

Maui County E9-1-1 Status Report

December 1, 2016 – December 31, 2016



Maui County E9-1-1 Status Report

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1. PSAP OPERATIONS

9-1-1 CALL VOLUME MAUI PSAP – DECEMBER 2016

(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	
2016	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
DEC	11,052	2,169	19.63%	7,363	66.62%	59.54%	40.46%	264	2.39%	23	0.21%	0	0.00%	1,233	11.16%	0	0.00%

CALL VOLUME MAUI PSAP NOTES:

*Calls with no Ali 0.21% - Statewide average = 0.15% Year 2016

9-1-1 CALL VOLUME MAUI PSAP – CALENDAR YEAR 2016

9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	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	11,627	2,130	18.32%	7,796	67.05%	60.31%	39.69%	334	2.87%	19	0.16%	0	0.00%	1,348	11.59%	0	0.00%
FEB	9,968	1,941	19.47%	6,639	66.60%	56.64%	43.36%	263	2.64%	7	0.07%	0	0.00%	1,118	11.22%	0	0.00%
MAR	11,240	2,216	19.72%	7,452	66.30%	57.11%	42.89%	262	2.33%	12	0.11%	0	0.00%	1,298	11.55%	0	0.00%
APR	11,162	2,180	19.53%	7,376	66.08%	57.57%	42.43%	249	2.23%	19	0.17%	0	0.00%	1,338	11.99%	0	0.00%
MAY	11,672	2,012	17.24%	7,929	67.93%	57.94%	42.06%	295	2.53%	17	0.15%	0	0.00%	1,419	12.16%	0	0.00%
JUNE	11,010	1,910	17.35%	7,470	67.85%	56.83%	43.17%	297	2.70%	7	0.06%	0	0.00%	1,326	12.04%	0	0.00%
JULY	12,362	2,216	17.93%	8,304	67.17%	54.29%	45.71%	328	2.65%	21	0.17%	0	0.00%	1,493	12.08%	0	0.00%
AUG	11,409	1,979	17.35%	7,798	68.35%	54.92%	45.08%	269	2.36%	14	0.12%	0	0.00%	1,349	11.82%	0	0.00%
SEPT	10,445	1,860	17.81%	7,033	67.33%	57.78%	42.22%	270	2.58%	8	0.08%	0	0.00%	1,274	12.20%	0	0.00%
OCT	10,528	1,960	18.62%	7,093	67.37%	58.30%	41.70%	292	2.77%	14	0.13%	0	0.00%	1,169	11.10%	0	0.00%
NOV	10,238	1,923	18.78%	6,842	66.83%	57.48%	42.52%	301	2.94%	19	0.19%	0	0.00%	1,153	11.26%	0	0.00%
DEC	11,052	2,169	19.63%	7,363	66.62%	59.54%	40.46%	264	2.39%	23	0.21%	0	0.00%	1,233	11.16%	0	0.00%
YTD	132,713	24,496		89,095				3,424		180		0		15,518		0	
MON AVG	11,059	2,041	18.48%	7,425	67.12%	57.39%	42.61%	285	2.58%	15	0.13%	0	0.00%	1,293	11.68%	0.00	0.00%

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9-1-1 CALL VOLUME MOLOKAI PSAP – DECEMBER 2016

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	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
DEC	343	137	39.94%	160	46.65%	62.50%	37.50%	2	0.58%	2	0.58%	0	0.00%	42	12.24%	0	0.00%

CALL VOLUME MOLOKAI PSAP NOTES:

*Calls with no Ali 0.58% - Statewide average = 0.15% Year 2016

9-1-1 CALL VOLUME MOLOKAI PSAP – CALENDAR YEAR 2016

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	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	371	109	29.38%	210	56.60%	58.57%	41.43%	6	1.62%	2	0.54%	0	0.00%	44	11.86%	0	0.00%
FEB	337	126	37.39%	178	52.82%	54.49%	45.51%	3	0.89%	2	0.59%	0	0.00%	28	8.31%	0	0.00%
MAR	355	106	29.86%	205	57.75%	45.85%	54.15%	3	0.85%	2	0.56%	0	0.00%	39	10.99%	0	0.00%
APR	435	153	35.17%	232	53.33%	51.29%	48.71%	1	0.23%	2	0.46%	0	0.00%	47	10.80%	0	0.00%
MAY	360	141	39.17%	182	50.56%	52.75%	47.25%	0	0.00%	2	0.56%	0	0.00%	35	9.72%	0	0.00%
JUNE	505	114	22.57%	317	62.77%	62.46%	37.54%	0	0.00%	2	0.40%	0	0.00%	72	14.26%	0	0.00%
JULY	398	125	31.41%	229	57.54%	60.70%	39.30%	1	0.25%	0	0.00%	0	0.00%	43	10.80%	0	0.00%
AUG	416	128	30.77%	219	52.64%	62.10%	37.90%	1	0.24%	2	0.48%	0	0.00%	66	15.87%	0	0.00%
SEPT	397	122	30.73%	206	51.89%	59.71%	40.29%	4	1.01%	22	5.54%	0	0.00%	43	10.83%	0	0.00%
OCT	339	109	32.15%	194	57.23%	53.09%	46.91%	0	0.00%	1	0.29%	0	0.00%	35	10.32%	0	0.00%
NOV	364	139	38.19%	174	47.80%	59.77%	40.23%	4	1.10%	2	0.55%	0	0.00%	45	12.36%	0	0.00%
DEC	343	137	39.94%	160	46.65%	62.50%	37.50%	2	0.58%	2	0.58%	0	0.00%	42	12.24%	0	0.00%
YTD	4,620	1,509		2,506				25		41		0		539		0	
MON AVG	385	126	33.06%	209	53.96%	56.94%	43.06%	2.08	0.56%	3	0.88%	0	0.00%	44.917	11.53%	0	0.00%

