	54.70%	60.18%	39.82%	2.67	0.50%	1	0.14%	0	0.00%	63.333	12.27%	0	0.00%

## March 1, 2019 - March 31, 2019

## 9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) - MARCH 2019

							9-1	-1 Call V	olume								
_	COUNTY SAPs	Wir	eline		Wir	eless		VOIP	Calls	Calls W		Admir	Calls	Aband Ca	doned Ills	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		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
MAR	12,887	1,761	13.66%	9,301	72.17%	59.05%	40.95%	362	2.81%	8	0.06%	0	0.00%	1,455	11.29%	0	0.00%

## 9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) - CALENDAR YEAR 2019

							9-1-	-1 Call V	olume								
_	COUNTY SAPs	Wir	eline		Wir	eless		VO	IP	Calls w		Admir	n Calls		doned Ills	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		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	11,559	1,752	15.16%	8,489	73.44%	60.51%	39.49%	296	2.56%	3	0.03%	0	0.00%	1,019	8.82%	0	0.00%
FEB	11,449	1,828	15.97%	8,107	70.81%	59.68%	40.32%	317	2.77%	4	0.03%	0	0.00%	1,193	10.42%	0	0.00%
MAR	12,887	1,761	13.66%	9,301	72.17%	59.05%	40.95%	362	2.81%	8	0.06%	0	0.00%	1,455	11.29%	0	0.00%
APR																	
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	35,895	5,341		25,897				975		15		0		3,667		0	
MON AVG	11,965	1,780	14.93%	8,632	72.14%	59.75%	40.25%	325	2.71%	5	0.04%	0.00	0.00%	1,222	10.18%	0	0.00%

#### **PSAP OPERATION NOTES:**

- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Dropped Calls are hang ups after transfers.
- Abandoned Calls are included in the Wireline and Wireless total counts respectively.
- All VoIP (Voice over Internet Protocol) 911 calls are combined in the Call Volume statistic.
- Outgoing 911 calls are included in the totals. These are ringback or callback 911calls made from the Viper System.

## March 1, 2019 - March 31, 2019

## FOR YOUR INFORMATION

	FYIFor Your Information												
			PSAP C	perations	5								
	Statewide 911 Call Volumes												
PSAP	PSAP 2018 2017 2016 2015												
Oahu Civilian         1,034,190         70.62%         1,022,818         72.16%         1,009,059         71.93%         1,019,402         70.94%													
<b>RDC Pearl Harbor</b>	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 52,623 3.60% 49,902 3.52% 50,955 3.63% 56,874 3.96%													
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	2016 & 2015 Statewide average does not include Military 911 calls												

## TEXT TO 911 - CURRENT MONTH - MARCH 2019

## NOTE:

• Although there is a "Text to 911" plot on the MapFlex, the location of the plot is not reliable. Text to 911 Dispatchers should use their skills to ascertain the exact location of the emergency response.

<b>TEXT TO 911 M</b>	aui County I	PSAPs 2019
Month	Received	Received
WIOTICIT	at Maui	at Molokai
January	25	4
February	29	5
March	16	0
April		
May		
June		
July		
August		
September		
October		
November		
December		
YTD	70	9
Monthly Avg.	23	3

March 2019



# Maui County E9-1-1 Status Report

## March 1, 2019 - March 31, 2019

## WIRELESS PSAP TESTING - MARCH 2019

			MAUI COUNT	Y - MARCH 201	19	
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:

## NOTES:

- There were no (0) scheduled Wireless 911 tests conducted in March 2019 for the Maui and Molokai PSAPs.
- Verizon Wireless has completed migrating their Wireless network database from West to ComTech.
- During the 4<sup>th</sup> 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 15<sup>th</sup>, 2019, West completed the position source mapping for ComTech which appears to have resolved this issue.

## March 1, 2019 - March 31, 2019

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

#### MSAG TRANSACTIONS CURRENT MONTH/YEAR - MARCH 2019

	9-1-1 TRANSACTIONS								
MAUI COUNTY	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Sub	omitted	Open ALI Discrepancy Records		Customer Addresses	
2019		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	Affected
JANUARY	65	46	7	6	6	18	0	0	122
FEBRUARY	20	0	5	11	4	18	0	0	98
MARCH	248	224	15	8	1	209	0	0	58
APRIL									
MAY									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	333	270	27	25	11	245	0	0	278
AVG PER MONTH	111	90	9	8	4	82	0	0	93

#### **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 399 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.



## March 1, 2019 - March 31, 2019

#### MSAG CURRENT MONTH NOTES:

A total of **248** MSAG transactions were processed in 9-1-1 Net during the current month. Fifth teen (15) 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 inserting new MSAG records. **58** customer ANI/ALI (telephone number/address) records updated as a direct result.

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

Eight (8) Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 399 clean-up effort. ESN 399 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record.

One (1) VoIP DR was researched during the current month due to a 9-1-1 call made from a military phone in Kula. Military worked with PSAP to identify the location of the physical phone.

Akimeka processed twenty-seven (27) TN CRs related to the Dispatchable Location Project during the current month.

## OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

There are currently 209 Open TN CRs.

**209** Open TN CR transactions are a result of the Dispatchable Location project. Akimeka continues to monitor and track the progress of the Referred records. Once a telephone number is submitted to West for correction, it must be verified against HT records and/or approved by the customer. West's internal process requires calling each telephone customer individually for approval to update an address in the 9-1-1 database.

