Maui County E9-1-1 Status Report

June 1, 2017 – June 30, 2017

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1. PSAP OPERATIONS

9-1-1 CALL VOLUME MAUI PSAP – JUNE 2017

(**Source:** **West Safety Services Viper system**

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

9-1-1 Call Volume																
MAUI PSAP		**Wireline**		**Wireless**				**VOIP**		**Calls With No ALI**		**Admin Calls**		**Abandoned Calls**		**Other Calls**
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JUNE	9,893	1,665	16.83%	6,809	68.83%	52.15%	47.85%	299	3.02%	8	0.08%	0	0.00%	1,112	11.24%	0	0.00%

CALL VOLUME MAUI PSAP NOTES:

*Calls with No Ali for June 2017 = 0.08% - Statewide average for 2016 = 0.15%

9-1-1 CALL VOLUME MAUI PSAP – CALENDAR YEAR 2017

9-1-1 Call Volume																
MAUI PSAP		**Wireline**		**Wireless**				**VOIP**		**Calls with No ALI**		**Admin Calls**		**Abandoned Calls**		**Other Calls**
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	10,192	1,991	19.53%	6,822	66.93%	58.44%	41.56%	286	2.81%	14	0.14%	0	0.00%	1,079	10.59%	0	0.00%
FEB	9,578	1,888	19.71%	6,354	66.34%	58.59%	41.41%	306	3.19%	9	0.09%	0	0.00%	1,021	10.66%	0	0.00%
MAR	11,067	2,168	19.59%	7,283	65.81%	53.99%	46.01%	344	3.11%	8	0.07%	0	0.00%	1,264	11.42%	0	0.00%
APR	10,206	1,915	18.76%	6,822	66.84%	52.33%	47.67%	319	3.13%	3	0.03%	0	0.00%	1,147	11.24%	0	0.00%
MAY	10,262	1,887	18.39%	6,944	67.67%	51.21%	48.79%	332	3.24%	4	0.04%	0	0.00%	1,095	10.67%	0	0.00%
JUNE	9,893	1,665	16.83%	6,809	68.83%	52.15%	47.85%	299	3.02%	8	0.08%	0	0.00%	1,112	11.24%	0	0.00%
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	61,198	11,514		41,034				1,886		46		0		6,718		0	
MON AVG	10,200	1,919	18.80%	6,839	67.07%	54.45%	45.55%	314	3.08%	8	0.08%	0	0.00%	1,120	10.97%	0.00	0.00%

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9-1-1 CALL VOLUME MOLOKAI PSAP – JUNE 2017

9-1-1 Call Volume																
MOLOKAI PSAP	Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JUNE	362	113	31.22%	215	59.39%	64.65%	35.35%	0	0.00%	0	0.00%	0	0.00%	34	9.39%	0	0.00%

CALL VOLUME MOLOKAI PSAP NOTES:

* Calls with No Ali for June 2017 = 0.00% - Statewide average for 2016 = 0.15%

9-1-1 CALL VOLUME MOLOKAI PSAP – CALENDAR YEAR 2017

9-1-1 Call Volume																
MOLOKAI PSAP	Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	347	127	36.60%	182	52.45%	58.79%	41.21%	0	0.00%	1	0.29%	0	0.00%	37	10.66%	0	0.00%
FEB	264	90	34.09%	140	53.03%	67.86%	32.14%	3	1.14%	0	0.00%	0	0.00%	31	11.74%	0	0.00%
MAR	369	129	34.96%	196	53.12%	65.82%	34.18%	2	0.54%	3	0.81%	0	0.00%	39	10.57%	0	0.00%
APR	367	106	28.88%	212	57.77%	62.26%	37.74%	3	0.82%	2	0.54%	0	0.00%	44	11.99%	0	0.00%
MAY	376	107	28.46%	232	61.70%	58.62%	41.38%	0	0.00%	0	0.00%	0	0.00%	37	9.84%	0	0.00%
JUNE	362	113	31.22%	215	59.39%	64.65%	35.35%	0	0.00%	0	0.00%	0	0.00%	34	9.39%	0	0.00%
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	2,085	672		1,177				8		6		0		222		0	
MON AVG	348	112	32.37%	196	56.24%	63.00%	37.00%	1.33	0.42%	1	0.27%	0	0.00%	37	10.70%	0	0.00%

