STATE OF HAWAII

Communications, Technical and Finance Meeting
(Combined Meeting)

Kalanimoku Bldg., Room 322B

1151 Punchbowl St., Honolulu

Thursday, October 13, 2016

9:00 am - 10:30 am

Agenda

- I. Call to Order, Public Notice, Quorum
- II. Public testimony on all agenda items
- III. Introductions
- IV. Review and Approval of Last Month's Meeting Minutes
- V. Committee Updates by Committee Chairs
 - a. Communications Committee Steven Schutte
 - i. 2017 Legislative Investigative Committee update Paul Ferreira
 - ii. Others
 - b. Technical Committee Thalia Burns
 - i. Investigative Regulatory Committee update Davlynn Racadio
 - ii. Educational Investigative Committee update- Jeffrey Riewer
 - iii. FCC update
 - iv. Text-to-911 update
 - v. Request for approval:
 - vi. Others.
 - c. Finance Committee Kiman Wong
 - i. Review of Monthly Cash Flow & Budget Financial Reports.
 - ii. Request funding approval:
 - 1. Public Education Consultant for Text-to-911 for an additional \$40,000 to the existing budget of \$10,000 for a total revised budget of \$50,000.
 - iii. Others.

VI. PSAP Status Updates

a. Kauai - Michael Contrades

- b. Oahu HPD Allan Nagata
- c. Oahu HFD Gary Lum
- d. Molokai Dean Rickard
- e. Maui John Jakubczak
- f. Hawaii Paul Ferreira

VII. Items for Discussion, Consideration and Action

- a. 911 Timeline update.
- b. Others.

VIII. Announcements

- a. Meeting dates (10:00am 12:00noon):
 - i. Thursday, November 10, 2016 (Combined meeting)
 - ii. Thursday, December 8, 2016 (Combined meeting)
 - iii. Thursday, January 12, 2017 (Combined meeting)
- b. FirstNet Update Victoria Garcia
- c. Others
- IX. Open Forum: Public comment on issues not on the agenda for consideration for Committee meeting agenda at the next meeting.
- X. Adjournment

DOUGLAS MURDOCK

AUDREY HIDANO

STATE OF HAWAII

E911 Communications, Technical and Finance
Committee Meetings
Kalanimoku Bldg., Room 322B
1151 Punchbowl St., Honolulu
Thursday, October 13, 2016
9:00 am - 10:30 am

Meeting Minutes

Communications Committee members present: Steven Schutte (Chair), Thalia Burns (HPD), Paul Ferreira (HiPD), Davlynn Racadio (MPD) and Michael Contrades (KPD)

Communications Committee members absent: Lavina Taovao (KPD)

Technical Committee members present: Thalia Burns (Chair), Ahlan Leong (HPD), Rob Gausepohl (KPD), John Jakubczak (MPD), Tony Ramirez (Akimeka), Steven Schutte (Verizon), Gary Lum (HFD), Tony Velasco (DIT)I, Kenison Tejada (APCO/NENA Pacific Chapter) and Kiman Wong (Charter Com)

Technical Committee members absent: Marshall Kanahailua (HiPD), Darren Horio (HiPD), Davie Miyasaki (KPD)

Technical Committee members absent: Marshall Kanehailua (HiPD), Darren Horio (HiPD), Dave Miyasaki (KPD), Jeff Riewer (AT&T)

Finance Committee members present: Kiman Wong (Chair), Roy Irei (T-Mobile), Paul Ferreira (HiPD), Lisa Hiraoka (Consumer Advocate Designee), and Michael Contrades (KPD)
Finance Committee members absent: Randall Macadangdang (HPD)

Staff members present: Kerry Yoneshige (DAGS), Courtney Tagupa (ED, E911), and Melvia Kawashima (E911)

Guests: John V. Freeland (Regional Dispatch Center), Darryl Perry (KPD), Ken Peters (Tyler Tech), Arnold Kishi (ETS), Allan Nagata (HPD), Bradly Hirata (HPD), Bonnie Young (MPD), Dean Rickard (MPD), Ben Morgan (HT), Glenn Kobashigawa (HT), Annette Rausch (WEST), Agnes Lee (West), Arnold Kishi (OIMT), and Diana Chun (ESD)

I. Call to Order, Public Notice, Quorum

- a. The meeting was called to order at 9:00 am by the Board Chair.
- b. Public Notice has been posted.
- c. Quorum was present for all Committees.