- There are no open VoIP DRs as of March 31, 2019
- There are no open ALI DRs as of March 31, 2019

## March 1, 2019 - March 31, 2019

#### TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS - MARCH, 2019

#### 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	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES	TOTAL UNOPENED TNCR RECORDS			
MAUI	206	10	8	188			
MOLOKAI	3	3	0	0			
TOTAL	209	13	8	188			

#### **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.

Maui County March 2019

# Maui County E9-1-1 Status Report

## March 1, 2019 - March 31, 2019

#### DISPATCHABLE LOCATION - STATUS AS OF - MARCH 2019

#### NARRATIVE:

Maui County

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

During the month of August 2015, Akimeka started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically the Queen Kaahumanu Shopping Center at 275 Kaahumanu Ave. 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. Screen shots of the "Before" ALI screen, and the "After" ALI screen with the updated "Dispatchable Location" information visible, were presented to the Dispatch Supervisors. Akimeka received positive feedback from the 911 Dispatch Personnel because the information that the 911 Call Takers will receive, will certainly cut down on the process of determining the exact location of the 911 caller. In addition to this, Akimeka was informed that the Mobile Dispatch Terminals (MDTs) in the Police Vehicles, also are able to view this "Dispatchable Location" information which will reduce the response times for Public Safety.

Dispatchable Location							
2019	Common Name Place	TNCR* Transactions	Transactions				
Quarter 1	MSAG Address	Submitted	Processed**				
2018 Carryover		2,859	2,758				
	Andaz Maui at Wailea, 3550 Wailea Alanui, Wailea	0	30				
January	Wailea Ekahi, 3300 Wailea Alanui, Wailea	0	10				
	Wailea Villages, 161 Wailea Alanui, Wailea	0	6				
February		0	0				
	Azeka Maka, 1280 S Kihei Rd, Kihei	57	27				
March	Maul Mall, 70 E Kaahumanu Ave, Kahului	58	0				
	Piilani Village, Piikea Ave, Kihei	109	0				
Total		3,083	2,831				
YTD Total		224	73				

## March 1, 2019 - March 31, 2019

#### SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT - MARCH 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	TOTAL RECORDS SUBMITTED BY SPECTRUM (A)	TOTAL RECORDS MATCHING & VERIFIED WITH 911 DATABASES (B)	TOTAL RECORDS NOT MATCHING	NON MATCHING RECORDS CORRECTED BY AKIMEKA (C)	PERCENT COMPLETED	
HAWAII County	22,044	21,638 (98%)	406	406	100.00%	
KAUAI County	8,936	8,695 (97%)	241	241	100.00%	
MAUI County	18,256	17,517 (96%)	739	739	100.00%	
OAHU 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%	

<sup>\*</sup> Spectrum VoIP Database received on June 21st, 2017

<sup>\*\*</sup> Akimeka provided VoIP Records with Latitude/Longitude coordinates

(A)	VoIP Database records submitted by Spectrum to Akimeka for research and MSAG address validation.
<b>(B)</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.

Maui County March 2019

# Maui County E9-1-1 Status Report

# March 1, 2019 - March 31, 2019

#### BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT - MARCH 2019

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

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

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

	*Bandwidth							
9-1-1 VoIP Database Verification Project **(Updated)								
	TOTAL TOTAL NEW TOTAL NON PERCENT							
	RECORDS	RECORDS	RECORDS	MATCHING	COMPLETED			
PSAP	SUBMITTED BY	VERIFIED WITH	NOT	RECORDS				
rsar	BANDWIDTH	911 DATABASES	MATCHING	CORRECTED				
	(A)	<b>(B)</b>		<b>BY AKIMEKA</b>				
				<b>(C)</b>				
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%			

<sup>\*</sup>Bandwidth VoIP Database received on April 5th, 2018

(A)	VoIP Database records submitted by Bandwidth to Akimeka for research and MSAG address validation.
	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.

<sup>\*\*</sup>Updated Bandwidth VoIP Database received on September 6th, 2018

## March 1, 2019 - March 31, 2019

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – MARCH 2019

MAPPING LAYERS UPDATED (PART I)

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

		MAUI 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)						
		Delivered 3/27/2019					
		Spatially corrected, added floor info for four hundred and fourteen (414) records in Kihei					
		Updated full address for seven (7) records in Kula					
		Verified address for one (1) record in Waiehu					
		Spatially corrected thirteen (13) records in Makawao					
		Spatially corrected fourteen (14) records in Napili					
		Verified address for five hundred and fifty-two (552) records in Kaanapali					
		Updated full address for three (3) records in Waikapu					
		Spatially corrected, added floor info for ninety-six (96) records in Kihei					
		Updated label for ten (10) records in Kahului					
		Updated full address for three (3) records in Paia					
		Updated location name for one (1) record in Maalaea					
		Spatially corrected, updated full address for four (4) records in Makawao					
		Verified address for thirteen (13) records in Pukalani					
		Updated full address for three (3) records in Lanai					
	3/13/19	Added address for three (3) records in Lahaina					
Address Points	То	Added address for one (1) record in Paia					
	3/26/19	Verified address for nineteen (19) records in Napili					
		Spatially corrected, added neighborhood info for twenty-six (26) records in Kihei					
		Updated location name for one (1) record in Kihei					
		Added address for one (1) record in Waiehu					
		Spatially corrected two (2) records in Hana					
		Spatially corrected, updated location name for one (1) record in Napili					
		Added floor info for sixty-four (64) records in Kihei					
		Spatially corrected, added neighborhood & floor info, updated label for thirty-two (32) records in					
		Kihei					
		Spatially corrected, updated location name for one (1) record in Maalaea					
		Spatially corrected one (1) record in Wailea					
		Verified address for ninety-two (92) records in Waikapu					
		Added address for one (1) record in Napili					
		Spatially corrected, added neighborhood info for four (4) records in Napili					
		Spatially corrected six (6) records in Waikapu					
		Updated full address for seven (7) records in Kahului					

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# March 1, 2019 - March 31, 2019