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9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – DECEMBER 2016

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP Calls		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	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
DEC	11,395	2,306	20.24%	7,523	66.02%	59.60%	40.40%	266	2.33%	25	0.22%	0	0.00%	1,275	11.19%	0	0.00%

9-1-1 CALL VOLUME (COMBINED MAUI & MOLOKAI PSAPS) – CALENDAR YEAR 2016

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	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	11,998	2,239	18.66%	8,006	66.73%	60.27%	39.73%	340	2.83%	21	0.18%	0	0.00%	1,392	11.60%	0	0.00%
FEB	10,305	2,067	20.06%	6,817	66.15%	56.58%	43.42%	266	2.58%	9	0.09%	0	0.00%	1,146	11.12%	0	0.00%
MAR	11,595	2,322	20.03%	7,657	66.04%	56.81%	43.19%	265	2.29%	14	0.12%	0	0.00%	1,337	11.53%	0	0.00%
APR	11,597	2,333	20.12%	7,608	65.60%	57.37%	42.63%	250	2.16%	21	0.18%	0	0.00%	1,385	11.94%	0	0.00%
MAY	12,032	2,153	17.89%	8,111	67.41%	57.82%	42.18%	295	2.45%	19	0.16%	0	0.00%	1,454	12.08%	0	0.00%
JUNE	11,515	2,024	17.58%	7,787	67.62%	57.06%	42.94%	297	2.58%	9	0.08%	0	0.00%	1,398	12.14%	0	0.00%
JULY	12,760	2,341	18.35%	8,533	66.87%	54.46%	45.54%	329	2.58%	21	0.16%	0	0.00%	1,536	12.04%	0	0.00%
AUG	11,825	2,107	17.82%	8,017	67.80%	55.12%	44.88%	270	2.28%	16	0.14%	0	0.00%	1,415	11.97%	0	0.00%
SEPT	10,842	1,982	18.28%	7,239	66.77%	57.84%	42.16%	274	2.53%	30	0.28%	0	0.00%	1,317	12.15%	0	0.00%
OCT	10,867	2,069	19.04%	7,287	67.06%	58.16%	41.84%	292	2.69%	15	0.14%	0	0.00%	1,204	11.08%	0	0.00%
NOV	10,602	2,062	19.45%	7,016	66.18%	57.54%	42.46%	305	2.88%	21	0.20%	0	0.00%	1,198	11.30%	0	0.00%
DEC	11,395	2,306	20.24%	7,523	66.02%	59.60%	40.40%	266	2.33%	25	0.22%	0	0.00%	1,275	11.19%	0	0.00%
YTD	137,333	26,005		91,601				3,449		221		0		16,057		0	
MON AVG	11,444	2,167	18.96%	7,633	66.69%	57.39%	42.61%	287	2.51%	18	0.16%	0.00	0.00%	1,338	11.68%	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 not 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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TEXT TO 911 – CURRENT MONTH – DECEMBER 2016

NOTE:

- Maui County initiated a soft launch of the Text to 911 service on March 15, 2016.
- 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 Chart also includes internal testing of Text to 911 for training purposes.
- In a press conference on October 13, 2016, an official announcement was made by the Governor of the State of Hawaii introducing “TEXT TO 911” as an emergency public service now available in the State of Hawaii.

TEXT TO 911 Maui County PSAPs 2016		
Month	Received at Maui	Received at Molokai
January	1	0
February	0	0
March	38	5
April	12	2
May	25	3
June	19	4
July	43	4
August	23	1
September	30	9
October	87	5
November	24	0
December	18	0
YTD	320	33
Monthly Avg.	26.67	2.75

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WIRELESS PSAP TESTING – DECEMBER 2016

MAUI COUNTY - DECEMBER 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
None						

NOTES:

- There were no scheduled Wireless 911 tests conducted in December, 2016 for the Maui and Molokai PSAP.