II. Public testimony on all agenda items

a. Chair Ferreira asked if anyone who wishes to provide testimony on any agenda item to please come forward. No one came forward to testify.

III. Introductions

a. Introductions were made by everyone present at the request of the Board Chair.

IV. Review and Approval of Last Month's Meeting Minutes

a. John Jakubczak noted that September Joint Committee Minutes showed him present, but he was not. Board Chair called for approval of the September 15, 2016 meeting minutes

as corrected. Minutes were approved as corrected by voice vote by all Committee members present.

V. Committee Updates by Committee Chairs

- a. Communications Committee Steven Schutte
 - i. 2017 Legislative Investigative Committee update Paul Ferreira
 - a. For the 2017 session, a bill amending Chapter 138, HRS, to include a surcharge fee for prepaid card telecom services, will be introduced by DAGS, under the Governor's Admin package.
 - The bill brings parity to fees charged for all other telecommunications services that support E911 emergency services.
 - c. The budget justification for FY17-18 ceiling increase accommodates expected rolling upgrades of PSAPs' systems to accommodate texting capability.
- b. Technical Committee Thalia Burns
 - i. Investigative Regulatory Committee update Davlynn Racadio
 - 1. IRC Chair had nothing to report.
 - ii. FCC update
 - 1. The Executive Director Tagupa had nothing to report.
 - iii. Text-to-911 update Courtney Tagupa
 - a. Public education efforts will be reported under regular Board Meeting business.
- c. Finance Committee Kiman Wong
 - i. Review of Monthly Cash Flow & Budget Financial Reports
 - 1. The Finance Chair stated the following:
 - a. Receipts for month \$816,111
 - b. Disbursements for the month- \$200,107
 - c. Net Receipts \$616,005
 - d. .Net Bank Balance \$20,631,536
 - e. Outstanding encumbrances/accruals \$7010,287
 - f. Unencumbered Cash Balance \$13,621,249
 - ii. Request for Funding Approval for Public Education:
 - a. ED Tagupa requested to amend the Finance Committee Agenda item to increase Public Education/Admin Budget by \$40,000 for a consultant from the current \$10,000 budgeted, to support a public education effort for Text-to-911. Without knowing specific plans and costs for promoting a public education program, a sufficient amount of funding should be assured for program efforts.
 - b. Mr. Jakubczak cautioned that this amount (\$50,000) may not be enough for consultant fees, and wondered about the timeframe and scope of services.
 - c. Ms. Thalia Burns cautioned spending money on consultant services should wait until a review of what each county can do with in-kind services to promote the text to 911 initiative. Ms. Burns recommended that we reach out to all the agencies for inkind services before any monies are spent on a media consultant.

- d. D/C Ferreira concurred with Ms. Thalia Burns and recommended that the funds be spent on brochures and other public educational materials before engaging a media consultant.
- e. D/C Ferreira moved to amend the Finance Comm. Agenda request for funding approval by \$90,000 for a total of \$100,000 for public education planning efforts.
- f. A/C Jakubczak requested that funds be open ended and not be tied to consultant services; D/C Ferreira concurred, that a consultant may direct us to efforts already known or underway.
- g. Finance Chair Kiman Wong called for a motion to amend the Finance Committee Agenda's to request for funding approval in the amount of \$90,000 additional for the Public Education budget. D/C Paul Ferreira motioned to approve the amendment to the Finance Committee agenda to increase the Public Education budget by \$90,000 for a total of \$100,000. The motion was seconded and approved by voice vote by all Finance Committee members present.
- h. Finance Chair Kiman Wong called for the motion to increase the public education budget for Text-to-911 by \$90,000 for a total of \$100,000. Subject to final approval by the board. D/C Ferreira so moved to approve the additional budget of \$90,000 subject to final approval by the full Board. The motion was seconded and approved by voice vote by all the Finance Committee members present.