## MAPPING LAYERS UPDATED (PART II)

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

		MAUI 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 two (2) records in Kula					
		Updated full address for ten (10) records in Napili					
		Spatially corrected, added floor & neighborhood info for seventy-nine (79) records in Lahaina					
		Updated full address for twenty-nine (29) records in Pukalani					
		Added address for one (1) record in Waikapu					
		Verified address for four hundred and forty-two (442) records in Kihei					
		Added neighborhood info for one hundred and sixty (160) records in Kihei					
		Spatially corrected, added floor info for one hundred and twelve (112) records in Napili					
		Updated full address for two (2) records in Waiehu					
		Updated full address for thirty-six (36) records in Kihei					
		Verified address for one hundred and ninety-two (192) records in Lahaina					
		Verified address for twenty-seven (27) records in Makawao					
		Spatially corrected one (1) record in Napili					
		Spatially corrected one (1) record in Waiehu					
		Updated full address for nineteen (19) records in Wailea					
	3/13/19	Updated full address for two (2) records in Spreckelsville					
Address Points	To	Added neighborhood info for one (1) record in Kaanapali					
	3/26/19	Spatially corrected, updated full address for one (1) record in Pukalani					
		Verified address for one hundred and twenty-one (121) records in Wailuku					
		Spatially corrected, updated full address for three (3) records in Lahaina					
		Updated full address for thirty-two (32) records in Kula					
		Spatially corrected ninety-eight (98) records in Kihei					
		Updated full address for ten (10) records in Napili					
		Added address for twelve (12) records in Pukalani					
		Spatially corrected fourteen (14) records in Wailuku					
		Added location name for one (1) record in Waihee					
		Updated full address for four (4) records in Waiehu					
		Updated full address for six (6) records in Kihei					
		Verified address for six (6) records in Wailea					
		Added neighborhood & floor info, updated label for two hundred and twenty-four (224) records					
		in Kihei					
		Updated label, added floor & neighborhood info for thirty (30) records in Napili					
		Added address for one (1) record in Kaanapali					

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# **Maui County E9-1-1 Status Report**