WIRELESS PSAP TESTING – YEARLY TOTALS 2016

MAUI COUNTY - 2016						
WIRELESS 911 PSAP TESTING TOTALS 2016	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
	AT&T	1	3	Maui PSAP	Pass	Hana Site
	SPRINT	2	7	Maui PSAP	Pass	1 site on Molokai/1 site on Maui
	VERIZON	35	117	Maui PSAP	Pass	
	Total	38	127			

NOTES:

The Maui County PSAP tested a total of 38 cell towers sites and 127 cell sectors in 2016.

FOR YOUR INFORMATION

A “911 Wireless Testing Holiday Blackout” will be in effect starting on December 11th, 2016 until January 3rd, 2017 for Kauai PD, Maui PD, Molokai PD, and the Honolulu PD PSAPs. Hawaii County PD PSAP extends their blackout until January 17th, 2017 due to new PSAP equipment installation.

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – DECEMBER 2016

MAUI COUNTY	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
		MSAG (A)	TNCR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	
2016									
JANUARY	176	8	167	0	1	1,893	0	0	173
FEBRUARY	148	13	135	0	0	2,026	0	0	158
MARCH	79	14	65	0	0	1,938	0	0	170
APRIL	132	25	107	0	0	1,795	0	0	895
MAY	79	45	31	3	0	1,281	0	0	726
JUNE	60	38	21	1	0	823	0	0	608
JULY	37	16	20	1	0	467	0	0	402
AUGUST	83	18	64	1	0	421	0	0	477
SEPTEMBER	37	8	27	1	1	386	0	0	110
OCTOBER	23	7	15	1	0	359	0	0	36
NOVEMBER	16	15	1	0	0	323	0	0	36
DECEMBER	8	7	1	0	0	282	0	0	42
TOTAL YTD	878	214	654	8	2				3,833
AVG PER MONTH	73	8	167	0	1				173

Definitions

- (A) **Master Street Address Guide** - Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (B) **Telephone Number Change Request** - Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 399/359 attached to them which indicates the need for validation.
- (C) **Automatic Location Information Discrepancy Record** - Represents an address discrepancy discovered during a live 9-1-1 call, from a landline. These record corrections are treated with a higher priority and should be processed within 48 hours as a general guideline.
- (D) **Voice over Internet Protocol Discrepancy Record** - Represents an address discrepancy discovered during a live 9-1-1 call, from a VoIP phone. These record corrections are treated with a higher priority and should be processed within 72 hours as a general guideline per Time Warner Operations Center. MSR tracking effective April 2014.

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MSAG CURRENT MONTH NOTES:

A total of eight **8** MSAG transactions were processed in 9-1-1 Net during the month of December 2016. Seven (**7**) requests were processed relating to the MSAG database changes which 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.

There were **42** customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

One (**1**) Telephone Number Change Requests (TN CR) transaction was processed and corrected in 9-1-1 Net with a valid MSAG address. In December 2016, there were **42** TN CRs completed and as a result, two (**2**) ESN 359/399 street records were deleted from the MSAG database. No ALI DR's were submitted this month.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are 282 Open TN CR Transactions as of December 31, 2016.**
- **Refer to chart in the next section “TNCR Current Status”**

255 Open TN CR transactions are a direct result of the ESN 399 clean-up and are awaiting approval from Hawaiian Telcom, Inc. **27** Open TN CR transactions are a result of the Dispatchable Location project submitted in September. (Refer to the “Dispatchable Location” chart below) 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 ALI DRs Open as of December 31, 2016**
- **There are no VoIP DRs Open as of December 31, 2016**

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – DECEMBER, 2016

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NOTE:

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

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
County	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
MAUI	209	61	87	61
MOLOKAI	73	13	48	12
TOTAL	282	74	135	73

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

DISPATCHABLE LOCATION – STATUS AS OF – DECEMBER 2016 - PENDING

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NARRATIVE:

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

During the month of 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. There are currently 1612 transactions prepared for submission. Present observations indicate that previous transactions that were submitted in 2015 and 2016 are currently being processed.