VI. PSAP Status Updates

- a. Kauai Michael Contrades
 - i. A/C Contrades reported training on November 15-18 with plans to go "live" December 5th. Thank you to Tony Ramirez for his informative presentation.
- b. Oahu HPD Allan Nagata
 - i. Maj. Nagata reported that SMART911 accounts are now approaching 4,000. He noted that the October 6th Midweek magazine article featured the Smart911 service and the outstanding efforts of Officers' Spencer Andersen and Taylor Hoopii, as lauded by Hawaii Hotel & Lodging Industry Exec Director Mufi Hannemann.
 - ii. He expressed his thank you to the Board for supporting this program's costs for the second year of service.
 - iii. He also expressed gratitude to the Board as they enabled training travel to Colorado for two police radio dispatchers from the Communications Division.
 - iv. Police Radio Dispatch Class 45 (PRD45) is the new training class that started on October 10th. The new class has five new hire employees.
 - v. HPD's pilot program for continuous recruitment has about 35 persons going through the employment process and that class (PRD46) may start in February 2017 to fill about 20+ vacancies.
- c. Oahu HFD Gary Lum
 - i. B/C Gary Lum reported that West's MIS was updated in September. Metrics for both admin and 911 calls are 30% less than reported for previous months. Also, count of 911 calls transferred from 911 screeners to HFD dispatch do not match in

coming 911 calls at HFD dispatch. HawaiianTelcom and West need to look into these issues to confirm if stats from the MIS reports are correct.

- d. Molokai Dean Rickard
 - i. D/C Rickard reported that their Dispatch Center server shut down on Oct. 4th which affected its ability to accept 911 calls. Everything was up and running the next morning.
- e. Maui John Jakubczak
 - i. A/C Jakubczak reported MPD's entering into contract with Hawaiian Tel for backup dispatch in Kihei.
- f. Hawaii Paul Ferreira
 - i. D/C Ferreira reported that Hawaii County entered into contract with Spillman On September 9th, with start date in January to provide more training time for patrolmen.
 - ii. D/C Ferreira reported that on October 19, 911 "Hacking" that jammed lines with 21 calls in a matter of a minute with threat contents that were referred to FBI. While speculating these calls were tech savvy pranksters probably using an App to auto dial phone calls consistently, the matter was seriously addressed. Tracking calls were problematic.

VII. Items for Discussion, Consideration and Action

a. None

VIII. Announcements

- a. Meeting dates (10:00am 12:00noon):
 - i. Thursday, November 10, 2016 (Combined meeting)
 - ii. Thursday, December 15, 2016 TBD (Combined meeting)
 - iii. Thursday, January 12, 2017
 - iv. Thursday, February 9, 2017
- b. Future Conference dates(3 months advance approval required):
 - i. 911 Goes to Wash DC, Feb 26 Mar. 1, 2017.
 - ii. NENA Conference, June 3 8, 2017, San Antonio, TX.
 - iii. APCO Conference, August 13 -16, 2017, Denver, CO.
- c. FirstNet Update Victoria Garcia was not present.

IX. Open Forum: Public comment on issues not on the agenda for consideration for the Committee meeting agenda at the next meeting.

- i. The Board Chair requested if anyone wishes to comment on issues not on the agenda for consideration for the Committee meeting agenda at the next meeting to please come forward to testify. No one came forward to testify.
- X. Adjournment: Having no further business, Chair Ferreira adjourned the meeting.

October 1, 2016 - October 31, 2016



October 1, 2016 – October 31, 2016

AKIMEKA | HIGH PRIORITY, HIGH IMPACT.