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9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – JUNE 2017

9-1-1 Call Volume																
MAUI COUNTY PSAPs	Wireline		Wireless				VOIP Calls		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JUNE	10,255	1,778	17.34%	7,024	68.49%	52.53%	47.47%	299	2.92%	8	0.08%	0	0.00%	1,146	11.18%	0	0.00%

9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – CALENDAR YEAR 2017

9-1-1 Call Volume																
MAUI COUNTY PSAPs	Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2017	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	10,539	2,118	20.10%	7,004	66.46%	58.45%	41.55%	286	2.71%	15	0.14%	0	0.00%	1,116	10.59%	0	0.00%
FEB	9,842	1,978	20.10%	6,494	65.98%	58.79%	41.21%	309	3.14%	9	0.09%	0	0.00%	1,052	10.69%	0	0.00%
MAR	11,436	2,297	20.09%	7,479	65.40%	54.30%	45.70%	346	3.03%	11	0.10%	0	0.00%	1,303	11.39%	0	0.00%
APR	10,573	2,021	19.11%	7,034	66.53%	52.63%	47.37%	322	3.05%	5	0.05%	0	0.00%	1,191	11.26%	0	0.00%
MAY	10,638	1,994	18.74%	7,176	67.46%	51.45%	48.55%	332	3.12%	4	0.04%	0	0.00%	1,132	10.64%	0	0.00%
JUNE	10,255	1,778	17.34%	7,024	68.49%	52.53%	47.47%	299	2.92%	8	0.08%	0	0.00%	1,146	11.18%	0	0.00%
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	63,283	12,186		42,211				1,894		52		0		6,940		0	
MON AVG	10,547	2,031	19.25%	7,035	66.72%	54.69%	45.31%	316	2.99%	9	0.08%	0.00	0.00%	1,157	10.96%	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.**

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FOR YOUR INFORMATION

FYI ………... For Your Information				
PSAP Operations				
Statewide 911 Call Volumes for 2016 & 2015 compare				
PSAP	2016		2015	
Oahu Civilian	1,009,059	71.93%	1,019,402	70.94%
Hawaii County	205,412	14.64%	217,768	15.15%
Maui County	137,333	9.80%	142,952	9.95%
Kauai County	50,955	3.63%	56,874	3.96%
Total	1,402,759	100.00%	1,436,997	100.00%
*Statewide average does not include Military 911 calls.				

TEXT TO 911 – CURRENT MONTH – JUNE 2017

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.

TEXT TO 911 Maui County PSAPs 2017		
Month	Received at Maui	Received at Molokai
January	12	1
February	15	0
March	17	2
April	16	0
May	34	6
June	18	3
July		
August		
September		
October		
November		
December		
YTD	112	12
Monthly Avg.	18.67	2.00

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WIRELESS PSAP TESTING – JUNE 2017

MAUI COUNTY - JUNE 2017						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:

NOTES:

- There were no scheduled Wireless 911 tests conducted in June, 2017 for the Maui and Molokai PSAP.

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – JUNE 2017

MAUI COUNTY	Total	Dispatchable Location Transactions Submitted	MSAG	ALI Submitted		Open ALI Discrepancy Records			Customer Addresses Affected
2017		DL (A)	MSAG (B)	TN CR (C)	ALI DR (D)	TNCR	ALI DR	VoIP DR	
JANUARY	146	134	7	3	2	264	0	0	21
FEBRUARY	231	207	11	7	6	259	0	0	203
MARCH	130	80	16	33	1	228	0	0	68
APRIL	173	107	8	58	0	238	0	0	72
MAY	153	118	10	24	1	218	0	0	179
JUNE	137	127	8	1	1	218	0	0	145
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	970	773	60	126	11				688
AVG PER MONTH	162	129	10	21	2				115

Column header for "9-1-1 TRANSACTIONS" spans all data columns.