Dispatchable Location					
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Prepared	Number of TNCR* Transactions Submitted	Number of Transactions Processed**
Queen Kaahumanu Center	Carryover from 2015	2015		368	310
*Common Name Place and Address Available Upon Request		Jan-Jul	877	6	27
Azeka Kihei	1280 S. Kihei Rd, Kihei	Aug	49	0	0
Piilani Shopping Center	Piikea Ave, Kihei		118	0	0
Maui Marketplace	270 Dairy Rd, Kahului	Sept	129	0	1
University of Hawaii, Maui Campus	310 Kaahumanu Ave, Kahului	Oct-	245	0	9
Honua Kai Resort	130 Kai Malina Pkwy, Kaanapali	Nov	60	0	0
Fairmont Kea Lani	4100 Wailea Alanui Dr, Wailea	Dec	29	0	0
Four Seasons Wailea	3900 Wailea Alanui Dr, Wailea		40	0	0
Kaanapali Beach Club	104 Kaanapali Shores PL, Kaanapali		10	0	0
Kaanapali Villas	45 Kai Ala Dr, Kaanapali		32	0	0
Koa Resort	811 S. Kihei Rd, Kihei		23	0	0
Total			1612	374	347

Definition
Dispatchable Location is defined in the FCC 15-9 Docket as the verified or corroborated street address of the calling party plus additional information such as floor, suite, apartment or similar information that may be needed to adequately identify the location of the calling party.
TNCR* Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location in the Exact field on the ALI Screen.
Processed** may include inactive telephone numbers that were removed from the ALI Database.

CHARTER COMMUNICAATIONS (TIME WARNER) VOIP DATABASE TNCR

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Akimeka received Automatic Location Identification (ALI) records from Charter Communications (formally known as Time Warner) which is the predominant Voice over Internet Protocol (VoIP) provider in the State of Hawaii. As Akimeka had access to these ALI Records, Akimeka was able to perform a three way comparison. This comparison is a validation of the ALI Record to ensure the location as provided by the VoIP provider matches the GIS Information utilized by the Public Safety Agencies within their specific County 9-1-1 Service Area. This validation reduces the potential of address or location dispute during a 9-1-1 call.

The Analysis of the database records indicated there were invalid MSAG addresses utilized by the VoIP Provider, however, the majority of these records were corrected, or sent back to Charter for further location clarifications. Akimeka was able to verify the majority of the VoIP records had a valid MSAG address assigned and matched with the GIS information. Akimeka has also initiated a correction process with Charter Communications on behalf of the PSAPs in order to perform timely corrections to the remaining VoIP 9-1-1 Records, and to ensure new VoIP customers receive valid MSAG addresses to improve their 9-1-1 location service.

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

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

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – DECEMBER 2016

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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 GIS Delivered	Other/Remarks	
	Date Created/Edits Performed			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Address Points	12/30/2016		Added one (1) address in Haiku	
	12/29/2016		Added one (1) address in Kahului	
	12/29/2016		Spatially corrected two (2) address points in Kahului	
	12/29/2016		Added two (2) addresses in Spreckelsville	
	12/29/2016		Spatially moved one (21 address point in Spreckelsville	
	12/29/2016		Spatially corrected three (3) address points in Napili	
	12/29/2016		Added one (1) address in Kula	
	12/29/2016		Added one (1) address in Kualapuu	
	12/29/2016		Spatially corrected sixty (60) address points in Kihei	
	12/27/2016		Spatially corrected one (1) address point in Kihei	
		12/21/16		
	12/21/2016		Spatially corrected one (1) address point in Kihei	
	12/20/2016		Added Location Name for one (1) address in Kihei	
	12/20/2016		Spatially corrected one (1) address point in Wailea	
	12/19/2016		Added one (1) POI address on Lanai	
	12/19/2016		Assigned one (1) POI address in Maunaloa	
	12/19/2016		Added one (1) MSAG address in Waihee	
	12/19/2016		Added two (2) Alias Location Names in the MPD Common Places Lookup Table	
	12/15/2016		Spatially corrected one (1) address point in Haiku	
	12/15/2016		Added three (3) addresses in Haiku	
	12/15/2016		Added three (3) addresses in Hana	
	12/15/2016		Spatially corrected one (1) address point in Hana	
	12/15/2016		Added two (2) addresses in Kula	
	12/15/2016		Spatially corrected one (1) address point in Kula	
	12/12/2016		Spatially corrected one (1) address point in Haiku	
	12/12/2016		Added one (1) address in Haiku	
	12/12/2016		Spatially corrected two (2) address points in Kaanapali	
	12/12/2016		Added seven (7) addresses in Kaanapali	
	12/12/2016		Changed one (1) address in Kaluakoi	
	12/12/2016		Added one (1) address in Kaunakakai	
12/12/2016		Added one (1) address in Kula		
12/12/2016		Added one (1) address in Lahaina		

MAPPING LAYERS UPDATED (PART II)

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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 GIS Delivered	Other/Remarks
	Date Created/Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	12/12/2016		Added two (2) addresses in Makawao
	12/12/2016		Added one (1) address in Pukalani
		12/07/16	
	12/6/2016		Added one hundred sixty-four (164) addresses in Wailea
	12/5/2016		Added one (1) address in Wailuku
	12/5/2016		Added one (1) address in Kahului
	12/5/2016		Changed one (1) address in Kula
	12/5/2016		Spatially corrected one (1) address point in Wailea
	12/5/2016		Added six hundred forty six (646) addresses in Wailea
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names		12/21/16	
	12/21/2016		Corrected Coastal Name in Lanai
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN	12/13/2016		Modified boundary between ESN 313 and 315 to match spatially corrected street centerlines
Fire Beats			
Fire Districts			
Fire Response Areas			
Fire Stations			
Food & Beverage			
Gas Stations			
Gate Codes			
Government Buildings			

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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.