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Hawaii County E9-1-1 Status Report

October 1, 2016 – October 31, 2016

1. PSAP OPERATIONS

9-1-1 CALL VOLUME HAWAII COUNTY PSAPS - OCTOBER 2016

(Source: West Safety Services Viper system

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

	9-1-1 Call Volume																
	AII 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	No. of Other Calls	% of Total Calls
ОСТ	16,671	2,842	17.05%	11,660	69.94%	46.79%	53.21%	792	4.75%	21	0.13%	0	0.00%	1,356	8.13%	0	0.00%

CALL VOLUME HAWAII COUNTY PSAP NOTES:

The percentage of Wireless Phase 2 calls (53.21%) has increased from the number of Wireless Phase 1 calls (46.79%) in October 2016.

911 Calls with no Ali = 0.13% - Statewide average = 0.18% Year 2015

9-1-1 CALL VOLUME - CALENDAR YEAR 2016

	9-1-1							Call Volume									
	AII 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	No. of Other Calls	% of Total Calls
JAN	17,958	3,445	19.18%	12,221	68.05%	47.61%	52.39%	812	4.52%	27	0.15%	0	0.00%	1,453	8.09%	0	0.00%
FEB	16,976	3,046	17.94%	11,851	69.81%	48.47%	51.53%	707	4.16%	18	0.11%	0	0.00%	1,354	7.98%	0	0.00%
MAR	18,750	3,605	19.23%	12,790	68.21%	47.43%	52.57%	822	4.38%	12	0.06%	0	0.00%	1,521	8.11%	0	0.49%
APR	17,112	3,074	17.96%	12,026	70.28%	46.50%	53.50%	707	4.13%	21	0.12%	0	6.24%	1,284	7.50%	0	2.30%
MAY	17,343	3,048	17.57%	12,121	69.89%	45.67%	54.33%	798	4.60%	17	0.10%	0	0.05%	1,359	7.84%	0	2.30%
JUNE	17,176	3,148	18.33%	11,641	67.77%	45.00%	55.00%	755	4.40%	26	0.15%	0	0.00%	1,606	9.35%	0	0.00%
JULY	17,869	3,330	18.64%	12,437	69.60%	40.69%	59.31%	737	4.12%	32	0.18%	0	0.00%	1,333	7.46%	0	0.00%
AUG	17,560	3,081	17.55%	12,229	69.64%	42.06%	57.94%	766	4.36%	21	0.12%	0	0.00%	1,463	8.33%	0	0.00%
SEPT	16,085	2,836	17.63%	11,240	69.88%	42.22%	57.78%	682	4.24%	11	0.07%	0	0.00%	1,316	8.18%	0	0.00%
ОСТ	16,671	2,842	17.05%	11,660	69.94%	46.79%	53.21%	792	4.75%	21	0.13%	0	0.00%	1,356	8.13%	0	0.00%
NOV																	
DEC																	
YTD	173,500	31,455		120,216				7,578		206		0		14,045		0	
MON AVG	17,350	3,146	18.11%	12,022	69.31%	45.24%	54.76%	758	4.37%	21	0.12%	0	0.63%	1,405	8.10%	0	0.51%

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9-1-1 CALL VOLUME BY AGENCY - OCTOBER 2016

	9-1-1 Call Volume by Agency												
2016		Hawaii	Police Dep	artment		Hawaii Fire Department							
2010	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls			
October	13,033	78.18%	0	1,322	0	2,282	13.69%	0	34	0			