# March 1, 2019 - March 31, 2019

## MAPPING LAYERS UPDATED (PART III)

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

Type of Layer    Date Created Fifts Performed			MAUI COUNTY					
Address Points  Address Points	Type of Layer	Server Date Created/	GIS Delivery Dates/Remarks					
Updated full address, added neighborhood info for twelve (12) records in Kihei Spatially corrected four (4) records in Haliimaile Updated full address for thirty-three (33) records in Haiku Added address for two (2) records in Kahului Updated full address for eleven (11) record in Haiku Updated full address for one (1) record in Haiku Updated full address for one (1) record in Haiku Added neighborhood info for twenty-one (21) records in Wailuku Updated street name for two (2) records in Makawao Spatially corrected eight (8) records in Haiku Added address for eleven (11) records in Haiku Added address for eleven (11) records in Haiku Added floor info for one hundred and five (105) records in Kaanapali Spatially corrected eleven (11) records in Lahaina Updated full address for two (2) records in Makawao Added address for teve (10) records in Makawao Verified address for seventeen (17) records in Makawao Verified address for seventeen (17) records in Makawao Verified address for seventeen (17) records in Puia Updated full address for six (6) records in Puia Added address for seventy (70) records in Wailuku Spatially corrected, updated full address for five (5) records in Kihei Spatially corrected seven (7) records in Haiku Added address for two (2) records in Haiku Added address for two (2) records in Haiku Added address for two (10) records in Haiku Added address for two (2) records in Haiku	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE							
Address Points  Address Points  Spatially corrected four (4) records in Haliimaile Updated full address for thirty-three (33) records in Haliku Added address for two (2) records in Kahului Updated full address for eleven (11) record in Haliku Updated full address for one (1) record in Haliku Updated full address for one (1) record in Haliku Updated street name for two (2) records in Makawao Spatially corrected eight (8) records in Haliku Added address for eleven (11) records in Kihei Added address for two (2) records in Haliku Added floor info for one hundred and five (105) records in Kaanapali Spatially corrected eleven (11) records in Lahaina Updated full address for two (2) records in Makawao Added address for two (2) records in Makawao Added address for seventeen (17) records in Makawao Verified address for seventeen (17) records in Makawao Verified address for seventeen (17) records in Pukalani Added address for seventey (70) records in Pukalani Added address for seventy (70) records in Rainapali Spatially corrected, updated full address for five (5) records in Kihei Spatially corrected seven (7) records in Rainapali Spatially corrected seven (7) records in Rainapali Added address for two (2) records in Haliku Added neighborhood info for forty-one (41) records in Napili Added floor & neighborhood info for forty-one (41) records in Napilii	(Listed Alphabetically)							
Address Points  Address Points  Address Points  Address Points  Dupdated full address for thirty-three (33) records in Haiku Added address for two (2) records in Kahului Updated full address for eleven (11) record in Haiku Added neighborhood info for twenty-one (21) records in Wailuku Updated street name for two (2) records in Makawao Spatially corrected eight (8) records in Haiku Added address for eleven (11) records in Kihei Added address for two (2) records in Haiku Added address for two (2) records in Haiku Added address for two (2) records in Haina Added floor info for one hundred and five (105) records in Kaanapali Spatially corrected eleven (11) records in Lahaina Updated full address for two (2) records in Haina Spatially corrected eleven (11) records in Makawao Added address for two (2) records in Makawao Added address for ten (10) records in Makawao Verified address for ten (10) records in Makawao Verified address for seventeen (17) records in Makawao Verified address for seventeen (17) records in Wailuku Spatially corrected, updated full address for five (5) records in Kihei Spatially corrected seven (7) records in Wailuku Spatially corrected seven (7) records in Haiku Added address for two (2) records in Haiku Added neighborhood info for forty-one (41) records in Napili Added floor & neighborhood info for eighteen (18) records in Napilii								
Added address for two (2) records in Kahului  Updated full address for eleven (11) record in Lahaina  Spatially corrected, updated full address for one (1) record in Haiku  Updated full address for one (1) record in Haiku  Added neighborhood info for twenty-one (21) records in Wailuku  Updated street name for two (2) records in Makawao  Spatially corrected eight (8) records in Haiku  Added address for eleven (11) records in Kihei  Added address for eleven (11) records in In Haiku  Added floor info for one hundred and five (105) records in Kaanapali  Spatially corrected eleven (11) records in Hana  Updated full address for two (2) records in Makawao  Updated full address for two (2) records in Makawao  Added address for seventeen (17) records in Makawao  Verified address for seventeen (17) records in Makawao  Verified address for seventeen (17) records in Paia  Updated full address for seventy (70) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected seven (7) records in Paia  Added address for two (2) records in Paiai  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili								
Address Points  Address Points  Address Points  Address Points  Dipdated full address for eleven (11) records in Lahaina Spatially corrected, updated full address for one (1) record in Haiku Added neighborhood info for twenty-one (21) records in Wailuku Updated street name for two (2) records in Makawao Spatially corrected eight (8) records in Haiku Added address for eleven (11) records in Kihei Added address for two (2) records in Haiku Added floor info for one hundred and five (105) records in Kaanapali Spatially corrected eleven (11) records in Lahaina Updated full address for two (2) records in Hana Spatially corrected forty-nine (49) records in Makawao Added address for seventeen (17) records in Makawao Added address for seventeen (17) records in Makawao Verified address for seventeen (17) records in Pukalani Added address for seventy (70) records in Pukalani Added address for seventy (70) records in Kaanapali Spatially corrected wenty-six (26) records in Kaanapali Spatially corrected seven (7) records in Kaanapali Spatially corrected seven (7) records in Haiku Added neighborhood info for forty-one (41) records in Napili Added elighborhood info for forty-one (41) records in Napili Added floor & neighborhood info for eighteen (18) records in Napili								
Address Points  Address Points			` '					
Address Points  Address Peior Picking  Address Peior Malaka  Address Peior Malaka  Address Peior Malaka  Address Points  Address Peior Malaka  Address Peior Malaka  Address Points  Address Peior Malaka  Address Peior Malaka  Address Points  Address Points  Address Peior Malaka  Address Points  Address Peior Malaka  Address Points  A								
Added neighborhood info for twenty-one (21) records in Wailuku  Updated street name for two (2) records in Makawao  Spatially corrected eight (8) records in Haiku  Added address for eleven (11) records in Kihei  Added address for two (2) records in Hana  Added floor info for one hundred and five (105) records in Kaanapali  Spatially corrected eleven (11) records in Lahaina  Updated full address for two (2) records in Hana  Spatially corrected forty-nine (49) records in Makawao  Added address for ten (10) records in Makawao  Added address for seventeen (17) records in Makawao  Verified address for ten (10) records in Paia  Updated full address for six (6) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected twenty-six (26) records in Kaanapali  Spatially corrected seven (7) records in Napili  Added address for two (2) records in Haiku  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili								
Address Points  Address Points								
Address Points  3/13/19 To 3/26/19  Address Points  Address Po								
Address Points  Address Points								
Address Points  Address For two (2) records in Hana  Spatially corrected eleven (11) records in Hana  Spatially corrected forty-nine (49) records in Maalaea  Updated full address for ten (10) records in Makawao  Added address for seventeen (17) records in Makawao  Verified address for six (6) records in Paia  Updated full address for six (6) records in Pukalani  Added address for seventy (70) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected twenty-six (26) records in Kaanapali  Spatially corrected seven (7) records in Paia  Added address for two (2) records in Haiku  Added address for two (2) records in Haiku  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili			Spatially corrected eight (8) records in Haiku					
Address Points  3/13/19 To 3/26/19  Address Points  Address For two (2) records in Lahaina  Updated full address for two (2) records in Maalaea  Updated full address for ten (10) records in Makawao  Address For seventeen (17) records in Makawao  Verified address for seventeen (17) records in Paia  Updated full address for six (6) records in Pukalani  Address For seventy (70) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected twenty-six (26) records in Kaanapali  Spatially corrected seven (7) records in Paia  Address For two (2) records in Haiku  Address For two (2) records in Haiku  Address For two (2) records in Haiku  Address For two (2) records in Napili  Address For two (3) records in Napili  Address For two (41) records in Napili			,					
Address Points  3/13/19 To 3/26/19  Address Points  Spatially corrected eleven (11) records in Lahaina Updated full address for two (2) records in Maalaea Updated full address for ten (10) records in Makawao Added address for seventeen (17) records in Makawao Verified address for ten (10) records in Paia Updated full address for six (6) records in Pukalani Added address for seventy (70) records in Wailuku Spatially corrected, updated full address for five (5) records in Kihei Spatially corrected twenty-six (26) records in Kaanapali Spatially corrected seven (7) records in Paia Added address for two (2) records in Haiku Added neighborhood info for forty-one (41) records in Napili Added floor & neighborhood info for eighteen (18) records in Napili			Added address for two (2) records in Hana					
Address Points  Joan 13/13/19 To 3/26/19  Address Points  Joan 13/13/19 To 3/26/19  Joan 14/16/19  Added address for ten (10) records in Makawao  Added address for ten (10) records in Makawao  Verified address for ten (10) records in Paia  Updated full address for six (6) records in Pukalani  Added address for seventy (70) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected twenty-six (26) records in Paia  Added address for two (2) records in Haiku  Added address for two (2) records in Haiku  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili			Added floor info for one hundred and five (105) records in Kaanapali					
Address Points  Spatially corrected forty-nine (49) records in Maalaea  Updated full address for ten (10) records in Makawao  Added address for seventeen (17) records in Makawao  Verified address for ten (10) records in Paia  Updated full address for six (6) records in Pukalani  Added address for seventy (70) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected twenty-six (26) records in Kaanapali  Spatially corrected seven (7) records in Paia  Added address for two (2) records in Haiku  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili			Spatially corrected eleven (11) records in Lahaina					
Address Points  To 3/26/19  Spatially corrected forty-nine (49) records in Maalaea  Updated full address for ten (10) records in Makawao  Added address for seventeen (17) records in Makawao  Verified address for ten (10) records in Paia  Updated full address for six (6) records in Pukalani  Added address for seventy (70) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected twenty-six (26) records in Kaanapali  Spatially corrected seven (7) records in Paia  Added address for two (2) records in Haiku  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili		2/42/40	Updated full address for two (2) records in Hana					
Updated full address for ten (10) records in Makawao  Added address for seventeen (17) records in Makawao  Verified address for ten (10) records in Paia  Updated full address for six (6) records in Pukalani  Added address for seventy (70) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected twenty-six (26) records in Kaanapali  Spatially corrected seven (7) records in Paia  Added address for two (2) records in Haiku  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili	Address Points		Spatially corrected forty-nine (49) records in Maalaea					
Added address for seventeen (17) records in Makawao  Verified address for ten (10) records in Paia  Updated full address for six (6) records in Pukalani  Added address for seventy (70) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected twenty-six (26) records in Kaanapali  Spatially corrected seven (7) records in Paia  Added address for two (2) records in Haiku  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili	Address Foliits	_	Updated full address for ten (10) records in Makawao					
Updated full address for six (6) records in Pukalani Added address for seventy (70) records in Wailuku Spatially corrected, updated full address for five (5) records in Kihei Spatially corrected twenty-six (26) records in Kaanapali Spatially corrected seven (7) records in Paia Added address for two (2) records in Haiku Added neighborhood info for forty-one (41) records in Napili Added floor & neighborhood info for eighteen (18) records in Napili			Added address for seventeen (17) records in Makawao					
Added address for seventy (70) records in Wailuku  Spatially corrected, updated full address for five (5) records in Kihei  Spatially corrected twenty-six (26) records in Kaanapali  Spatially corrected seven (7) records in Paia  Added address for two (2) records in Haiku  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili			Verified address for ten (10) records in Paia					
Spatially corrected, updated full address for five (5) records in Kihei Spatially corrected twenty-six (26) records in Kaanapali Spatially corrected seven (7) records in Paia Added address for two (2) records in Haiku Added neighborhood info for forty-one (41) records in Napili Added floor & neighborhood info for eighteen (18) records in Napili			Updated full address for six (6) records in Pukalani					
Spatially corrected twenty-six (26) records in Kaanapali Spatially corrected seven (7) records in Paia Added address for two (2) records in Haiku Added neighborhood info for forty-one (41) records in Napili Added floor & neighborhood info for eighteen (18) records in Napili			Added address for seventy (70) records in Wailuku					
Spatially corrected seven (7) records in Paia Added address for two (2) records in Haiku Added neighborhood info for forty-one (41) records in Napili Added floor & neighborhood info for eighteen (18) records in Napili			Spatially corrected, updated full address for five (5) records in Kihei					
Added address for two (2) records in Haiku  Added neighborhood info for forty-one (41) records in Napili  Added floor & neighborhood info for eighteen (18) records in Napili			Spatially corrected twenty-six (26) records in Kaanapali					
Added neighborhood info for forty-one (41) records in Napili Added floor & neighborhood info for eighteen (18) records in Napili			Spatially corrected seven (7) records in Paia					
Added floor & neighborhood info for eighteen (18) records in Napili			Added address for two (2) records in Haiku					
			Added neighborhood info for forty-one (41) records in Napili					
Undeted full address for forty eight (49) records in Weilluku			Added floor & neighborhood info for eighteen (18) records in Napili					
opulated full address for forty-eight (46) records in Walluku			Updated full address for forty-eight (48) records in Wailuku					
Updated full address for eighteen (18) records in Paia			Updated full address for eighteen (18) records in Paia					
Verified address for six (6) records in Hoolehua			Verified address for six (6) records in Hoolehua					
Removed location name for one (1) record in Kihei			Removed location name for one (1) record in Kihei					
Verified address for five (5) records in Kahului			Verified address for five (5) records in Kahului					