MAUI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Harbors			
Helipads			
Hiking Trails			
Hospitals			
Hydrants			
Hyrdology Layers			
Incident Response Areas			
Lodging			
Major Roads			
Medic Beats			
Medic Districts			
Medic Response Areas			
Medic Stations			
Medical Facilities			
Milepost Markers			
MSAG Communities	12/13/2016		Modified boundary between Waikapu and Kahului to match spatially corrected street centerlines
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
Points of Interest	12/29/2016		Added one (1) POI in Kihei
	12/29/2016		Added one (1) POI in Wailuku
		12/21/16	
	12/21/2016		Added two (2) POI in Haiku
	12/21/2016		Added one (1) POI in Haliimaile
	12/21/2016		Added one (1) POI in Hana
	12/21/2016		Spatially corrected two (2) POI in Kaanapali
	12/21/2016		Added fifteen (15) POI in Kaanapali
	12/21/2016		Added four (4) POI in Kahului
12/21/2016		Added two (2) POI in Kihei	

Maui County E9-1-1 Status Report

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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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Points of Interest	12/21/2016		Added thirty-eight (38) POI in Lahaina
	12/21/2016		Added one (1) POI in Maalaea
	12/21/2016		Added two (2) POI in Paia
	12/21/2016		Added one (1) POI in Pukalani
	12/21/2016		Added two (2) POI in Waiehu
	12/21/2016		Added sixty-seven (67) POI in Wailea
	12/21/2016		Added eight (8) POI in Wailuku
	12/20/2016		Added forty-three (43) POI in Haiku
	12/20/2016		Added two (2) POI in Haliimaile
	12/20/2016		Added forty-nine (49) POI in Hana
	12/20/2016		Added fourteen (14) POI in Hoolehua
	12/20/2016		Added fourteen (14) POI in Kaanapali
	12/20/2016		Added seventy-four (74) POI in Kahului
	12/20/2016		Added one (1) POI in Kaluakoi
	12/20/2016		Added nine (9) POI in Kapalua
	12/20/2016		Added thirty (30) POI in Kaunakakai
	12/20/2016		Added fifty (50) POI in Kihei
	12/20/2016		Added eight (8) POI in Kualapuu
	12/20/2016		Added seventy-nine (79) POI in Kula
	12/20/2016		Added sixty-one (61) POI in Lahaina
	12/20/2016		Added thirty-seven (37) POI in Lanai
	12/20/2016		Added ten (10) POI in Maalaea
	12/20/2016		Added twenty-one (21) POI in Makawao
	12/20/2016		Added five (5) POI in Maunaloa
	12/20/2016		Added ten (10) POI in Napili
	12/20/2016		Added sixteen (16) POI in Paia
	12/20/2016		Added seven (7) POI in Pukalani
	12/20/2016		Added seven (7) POI in Pukoo
	12/20/2016		Added four (4) POI in Spreckelsville
	12/20/2016		Added eight (8) POI in Waiehu
12/20/2016		Added nineteen (19) POI in Waihee	
12/20/2016		Added three (3) POI in Waikapu	
12/20/2016		Added thirty-four (34) POI in Wailea	

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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.

MAUI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Points of Interest	12/20/2016		Added forty-one (41) POI in Wailuku
	12/12/2016		Added one (1) POI in Kaanapali
		12/07/16	
	12/7/2016		Spatially corrected four (4) POI in Kaanapali
	12/7/2016		Added six (6) POI in Kapalua
	12/7/2016		Added one (1) POI in Kaanapali
	12/5/2016		Changed one (1) POI name in Wailea
	12/5/2016		Added one (1) POI in Kahului
Police Beats		12/21/16	
	12/13/2016		Modified boundary between Police Beat 31 & 34 to match spatially corrected street centerlines
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines		12/21/16	
	12/19/2016		Spatially corrected four (4) street centerline segments in Hana
	12/19/2016		Assigned one (1) street centerline range in Kihei
	12/16/2016		Spatially corrected four (4) street centerline segments in Makawao
	12/15/2016		Spatially corrected two (2) street centerline segments in Makawao
	12/14/2016		Spatially corrected four (4) street centerline segments in Makawao
	12/14/2016		Modified two (2) street centerline segment ranges in Makawao
	12/14/2016		Added one (1) street centerline segment in Makawao
	12/13/2016		Spatially corrected four (4) street centerline segments in Haiku
	12/13/2016		Partial spatial correction of one (1) street centerline segment in Haiku
	12/13/2016		Spatially corrected one (1) street centerline segment in Makawao
	12/13/2016		Spatially corrected six (6) street centerline segments in Waikapu
	12/13/2016		Split one (1) street centerline segment in Waikapu
	12/12/2016		Spatially corrected five (5) street centerline segments in Kahului
	12/12/2016		Modified two (2) street centerline range segments in Kaluakoi
12/12/2016		Modified two (2) street centerline range segments in Kula	