9-1-1 CALL VOLUME BY AGENCY - CALENDAR YEAR 2016

	9-1-1 Call Volume by Agency												
2046		Hawaii	Police Dep	artment		Hawaii Fire Department							
2016	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls			
January	14,138	78.73%	0	1,427	0	2,367	13.18%	0	26	0			
February	13,259	78.10%	0	1,331	0	2,363	13.92%	0	23	0			
March	15,966	85.15%	0	1,461	0	2,784	14.85%	0	60	0			
April	13,624	79.62%	0	1,243	0	2,204	12.88%	0	41	0			
Мау	13,866	79.95%	0	1,333	0	2,118	12.21%	0	26	0			
June	13,526	78.75%	0	1,576	0	2,044	11.90%	0	30	0			
July	14,136	79.11%	0	1,296	0	2,400	13.43%	0	37	0			
August	14,030	79.90%	0	1,445	0	2,067	11.77%	0	18	0			
September	12,844	79.85%	0	1,301	0	1,925	11.97%	0	15	0			
October	13,033	78.18%	0	1,322	0	2,282	13.69%	0	34	0			
November													
December													
YTD	138,422		0	13,735	0	22,554		0	310	0			
MON AVG	13,842	79.73%	0	1,374	0	2,255	12.98%	0	31	0			

PSAP OPERATION NOTES:

- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Dropped Calls are hang ups after transfers.
- Abandoned Calls are not included in the total of Wireline and Wireless counts respectively.
- All VOIP (Voice over internet protocol) types of 911 calls are combined in the Call Volume statistic.

Hawaii County October 2016

October 1, 2016 – October 31, 2016

TEXT TO 911 - CURRENT MONTH - OCTOBER 2016

NOTE:

- Hawaii County deployed a soft launch of Text to 911 on February 1, 2016.
- Although there is a "Text to 911" plot on the MapFlex, the location of the plot is not reliable in some cases and pretty
 accurate in others. There are no indication on the Ali Screen to inform the Dispatcher on location accuracy. Text to 911
 Dispatchers should use their skills to ascertain the exact location of the emergency response.
- 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 Hawaii County PSAPs 2016							
Month	Received at Police	Received at Fire					
January	39	20					
February	26	8					
March	31	5					
April	22	2					
May	13	3					
June	22	6					
July	22	1					
August	16	0					
September	20	1					
October	21	1					
November							
December							
YTD	232	47					
Monthly Avg.	23.20	4.70					

- The January Text to 911 counts reflects only internal testing of Text to 911.
- 911 Text messages received at the Fire Department are transfers from the Police Department.

October 1, 2016 – October 31, 2016

WIRELESS PSAP TESTING - OCTOBER 2016

	HAWAII COUNTY - OCTOBER 2016									
Date	Date WSP Sites Sectors Tested By: Test Pass/Fail									
None										

NOTES:

• There were no scheduled Wireless 911 Tests for the month of October 2016.

FOR YOUR INFORMATION

FYI	For Your Information
MLTS (Multi L	ine Telephone System)
Most MLTS/DRY systems enable the digits	9-1-1 to be dialed and routed to a Public S

"Most MLTS/PBX systems enable the digits 9-1-1 to be dialed and routed to a Public Safety Answering Point (PSAP). However, the vast majority of these systems do not provide granular location information with the 9-1-1 call to enable emergency responders to know the actual location of the emergency. In many instances a call from the 12th floor of a large office building may only provide the street address of the building. If the caller is unable to provide his or her location and no one else is available to provide assistance, such a lack of location information can prove fatal." (NENA: Multi-Line Telephone System & Private Branch Exchange) Technical

PRIMARY	MLTS/PBX 911 CALLS RECEIVED					
PSAPS*	Oct 2016	YEAR TO DATE 2016				
Oahu	3,239	32,371				
Hawaii	162	779				
Maui	147	1,015				
Molokai	0	1				
Kauai	26	207				
Total**	3,574	34,373				

^{*}PSAP totals does not include Military 911 calls.

Hawaii County October 2016

^{**} Total numbers are a minimum estimated count. Presently, CENTRX & VoIP call volumes are combined with Multi & Single line systems and were not added to the total MLTS 911 calls.

October 1, 2016 – October 31, 2016

FOR YOUR INFORMATION

FYI	For Your Information
911 Calls Rece	eived From Payphones

Approximately 95% of 911 calls received from Payphones are "one way" lines. These Payphones are not capable of receiving calls which makes it impossible for the 911 operator to re-contact the caller should there be a location discrepancy or additional information needed.