# **Maui County E9-1-1 Status Report**

# March 1, 2019 - March 31, 2019

## MAPPING LAYERS UPDATED (PART IV)

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

		MAUI 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)						
		Updated full address for two (2) records in Haliimaile					
		Spatially corrected, added floor info for eighty (80) records in Maalaea					
		Verified address for ten (10) records in Haiku					
		Updated label for three (3) records in Kula					
		Spatially corrected one (1) record in Kula					
		Updated full address for twenty-four (24) records in Lahaina					
		Spatially corrected, added floor & neighborhood info for sixteen (16) records in Kihei					
	3/13/19	Verified address for seventy-nine (79) records in Kula					
	To	Updated full address for three (3) records in Wailea					
	3/26/19	Spatially corrected forty-three (43) records in Wailea					
		Updated address for one hundred and eighty-eight (188) records in Wailea					
		Added address for six (6) records in Wailea					
		Spatially corrected, updated full address for three (3) records in Napili					
		Spatially corrected, added neighborhood info for one (1) record in Lahaina					
		Spatially corrected forty-nine (49) records in Pukalani					
		Updated full address for eleven (11) records in Wailuku					
Address Points		Spatially corrected, updated full address for one (1) record in Wailea					
		Updated full address for forty-two (42) records in Makawao					
		Delivered 3/14/2019					
		Updated full address for thirteen (13) records in Waikapu					
		Verified address for forty-nine (49) records in Napili					
		Updated full address for ten (10) records in Kihei					
		Spatially corrected nine (9) records in Makawao					
		Updated full address for one hundred and seventy-seven (177) records in Napili					
	3/1/19	Updated full address for twenty (20) records in Wailuku					
	То	Updated full address for three (3) records in Paia					
	3/12/19	Spatially corrected two hundred and sixty-eight (268) records in Napili					
		Updated full address for four (4) records in Pukalani					
		Spatially corrected two (2) records in Wailuku					
		Verified address for two (2) records in Wailea					
		Verified address for two hundred and eighty-one (281) records in Kihei					
		Updated full address for three (3) records in Haiku					
		Verified address for one (1) record in Kaanapali					