Maui County E9-1-1 Status Report

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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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Street Centerlines	12/12/2016		Spatially corrected two (2) street centerline segments in Waikapu
	12/12/2016		Split one (1) street centerline segment in Waikapu
		12/07/16	
Subdivisions	12/29/2016		Added one (1) subdivision in Kahului
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors		12/21/16	
	12/14/2016		Per AT&T CRS
		12/07/16	
	12/6/2016		Per AT&T CRS
WSP Cell Towers	12/2/2016		Per AT&T CRS
		12/21/16	
	12/14/2016		Per AT&T CRS
		12/07/16	
	12/6/2016		Per AT&T CRS
	12/2/2016		Per AT&T CRS

GIS Summary for 2016

MAUI COUNTY		
Type of Layer	Totals	Remarks
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE		
Address Points	7,599	Approximate number of new and/or edited *Address Points added to the Maui County GIS map and database in 2016.
Street Centerlines	1,039	Approximate number of new and/or edited *Street Centerlines added to the Maui County GIS map and database in 2016.
Points of Interest	2,094	Approximate number of new and/or edited *Points of Interest/Common Name Places added to the Maui County GIS map and database in 2016.

* Specific details available upon request.

Maui County E9-1-1 Status Report

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NOTE:

The above summary does not capture the entire GIS effort for the 2016 year, only a list of some of the more critical layer updates. There were a significant amount of updates that took place with other layers such as response layers, and other supporting GIS information. Also, for a summary regarding wireless updates, please refer to the CRS sections to see the 2016 year totals, which are also largely impacting to the PSAPs.

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.

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
12/21/2016	Delivered .map, .str., rte., Maui Cell Coverage. cvs which included updated Address Points, Coastal Names, Common Places Lookup Table, Police Beats, Street Centerlines and WSP Cell Towers for Intergraph CAD Map update
12/7/2016	Delivered .map, .str., rte., and Maui Cell Coverage.cvs which included updated Address Points, MPD Look Up Table, Street Centerlines and WSP Cell Towers for Intergraph CAD Map

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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 December 7, 2016 – Akimeka delivered an updated Intergraph CAD map which included:
 - a. Address Points, Common Places Lookup Table, Street Centerlines, and WSP Cell Towers.
 - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
 - c. Added Street labels to the CAD map.

2. Akimeka delivered an updated Intergraph CAD map on December 21, 2016 which included:
 - a. Address Points, Coastal Names, Common Places Lookup Table, Police Beats, Street Centerlines, and WSP Cell Towers.
 - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
 - c. Added Street labels to the CAD map.

During January 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.

MAPFLEX SYSTEM

During the month of December 2016, the MapFlex system received one manual update 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 year.

Due to the issues MapFlex is having regarding the automatic updates, all of the PSAPs had agreed to hold on all GIS updates until West has made the necessary system changes. Manual GIS uploads took place on December 9, 2016.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in December 2016
 - a. **Hawaii County** – December 9, 2016
 - b. **Maui County** – December 9, 2016
 - c. **Kauai County** – December 9, 2016
 - d. **Honolulu** – December 9, 2016

2. Although there were no official confirmation that the manual updates were completed, Akimeka confirmed on December 20th that the GIS data was successfully updated in the MapFlex system.

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MAPFLEX SYSTEM ISSUES

During the month of August 2016, there were some identified issues regarding the MapFlex system, some of which were a continuation of previous issues identified.

On August 3, 2016, during the all PSAP conference call with West, Akimeka, and Hawaiian Telcom also in attendance, there were several issues that were discussed.