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 **137** MSAG transactions were processed in 9-1-1 Net during the current month. Eight (**8**) 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. **145** customer ANI/ALI (telephone number/address) records updated as a direct result.

127 Dispatchable Location transactions were submitted during the current month.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

128 Telephone Number Change Request (TN CR) transactions were processed and corrected in 9-1-1 Net during the current month. One (**1**) TN CR was completed for the ESN 399/359 clean-up project and as a result, one (**1**) ESN 399/359 street record was deleted from the MSAG database. **127** TN CRs were processed relating to the Dispatchable Location project.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are currently 218 Open TN CR Transactions.**
- **Refer to chart in the next section "TNCR Current Status"**

199 Open TN CR transactions are a direct result of the ESN 399/359 clean-up and are awaiting approval from Hawaiian Telcom, Inc. **19** 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. One (**1**) ALI DR was submitted as a result of a 9-1-1 call made from a residence in Hana. Maui PSAP submitted the request to Akimeka to update the customer information and the discrepancy was corrected by West Safety Services.

- **There are no open ALI DRs**
- **There are no open VoIP DRs**

NARRATIVE:

Akimeka has prepared a total of 2,248 Dispatchable Location transactions for submission. 127 previously prepared transactions were submitted in June and 127 transactions were processed.

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TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – JUNE, 2017

NOTE:

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

<table>
<tr><td colspan="5">PSAP 9-1-1 Telephone Number Location Change Request
(Telephone Number Change Request (TNCR) Status)</td></tr>
<tr>
<th>County</th>
<th>TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA</th>
<th>OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)</th>
<th>OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)</th>
<th>TOTAL UNOPENED TNCR RECORDS</th>
</tr>
<tr><td>MAUI</td><td>168</td><td>57</td><td>69</td><td>42</td></tr>
<tr><td>MOLOKAI</td><td>50</td><td>12</td><td>33</td><td>5</td></tr>
<tr><td>TOTAL</td><td>218</td><td>69</td><td>102</td><td>47</td></tr>
</table>

<table>
<tr><td colspan="2">STATUS</td></tr>
<tr><td>TOTAL TNCRs SUBMITTED - The total number of TNCR requests for modification that have been submitted in 9-1-1</td></tr>
<tr><td>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.</td></tr>
<tr><td>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.</td></tr>
<tr><td>TOTAL UNOPENED TNCR RECORDS STATUS - The request is submitted by Akimeka on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.</td></tr>
</table>

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DISPATCHABLE LOCATION – STATUS AS OF – JUNE 2017 - PENDING

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 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				
2017 **Quarter 2**	**Common Name Place** **MSAG Address**	**TNCR* Transactions Prepared**	**TNCR* Transactions Submitted**	**Transactions Processed****
Quarter 1 Carryover		2,033	374	350
April	Menehune Shores, 760 S Kihei Rd, Kihei	107	0	0
April	Kealia Resort, 191 N Kihei Rd, Kihei	0	41	34
May	Koa Resort, 811 S. Kihei Rd, Kihei	0	21	21
May	Kihei Resort, 777 S. Kihei Rd, Kihei	0	16	16
May	Menehune Shores, 760 S Kihei Rd, Kihei	0	41	41
May	Kihei Bay Surf, 715 S. Kihei Rd, Kihei	1	18	18
May	QKC, 275 Kaahumanu Ave, Kahului	0	0	5
May	Kealia Resort, 191 N Kihei Rd, Kihei	0	0	7
May	Kihei Bay Vista, 679 S. Kihei Rd, Kihei	0	22	22
June	Kihei Beach Resort, 36 S Kihei Rd, Kihei	0	49	49
June	Kihei Kai, 61 N Kihei Rd, Kihei	0	18	18
June	Kihei Sands, 115 N Kihei Rd, Kihei	0	13	13
June	Maalaea Surf, 12 S Kihei Rd, Kihei	0	22	22
June	Nani Kai Hale, 73 N Kihei Rd, Kihei	0	25	25
Quarter 2 Total		107	286	291
Total		2,248	946	932