# March 1, 2019 - March 31, 2019

## MAPPING LAYERS UPDATED (PART V)

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

		MAUI 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	3/1/19 To 3/12/19						
		Spatially corrected two (2) records in Kahului Spatially corrected four hundred and five (405) records in Kihei Updated full address for ten (10) records in Wailuku Updated label for twenty (20) records in Napili					

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# March 1, 2019 - March 31, 2019

## MAPPING LAYERS UPDATED (PART VI)

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

		MAUI 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)
	3/1/19	Added address for seven (7) records in Wailuku
Address Points	То	Updated full address for thirteen (13) records in Makawao
	3/12/19	Spatially corrected one (1) record in Lahaina
Airports		
Bridges		
	3/13/19	Delivered 3/27/2019
Building Footprints	То	Verified address for six (6) records in Kihei
	3/26/19	Added five (5) records in Kihei
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	3/1/19 To	Delivered 3/14/2019
	3/12/19	Added one (1) record in Wailuku
Gas Stations		
Gate Codes	3/13/19 To 3/26/19	Delivered 3/27/2019 Added one (1) record in Kihei
Government Buildings		
Harbors		
Helipads		
Hiking Trails		
Hospitals		
Hydrants		

# **Maui County E9-1-1 Status Report**

# March 1, 2019 - March 31, 2019

## MAPPING LAYERS UPDATED (PART VII)

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

		MAUI 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)					
Hyrdology Layers						
Incident Response Areas						
	3/13/19 To 3/26/19	Delivered 3/27/2019  Updated name for two (2) records in Kihei  Spatially corrected, updated name for one (1) record in Napili  Spatially corrected seven (7) records in Kihei  Added two (2) records in Kihei				
Lodging		Updated name for one (1) record in Wailuku Spatially corrected two (2) records in Wailea				
	3/1/19 To 3/12/19	Spatially corrected three (3) records in Napili Spatially corrected, updated name for three (3) records in Kihei Spatially corrected, updated name for one (1) record in Napili Added two (2) records in Napili Spatially corrected one (1) record in Kihei				
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	3/13/19 To 3/26/19	Delivered 3/27/2019  Spatially corrected one (1) record in Waikapu  Spatially corrected two (2) records in Paia				
		Verified address for two (2) records in Wailea				

# March 1, 2019 - March 31, 2019

## MAPPING LAYERS UPDATED (PART VIII)

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

	MAUI 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)					
		Updated address for one (1) record in Kihei				
		Spatially corrected two (2) records in Napili				
		Verified address for two (2) records in Kihei				
		Updated full address for five (5) records in Kapalua				
		Updated full address for four (4) records in Waihee				
		Added POI for one (1) record in Lahaina				
		Spatially corrected one (1) record in Pukalani				
		Added one (1) record in Kihei				
		Added POI for two (2) records in Kihei				
		Spatially corrected three (3) records in Makawao				
	3/13/19 To	Corrected full address for one (1) record in Wailuku				
	3/26/19	Spatially corrected six (6) records in Wailea				
	0/20/10	Verified address for one (1) record in Kaanapali				
		Added street info for fourteen (14) records in Waihee				
		Verified address for one (1) record in Wailuku				
Points of Interest		Added POI for two (2) records in Waihee				
		Added POI for two (2) records in Wailuku				
		Added POI for two (2) records in Wailea				
		Spatially corrected seven (7) records in Kihei				
		Updated name for one (1) record in Pukalani				
		Added address for one (1) record in Wailuku				
		Spatially corrected two (2) records in Wailuku				
		Delivered 3/14/2019				
		Updated name for two (2) records in Kihei				
		Verified address for one (1) record in Wailuku				
		Updated name for one (1) record in Napili				
	3/1/19	Spatially corrected, updated name for one (1) record in Napili				
	To 3/12/19	Added POI for one (1) record in Wailuku				
	3/12/13	Verified address for four (4) records in Napili				
		Spatially corrected four (4) records in Kihei				
		Added POI for one (1) record in Napili				
		Spatially corrected three (3) records in Napili				

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# March 1, 2019 - March 31, 2019

## MAPPING LAYERS UPDATED (PART IX)

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

	MAUI 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)				
Police Beats						
Police Districts						
Police Response Areas						
Police Stations						
Post Offices						
Schools						
	3/13/19	Delivered 3/27/2019  Removed alias - Mokulele hwy for ten (10) records in Kahului				
	To 3/26/19	Modified range for one (1) record in Kahului  Removed alias - Mokulele hwy for three (3) records in Kihei				
Street Centerlines	3/1/19 To 3/12/19	Delivered 3/14/2019				
Street dentermies		Assigned range for one (1) record in Wailuku				
		Added centerline for four (4) records in Wailuku				
		Modified range for three (3) records in Wailuku				
		Split segment, modified range for two (2) records in Wailuku				
		Delivered 3/27/2019				
		Spatially corrected four (4) records in Makawao				
		Spatially corrected two (2) records in Wailuku				
		Spatially corrected three (3) records in Kihei				
0	3/13/19	Spatially corrected one (1) record in Lahaina				
Subdivisions	To 3/26/19	Added one (1) record in Kihei				
	3/20/19	Updated name for one (1) record in Pukalani				
		Spatially corrected one (1) record in Waiehu				
		Spatially corrected three (3) records in Wailea				
		Spatially corrected two (2) records in Pukalani				
Tow Jurisdictions						
Tsunami Evacuation Zones						
Tsunami Heights						
Waste Water Plants						
	3/13/19	Delivered 3/27/2019				
WSP Cell Sectors	To 3/26/19	Updated two (2) sectors per AT&T CRS				
		Added sixteen (16) sectors per Verizon Wireless CRS				