1. There was an upload issue with the Kauai MapFlex system on July 24, 2016 which was related to an issue which Maui PD experienced earlier in the year. The MapFlex screen went blank and there was no mapping capability.
 - a. West relayed that there is an issue with the automatic update script and there are updates required for them to make to the system.
 - b. All of the PSAPs agreed to hold off on all GIS updates in MapFlex until West has resolved the issue.
2. The MapFlex system began displaying wireless information incorrectly during the month of August 2016.
 - a. The issue described is that when wireless calls are coming into the PSAPs, the ALI information appears to be correct and it matches with the GIS data, so it subsequently displays a Phase I location for Phase I calls. What is occurring directly after this, is the 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.
 - b. West and HT are looking into the issue and are planning a software update that should help resolve the issue.
3. The Text-to-911 icons have stopped displaying at the PSAPs.
 - a. It was identified that the icons for text calls have stopped displaying in the MapFlex maps. Previously when calls came in as a text call, there would be an icon displaying "TEXT" where the call was plotted.
 - b. West and HT will be researching the issue.
4. Throughout October 2016 West and HT continued to work on the patches to fix some of the above issues.
5. During November 2016, the updates were installed on the MapFlex systems throughout the State of Hawaii.
 - a. After the updates had taken place, issues were identified with the display of Phase I coverage areas in MapFlex – identified by the Honolulu Fire Department. In addition, the only information that was being displayed for Phase I calls were Lat/Longs with a static coverage of approximately 330 meters for all calls. The issue was first identified when calls had plotted in the ocean, while the caller was surely on land.
 - b. The issue was brought to West and HT's attention for resolution.
 - c. West had worked internally with their team and determined that it was an issue with the confidence with Sprint wireless and that Sprint was the source of the issue in MapFlex.
 - d. The discussions on this issue circled for some time throughout November without resolution until it was discovered later in November that the reason the coverage area was not being displayed was due to the MapFlex upgrade that was installed. After installation, 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.
 - e. The additional issue with MapFlex plotting the centroid of the sector as the tower location still remains and is being troubleshot by West and HT.
 - f. West and HT will be following up with the PSAPs with a resolution in December 2016.
 - g. The next conference call with West, HawaiianTel, and the PSAPs is scheduled for January 11th.

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4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - DECEMBER 2016

MAUI COUNTY						
#	Date	Ticket #	Description	PSAP	Urgency	Comments
			None			

NOTE:

There are no Open Service Requests for the Maui County PSAPs for December, 2016.

MAUI PSAP SERVICE REQUESTS YEAR-TO-DATE (YTD) SUMMARY – 2016

MAUI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2016	TOTAL		Open	WIRESLINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2015 Carryover*			0						
January	1	1	0	0	0	0	0	1	1
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	1	1	0	1	1	0	0	0	0
May	3	3	0	3	3	0	0	0	0
June	1	1	0	1	1	0	0	0	0
July	1	1	0	1	1	0	0	0	0
August	1	1	0	1	1	0	0	0	0
September	2	2	0	1	1	0	0	1	1
October	3	3	0	3	3	0	0	0	0
November	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0
TOTAL	13	13	0	11	11	0	0	2	2

Note: * The 2015 Carryover row indicated the number of Service Requests that were opened in 2015 and brought forward into 2016 in an effort to track the service request until completion. Detailed information on service tickets are available upon request.

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.

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5. E9-1-1 DATABASE SYNCHRONIZATION

(Reference: NENA 71-501, Version 1.1 – NENA Information Document for Synchronizing Geographic Information System databases with MSAG & ALI)

As part of Akimeka's value added services, Akimeka conducted the next quarterly database synchronization audit for Maui County in December 2016.

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 December 1, 2016 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%.

Maui County E9-1-1 Status Report

December 1, 2016 - December 31, 2016

AUDIT SUMMARY RESULTS – 2015-2016

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of March 1, 2016		As of June 1, 2016		As of September 1, 2016		As of December 1, 2016	
		9-1-1 MSAG Dated 3-01-16		9-1-1 MSAG Dated 6-01-16		9-1-1 MSAG Dated 9-01-16		9-1-1 MSAG Dated 12-01-16	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		2,681		2,689		2,693		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		2,606		2,614		2,618		2,628	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		2,606	100.00%	2,614	100.00%	2,616	100.00%	2,626	100.00%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	0	0.0%	0	0.0%	1	0.0%	1	0.0%
9-1-1 MSAG Record With No GIS Record	(3)	0	0.0%	0	0.0%	1	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%