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

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

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

PSAP	**TOTAL RECORDS SUBMITTED BY SPECTRUM (A)**	**RECORDS VERIFIED BY AKIMEKA (B)**	**PERCENT COMPLETE (C)**
HAWAII County	22,044	0	0.00%
KAUAI County	8,936	219	2.45%
MAUI County	18,256	311	1.70%
OAHU Cilivian	87,414	0	0.00%
OAHU Military	3,663	0	0.00%
TOTAL	140,313	530	

*Table title: *Spectrum (Charter) 9-1-1 VoIP Database Verification Project*

* Spectrum VoIP Database received on June 21st, 2017

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

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3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JUNE 2017

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**	**Date GIS Delivered**	**Other/Remarks**
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE **(Listed Alphabetically)**			
Address Points	6/29/2017		Added one (1) address in Haiku
	6/29/2017		Changed one (1) address in Haiku
	6/29/2017		Added one (1) address in Hana
	6/29/2017		Changed one (1) address in Pukalani
	6/29/2017		Added one (1) address in Pukalani
		06/21/17	
	6/21/2017		Spatially corrected three (3) address points in Haiku
	6/21/2017		Added two (2) addresses in Haiku
	6/21/2017		Added one (1) address in Kaunakakai
	6/13/2017		Spatially corrected one (1) address point in Kula
	6/13/2017		Added one (1) address in Kahului
	6/13/2017		Added one (1) address in Hana
	6/9/2017		Added one (1) address in Wailuku
	6/9/2017		Corrected two (2) addresses in Wailuku
		06/07/17	
	6/6/2017		Added one (1) address in Kaunakakai
	6/6/2017		Added one (1) address in Kihei
	6/6/2017		Added one (1) address in Napili
	6/6/2017		Added one (1) address in Pukalani
	6/6/2017		Spatially corrected sixty-eight (68) address points in Napili
	6/6/2017		Added one (1) address in Wailuku
	6/6/2017		Spatially corrected fifty-one (51) address points in Wailuku
	6/5/2017		Added one (1) address in Kaunakakai
	6/5/2017		Added one (1) address in Wailuku
	6/5/2017		Spatially corrected two hundred (200) address points in Wailuku
	6/2/2017		Spatially corrected three (3) address points in Haiku
	6/2/2017		Spatially corrected five (5) address points in Kapalua
	6/2/2017		Updated Location Name for one (1) address in Kapalua
	6/2/2017		Spatially corrected three (3) address points in Kihei
	6/2/2017		Spatially corrected three (3) address points in Kula
	6/2/2017		Spatially corrected two (2) address points in Lahaina
	6/2/2017		Spatially corrected one (1) address point in Napili

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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.

Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
MAUI COUNTY			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	6/2/2017		Spatially corrected one (1) address point in Paia
	6/2/2017		Updated Location Name for one (1) address in Spreckelsville
	6/2/2017		Spatially corrected five (5) address points in Waihee
	6/2/2017		Spatially corrected one (1) address point in Wailea
Airports		**06/07/17**	
	6/2/2017		Changed Name to Kapalua Airport
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN			
Fire Beats			
Fire Districts			
Fire Response Areas			
Fire Stations			
Food & Beverage			
Gas Stations			
Gate Codes			
Government Buildings			
Harbors			
Helipads			
Hiking Trails			
Hospitals			
Hydrants			
Hyrdology Layers			

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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	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
MAUI COUNTY			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
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		**06/07/17**	
	6/6/2017		Rescue Tubes - Added thirty-two (32) rescue tubes in Kihei
	6/6/2017		Rescue Tubes - Added forty-one (41) rescue tubes in Wailea
Parcels			
Parks			
Parks Polygon			
Points of Interest		**06/21/17**	
	6/9/2017		Updated two (2) POI addresses in Wailuku
		06/07/17	
	6/6/2017		Spatially corrected one (1) POI in Wailea
	6/5/2017		Added one (1) POI in Wailuku
	6/5/2017		Updated two (2) POI names in Wailuku
	6/2/2017		Added four (4) POI in Haiku
	6/2/2017		Corrected two (2) POI name in Haiku
	6/2/2017		Spatially corrected one (1) POI in Haiku
	6/2/2017		Added six (6) POI in Kapalua
	6/2/2017		Spatially corrected six (6) POI in Kapalua
	6/2/2017		Added five (5) POI in Kihei
	6/2/2017		Spatially corrected two (2) POI in Kihei
	6/2/2017		Added three (3) POI in Kula