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# March 1, 2019 - March 31, 2019

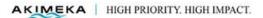
## MAPPING LAYERS UPDATED (PART X)

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

		MAUI COUNTY
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	GIS Delivery Dates/Remarks
		-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)
	3/13/19 To 3/26/19	Added twenty-six (26) sectors per AT&T CRS  Added twelve (12) sectors per Sprint CRS  Updated three (3) sectors per Sprint CRS
WSP Cell Sectors	3/1/19 To 3/12/19	Delivered 3/14/2019  Added twelve (12) sectors per Verizon Wireless CRS  Updated seventeen (17) sectors per Sprint CRS  Added ten (10) sectors per AT&T CRS  Updated three (3) sectors per Verizon Wireless CRS
WSP Cell Towers	3/13/19 To 3/26/19	Delivered 3/27/2019  Added two (2) towers per Sprint CRS  Updated one (1) tower per Sprint CRS  Added one (1) tower per Verizon Wireless CRS  Updated five (5) towers per AT&T CRS
wsr Cell Towers	3/1/19 To 3/12/19	Delivered 3/14/2019  Updated three (3) towers per Sprint CRS  Added one (1) tower per Verizon Wireless CRS  Updated three (3) towers per AT&T CRS  Updated one (1) tower per Verizon Wireless CRS

## NOTE:

The Parcels layer is provided by Maui County. Akimeka performs edits on the spatial information of the layer for 9-1-1 purposes. Changes to the attribute table are made when needed. The Parcels layer uploaded to the PSAP GIS server is intended for 9-1-1 purposes only and should not be disseminated to other county agencies.



# March 1, 2019 - March 31, 2019

## 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
3/13/2019	Delivered updated data for MapFlex which included Address Points, Lodging, Points Of Interest, Street Centerlines, Subdivisions, WSP Cell Sectors and WSP Cell Towers
3/14/2019	Delivered .map, .str, .rte, and Maui Cell Coverage.csv which included updated Address Points, Common Places Lookup Table, Lodging, Points Of Interest, Street Centerlines, Subdivisions and WSP Cell Towers for Intergraph
3/27/2019	Delivered .map, .str, .rte, and Maui Cell Coverage.csv which included updated Address Points, Building Footprints, Common Places Lookup Table, Gate Codes, Lodging, Points Of Interest, Street Centerlines, Subdivisions and WSP Cell Towers for Intergraph
3/27/2019	Delivered updated data for MapFlex which included Address Points, Building Footprints, Lodging, Points Of Interest, Street Centerlines, Subdivisions, WSP Cell Sectors and WSP Cell Towers

## March 1, 2019 - March 31, 2019

#### INTERGRAPH CAD UPGRADE

From April through June 2014, the Maui Police Department worked to upgrade their Intergraph CAD system to the more recent 2014 version. Through this upgrade process, new improvements were identified and the overall functionality of the system from the Map Build process to the Production workstation made significant enhancements in order to streamline the deliverables and continue providing accurate data to the PSAP.

- 1. Akimeka delivered an updated Intergraph CAD map March 14, 2019 which included:
  - a. Address Points, Common Places Lookup Table, Lodging, Points Of Interest, Street Centerlines, Subdivisions, and WSP Cell Towers for Intergraph
  - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
- 2. On March 27, 2019 Akimeka delivered an updated Intergraph CAD map which included:
  - a. Address Points, Building Footprints, Common Places Lookup Table, Gate Codes, Lodging, Points Of Interest, Street Centerlines, Subdivisions and WSP Cell Towers
  - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
- 3. Akimeka is still waiting for the 2016 version upgraded software from Hexagon.

During April 2019, the Intergraph CAD map will continue to be delivered every other week, which has been coordinated with all mapping system updates and synchronizations with other 911 databases.

#### MAPFLEX SYSTEM

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

**Hawaii County** – March 12<sup>th</sup>, 2019 and March 26<sup>th</sup>, 2019 **Maui County** – March 13<sup>th</sup>, 2019 and March 27<sup>th</sup>, 2019 **Kauai County** – March 14<sup>st</sup>, 2019, and March 28<sup>th</sup>, 2019 **Honolulu** – March 1<sup>st</sup>, 2019, March 15<sup>th</sup>, 2019, and March 29<sup>th</sup>, 2019

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# March 1, 2019 - March 31, 2019

## MAPFLEX ISSUES

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

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

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Maui County March 2019



# March 1, 2019 - March 31, 2019

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

## March 1, 2019 - March 31, 2019

## 4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - MARCH 2019

	MAUI COUNTY									
#	# Date Ticket # Description PSAP Urgency Comments									
			None							

NOTE:

There are no (0) Open Service Request for the Maui County PSAPs for March, 2019.

## MAUI PSAP SERVICE REQUESTS YEAR-TO-DATE (YTD) SUMMARY - 2019

	MAUI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2019	TO	ΓAL		WIRE	WIRELINE		WIRELESS		VoIP	
2019	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed	
2018 Carryover*			1							
January	5	5	1	5	5	0	0	0	0	
February	4	3	2	4	3	0	0	0	0	
March	1	3	0	1	3	0	0	0	0	
April										
May										
June										
July										
August										
September										
October										
November										
December										
TOTAL	10	11	0	10	11	0	0	0	0	

\*The 2018 Carry Over row indicates the number of Service Requests that were opened in 2018; however, were brought forward into 2019 in an effort to track the service request until completion.