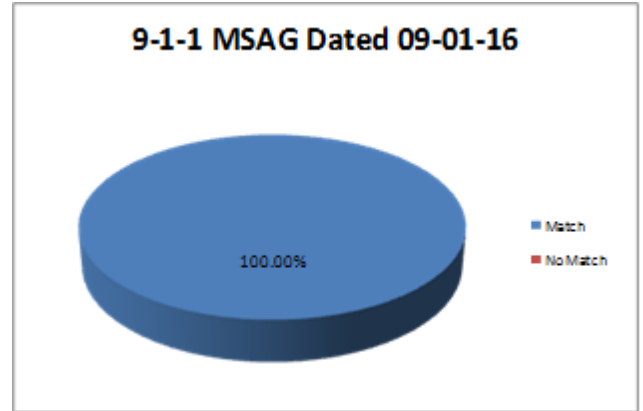
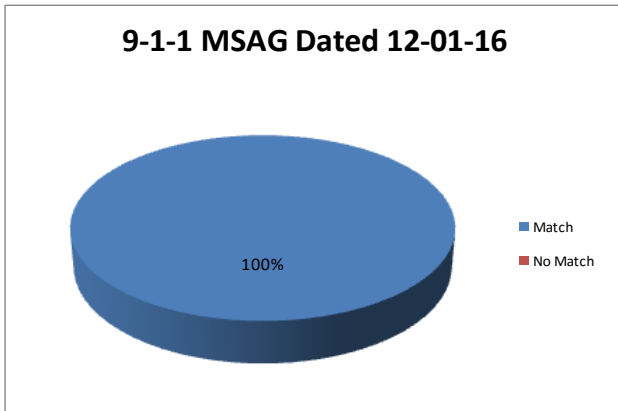
AUDIT SUMMARY NOTES:

- (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.

Maui County E9-1-1 Status Report

December 1, 2016 - December 31, 2016

MSAG AUDIT SUMMARY RESULTS – DECEMBER 1, 2016 VS SEPTEMBER 1, 2016



NOTE:

Maui County's level of accuracy or 9-1-1 Match percentage remained constant at 100% as of December 1, 2016 to 100% on September 1, 2016
 NENA Recommended Match Rate = 98%

MSAG AUDIT SUMMARY RESULTS NOTES:

- “MSAG - GIS Minor Corrections” increased by two (0 to 2) from September 2016 to December 2016 respectively. The two 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” decreased by one (1 to 0) from September 2016 to December 2016. The total of zero 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” increased by two (0 to 2) from September 2016 to December 2016 respectively. 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” increased by two (1 to 3) from September 2016 to December 2016. 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”.

Maui County E9-1-1 Status Report

December 1, 2016 - December 31, 2016

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:

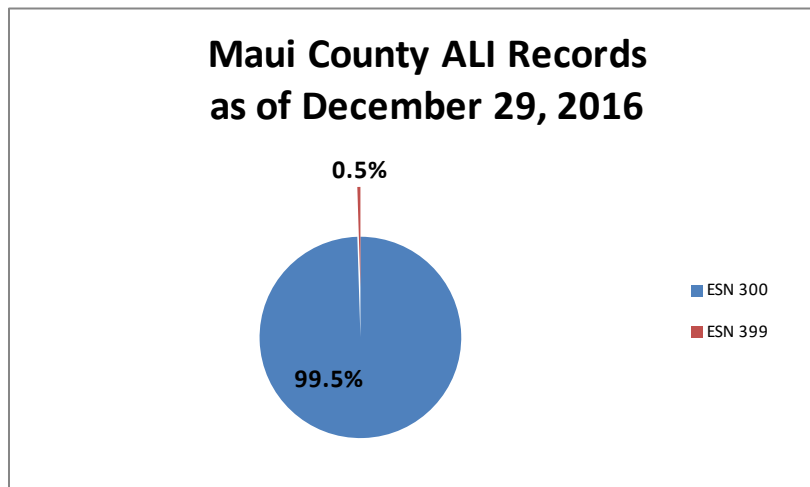
PSAP	ESN	Invalid MSAG Records							
		9-1-1 MSAG Dated 03-01-16		9-1-1 MSAG Dated 06-01-16		9-1-1 MSAG Dated 09-01-16		9-1-1 MSAG Dated 12-01-16	
		# of Records	% of Total MSAG Records (Valid and Invalid)	# of Records	% of Total MSAG Records (Valid and Invalid)	# of Records	% of Total MSAG Records (Valid and Invalid)	# of Records	% of Total MSAG Records (Valid and Invalid)
MAUI	399	97	3.8%	75	2.9%	49	1.9%	43	1.7%
MOLOKAI	359	27	10.7%	22	9.1%	18	7.5%	17	7.0%
TOTAL MAUI		124	4.4%	97	3.5%	67	2.4%	60	2.2%

Maui County E9-1-1 Status Report

December 1, 2016 - December 31, 2016

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 December 29, 2016, **325** ESN 399 (Maui/Lanai) and ESN 359 (Molokai) records, representing **.5%** of Maui County’s total ALI records, require research and corrective action, if needed.



THE TOTAL NUMBER OF ALI RECORDS REMAINS RELATIVELY CONSISTENT.

NOTES:

The number of ESN 359/399 ALI records decreased from 366 to 325 from September 2016 to December 2016 respectively. The decrease reflects the work that Akimeka has done since the last database synchronization in September 2016. Extensive research has gone into verifying the invalid TNs against current County data. This is an ongoing project, as Akimeka continues to research and correct the ESN 359/399 records.