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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**	**Date GIS Delivered**	**Other/Remarks**
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE **(Listed Alphabetically)**			
Points of Interest	6/2/2017		Spatially corrected three (3) POI in Kula
	6/2/2017		Updated three (3) POI names in Kula
	6/2/2017		Added two (2) POI in Lahaina
	6/2/2017		Spatially corrected two (2) POI in Lahaina
	6/2/2017		Updated one (1) POI name in Lahaina
	6/2/2017		Added one (1) POI in Makawao
	6/2/2017		Spatially corrected one (1) POI in Makawao
	6/2/2017		Spatially corrected three (3) POI in Napili
	6/2/2017		Added address to one (1) POI in Napili
	6/2/2017		Updated one (1) POI name in Napili
	6/2/2017		Spatially corrected one (1) POI in Paia
	6/2/2017		Spatially corrected one (1) POI in Spreckelsville
	6/2/2017		Updated one (1) POI name in Spreckelsville
	6/2/2017		Spatially corrected two (2) POI in Waihee
	6/2/2017		Updated one (1) POI name in Wailea
	6/2/2017		Spatially corrected one (1) POI in Wailea
Police Beats			
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines	6/29/2017		Spatially corrected one (1) street centerline segment in Haiku
	6/28/2017		Spatially corrected five (5) street centerlines in Haiku
	6/23/2017		Spatially corrected eight (8) street centerline segments in Haiku
		06/21/17	
	6/21/2017		Spatially corrected two (2) street centerline segments in Haiku
	6/21/2017		Modified one (1) street centerline range in Haiku
	6/20/2017		Spatially corrected two (2) street centerlines in Maunaloa
	6/19/2017		Spatially corrected one (1) street centerline in Maunaloa
	6/13/2017		Spatially corrected two (2) street centerline segments in Maunaloa
	6/12/2017		Added four (4) street centerline segments in Maunaloa

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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.

Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
MAUI COUNTY			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Street Centerlines	6/12/2017		Spatially corrected one (1) street centerline segment in Maunaloa
		06/07/17	
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors	6/29/2017		Per Verizon CRS
		06/21/17	
	6/20/2017		Per Verizon CRS
		06/07/17	
WSP Cell Towers	6/29/2017		Per Verizon CRS
		06/21/17	
	6/20/2017		Per Verizon CRS
		06/07/17	

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.

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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
06/21/17	Delivered .map, .str, .rte., and Maui Cell Coverage.csv which included updated Address Points, Common Places Lookup Table, Points Of Interest, Street Centerlines, and WSP Cell Towers for Intergraph
06/21/17	Delivered updated data for MapFlex which included Address Points, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
06/07/17	Delivered updated data for MapFlex which included Address Points, Airports, Food and Beverage, Points Of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers
06/07/17	Delivered .map, .str, .rte., and Maui Cell Coverage.csv which included updated Address Points, Airports, Common Places Lookup Table, Points Of Interest, Rescue Tubes, Street Centerlines, and WSP Cell Towers for Intergraph

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. On June 7th, 2017 – Akimeka delivered an updated Intergraph CAD map which included:
    a. Address Points, Airports, Common Places Lookup Table, Points of Interest, Rescue Tubes, Street Centerlines and WSP Cell Towers
    b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv

2. Akimeka delivered an updated Intergraph CAD map June 21st, 2017 which included:
    a. Address Points, Common Places Lookup Table, Points of Interest, Street Centerlines, and WSP Cell Towers.
    b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv

During July 2017, 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.