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

Maui County March 2019



## March 1, 2019 - March 31, 2019

## **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 the next quarterly database synchronization audit for Maui County in March 2019.

The database synchronization effort included comparing Maui County's 9-1-1 MSAG against its GIS Street Centerline data. A total number of 2,730 9-1-1 MSAG (ESN 300 - 357) records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on March 1, 2019 for Maui 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%.



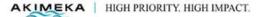
## March 1, 2019 - March 31, 2019

#### AUDIT SUMMARY RESULTS - 2018 - 2019

		As of June 1, 2018		As of September 1, 2018		As of December 1, 2018		As of March 1, 2019	
9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	9-1-1 MSAG es Dated 6-01-18		9-1-1 MSAG Dated 9-01-18		9-1-1 MSAG Dated 12-01-18		9-1-1 MSAG Dated 3-01-19	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		2,719		2,732		2,727		2,730	
Less: 9-1-1 MSAG Exception Records	(1)	74	2.7%	75	2.7%	75	2.7%	64	2.3%
Net 9-1-1 MSAG Records Eligible for Comparison		2,645		2,657		2,652		2,666	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG GIS Match No Corrections Required)		2,625	100.00%	2,642	100.00%	2,648	100.00%	2,666	100.00%
9-1-1 MSAG GIS No Match - Minor Correction Required	(2)	20	0.0%	15	0.0%	3	0.0%	0	0.0%
9-1-1 MSAG Record With No GIS Record	(3)	0	0.0%	0	0.0%	1	0.0%	0	0.0%
Total 9-1-1 MSAG Records No Match		20	0.0%	15	0.0%	4	0.0%	0	0.0%

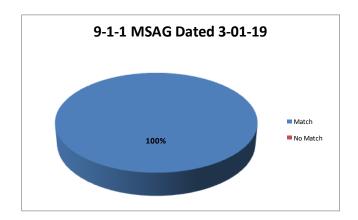
#### **AUDIT SUMMARY NOTES:**

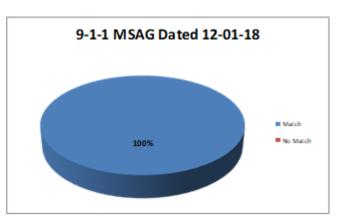
- (1)An MSAG Record that will not have a corresponding GIS Street Centerline Record but is required for the routing of E9-1-1 calls (i.e., Emergency Call Box, Foreign Exchange Records, Wireless Shell Records, etc.). No further action is required.
- (2)An MSAG Record that requires minor MSAG attention 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.



## March 1, 2019 - March 31, 2019

#### MSAG AUDIT SUMMARY RESULTS - MARCH 1, 2019 VS DECEMBER 1, 2018





Maui County's level of accuracy or 9-1-1 Match percentage remained constant at 100% as of March 1, 2019 to 100% on December 1, 2018

NENA Recommended Match Rate = 98%

#### MSAG AUDIT SUMMARY RESULTS NOTES:

- "MSAG GIS Minor Corrections" decreased (4 to 0) from December 2018 to March 2019. Minor corrections were primarily the result of edits made to the GIS Street Centerlines layer in order to meet new NG9-1-1 requirements. Low and high address ranges were then adjusted in the MSAG to correspond with the GIS record. Although this is a minor correction, customer telephone numbers (TNs) need to be validated by the service providers prior to adjusting an address range.
- "MSAG Record with No GIS Record" remained constant (0 to 0) from December 2018 to March 2019. MSAG Record with No GIS Record were zero due primarily to the verification of the MSAG records against multiple GIS databases to determine if the roads are existing within Maui County records.
- "GIS Record with Minor Corrections" decreased (3 to 0) from December 2018 to March 2019. Low and high address ranges, street suffix, and MSAG Community were adjusted in the GIS to correspond with the MSAG record.
- Ongoing maintenance is critical to ensure the database synchronized level of address accuracy is maintained each time an MSAG or GIS record is "last modified".

Maui County March 2019

# Maui County E9-1-1 Status Report

## March 1, 2019 - March 31, 2019

## INVALID MSAG STREETS AND ADDRESS RANGES - ESN X99 RECORDS

Hawaiian Telcom, Inc. (HTI) provides Maui County and Akimeka, as the PSAP's agent, with access and visibility to the ESN 359/399 MSAG records which are "known" invalid streets and address ranges. Results of the data provided are as follows:

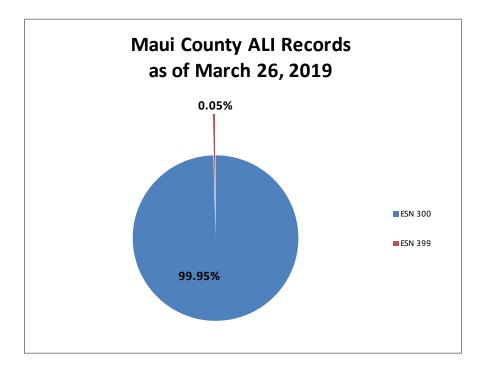
PSAP	ESN	Invalid MSAG Records	
		9-1-1 MSAG Dated 03-01-19	
		# of Records	% of Total MSAG Records (Valid and Invalid)
MAUI	399	13	0.5%
MOLOKA	359	0	0.0%
TOTAL MAUI		13	0.5%

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## March 1, 2019 - March 31, 2019

## 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 Maui County. As of March 26, 2019, **13** ESN 399 (Maui/Lanai) and ESN 359 (Molokai) records, representing **.05%** of Maui County's total ALI records, require research and corrective action, if needed.



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