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MAPFLEX SYSTEM

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

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

1. Akimeka delivered GIS data to the MapFlex system on the following dates in June 2017
   a. **Hawaii County** – June 6th, 2017 and June 20th, 2017
   b. **Maui County** – June 7th, 2017 and June 21st, 2017
   c. **Kauai County** – June 8th, 2017 and June 22nd, 2017
   d. **Honolulu** – June 9th, 2017 and June 23rd, 2017

MAPFLEX ISSUES

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

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

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11/2016	Wireless Confidence	Sprint calls coming across with unusually high confidence. Coordination is taking place with Sprint and West. West provides the PDE services for Sprint.	Pending
1/18/2017	RDC MapFlex	During a meeting between Akimeka and RDC, it was identified that HPD GIS data was contained within the RDC MapFlex and was missing RDC's data. Due to the proprietary nature of the GIS data provided by Akimeka for the civilian PSAP's mapping systems and the confidential information contained to support HPD operations, it was concerning. Actions were taken to request West to stop this and to pull RDC's archive data. West has since replied that they never knew RDC was military and functioned separately from the civilian PSAPs. HPD, RDC, and Akimeka have taken corrective actions to construct GIS data that will be used as a baseline for the RDC and to remove sensitive information supplied for the RDC MapFlex.	Pending – Akimeka notified West that they had data ready on June 28, 2017 pending response from West.
3/22/2017	ArcGIS Address Locator	The locators in MapFlex have a configurations which does not include ESNs. A reported issue has occurred with the Sheraton in Waikiki. The address locator does not differentiate between the Sheraton hotel and the surf break and plots on the surf break. The bigger issue is that this same issue will occur with complexes that have same primary address.	A new SP 5.4 update by West is aimed to correct this issue.
5/17/2017	VoIP Calls Plotting Incorrectly	Recognized in late April and early May 2017, the PSAPs have been receiving several VoIP calls which are plotting in the incorrect locations. After further research it was determined that it is because MapFlex is configured to plot the received Lat/Long. The problem is that these are not always maintained properly and that ideally the system should first choose to match with the GIS data based on the provided address.	West is currently researching their configurations (May - June 2017). Aside from the MapFlex, Akimeka is working with Spectrum (previously Time Warner) to correct their Lat/Longs on a mass scale
5/17/2017	Landline Calls Producing X/Y on calls	It was determined that for normal landline calls, the X/Y coordinates are being sent. The PSAPs have asked where these are being generated and why would they be sent for landline calls.	West is looking into this (May - June 2017)

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4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - JUNE 2017

MAUI COUNTY						
#	Date	Ticket #	Description	PSAP	Urgency	Comments
			None			

NOTE:

There are no Open Service Requests for the Maui County PSAPs for June, 2017.

MAUI PSAP SERVICE REQUESTS YEAR-TO-DATE (YTD) SUMMARY – 2017

MAUI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2017	**TOTAL**		Open	**WIRELINE**		**WIRELESS**		**VoIP**	
	Created	**Closed**		Created	Closed	Created	Closed	Created	Closed
2016 Carryover*			0						
January	2	2	0	2	2	0	0	0	0
February	6	6	0	6	6	0	0	0	0
March	1	1	0	1	1	0	0	0	0
April	0	0	0	0	0	0	0	0	0
May	1	1	0	0	0	0	0	1	1
June	1	1	0	1	1	0	0	0	0
July									
August									
September									
October									
November									
December									
TOTAL	**11**	**11**	**0**	**10**	**10**	**0**	**0**	**1**	**1**

Note:	*The 2016 Carry Over row indicates the number of Service Requests that were opened in 2016; however, were brought forward into 2017 in an effort to track the service request until completion.

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

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 June 2017.

The database synchronization effort included comparing Maui County's 9-1-1 MSAG against its GIS Street Centerline data. A total number of **2,703** 9-1-1 MSAG (ESN 300 – 357) records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on June 1, 2017 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 yield a 100 percent match rate. As such, NENA's recommended minimum match rate is 98%.

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AUDIT SUMMARY RESULTS – 2016 -2017

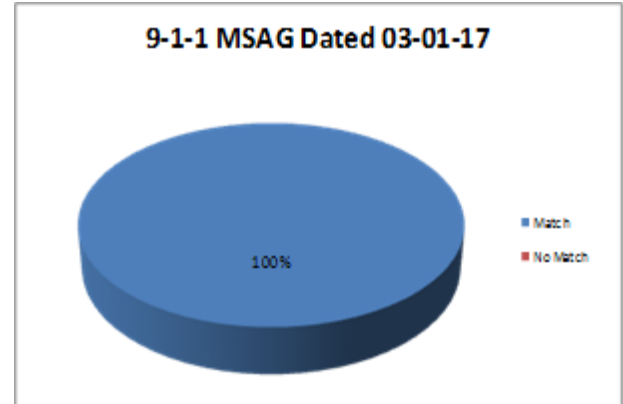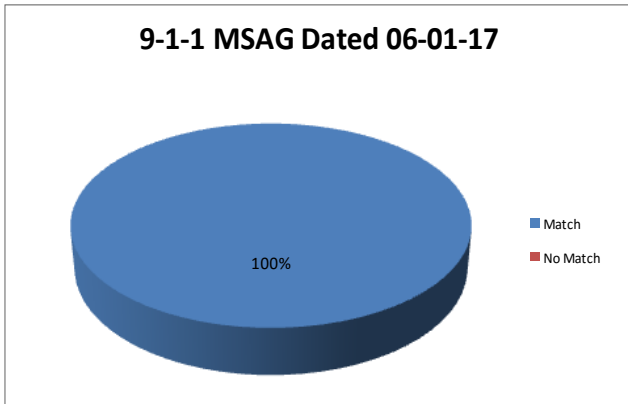| 9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of September 1, 2016 9-1-1 MSAG Dated 9-01-16		As of December 1, 2016 9-1-1 MSAG Dated 12-01-16		As of March 1, 2017 9-1-1 MSAG Dated 3-01-17		As of June 1, 2017 9-1-1 MSAG Dated 6-01-17	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		2,693		2,703		2,703		2,703	
Less: 9-1-1 MSAG Exception Records	(1)	75	2.7%	75	2.7%	75	2.7%	75	2.7%
Net 9-1-1 MSAG Records Eligible for Comparison		2,618		2,628		2,632		2,632	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		2,616	100.00%	2,626	100.00%	2,629	100.00%	2,628	100.00%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	1	0.0%	1	0.0%	3	0.0%	3	0.0%
9-1-1 MSAG Record With No GIS Record	(3)	1	0.0%	1	0.0%	0	0.0%	1	0.0%
Total 9-1-1 MSAG Records No Match		0	0.0%	0	0.0%	0	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.

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MSAG AUDIT SUMMARY RESULTS – JUNE 1, 2017 VS MARCH 1, 2017

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

at 100% as of June 1, 2017 to 100% on March 1, 2017

NENA Recommended Match Rate = 98%

MSAG AUDIT SUMMARY RESULTS NOTES:

- "MSAG - GIS Minor Corrections" remained the same (3 to 3) from March 2017 to June 2017. The minor corrections is 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" increased (0 to 1) from March 2017 to June 2017. The total of one MSAG Record with No GIS Record was 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" remained the same (3 to 3) from March 2017 to June 2017. Low and high address ranges, street suffix, and MSAG Community were adjusted in the GIS to correspond with the MSAG record.
- "MSAG records that don't match GIS" remained the same (3 to 3) from March 2017 to June 2017. This is a result in which MSAG records submitted in 9-1-1 Net were not completed prior to the end of the month.
- 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".

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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 03-01-17		9-1-1 MSAG Dated 06-01-17	
		# of Records	% of Total MSAG Records (Valid and Invalid)	# of Records	% of Total MSAG Records (Valid and Invalid)
MAUI	399	38	1.5%	37	1.5%
MOLOKAI	359	12	5.2%	5	2.2%
TOTAL MAUI		50	1.8%	42	1.5%

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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 June 29, 2017, **176** ESN 399 (Maui/Lanai) and ESN 359 (Molokai) records, representing **.3%** of Maui County's total ALI records, require research and corrective action, if needed.

**Maui County ALI Records
as of June 29, 2017**

0.3%

99.7%

■ESN 300

■ESN 399