PRIMARY	911 CALLS RECEIVED via Payhone
PSAPS	October 2016
Oahu	2,694
Hawaii	308
Maui	240
Molokai	14
Kauai	128
Total**	3,384

*PSAP totals does not include Military 911 calls.

Class of Service (COS) COIN = 1 way out line PAY\$ = 2 way line



October 1, 2016 - October 31, 2016

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - OCTOBER 2016

HAWAII	9-1-1 TRANSACTIONS								
COUNTY		MSAG	Α	LI Submitte	ed	Discre	Open ALI epancy Re		Customer
2016	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Addresses Affected
JANUARY	293	22	262	8	1	1,924	1	1	282
FEBRUARY	270	41	228	1	0	2,154	1	0	425
MARCH	236	27	207	1	1	2,259	1	0	302
APRIL	336	129	201	6	0	1,965	2	0	945
MAY	218	134	79	5	0	1,504	2	0	613
JUNE	160	29	129	2	0	630	2	0	2,162
JULY	278	60	215	3	0	358	3	0	1,550
AUGUST	308	80	226	2	0	326	3	0	461
SEPTEMBER	479	50	428	1	0	274	3	0	581
OCTOBER	374	17	356	1	0	265	1	0	365
NOVEMBER									
DECEMBER									_
TOTAL YTD	2,952	589	2,331	30	2				7,686
AVG PER MONTH	295	59	233	3	0				769

Definitions

- (A) Master Street Address Guide Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (B) **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.
- (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 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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Hawaii County E9-1-1 Status Report

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MSAG CURRENT MONTH NOTES:

A total of **374** MSAG transactions were processed in 9-1-1 Net during the month of October 2016. **17** 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 Military response areas, and inserting new MSAG records.

There were 365 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

356 Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 299 clean-up effort and the Dispatchable Location Project. ESN 299 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record. One (1) ALI DR was submitted as the result of a 9-1-1 call from a residence in Pahoa. Hawaii County Fire submitted this request to Akimeka to update the customer information and the discrepancy was corrected in 9-1-1 Net.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are 265 Open TN CR Transactions as of October 31, 2016.
- Refer to chart in the next section "TNCR Current Status"

355 Open TN CR transactions are a direct result of the ESN 299 clean-up and are awaiting approval from Hawaiian Telcom, Inc. One (1) Open TN CR transactions are a result of the Dispatchable Location project. (Refer to the "Dispatchable Location" chart below) Once a telephone number is submitted to West for correction, it is verified against HT records and/or by the customer. West's internal process requires calling each telephone customer individually for verification to update an address in the 9-1-1 database. West Safety Services opened 365 TN CR records for Hawaii County during the month of September 2016. Many of these records required more research by Akimeka in order to find their MSAG valid addresses, after West provided information available in HT records or driving directions per HT customer. Akimeka continues to monitor and track the progress of the remaining 265 Referred records.

• There is one (1) Open ALI-DR as of October 31, 2016

One Open ALI DR was submitted in July 2016 for a business in Kailua Kona. Akimeka will continue to monitor this discrepancy until it is updated.

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October 1, 2016 – October 31, 2016

TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS - OCTOBER 2016

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)									
PSAP	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					
HAWAII	265	115	126	24					

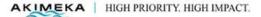
STATUS

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.

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.

Hawaii County October 2016



October 1, 2016 – October 31, 2016

DISPATCHABLE LOCATION - STATUS AS OF - OCTOBER 2016

NARRATIVE:

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

During the month of September 2015, Akimeka started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically the **Kings Shops at 690250 Waikoloa Beach Dr., Waikoloa**. The "Dispatchable Location" data is entered into the "Driving Directions" field in the 9-1-1 Net system, and will display on the Viper Power 911 ALI Screen in the "Exact" field should a 911 call be received from that telephone number.

Dispatchable Location								
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Submitted	Number of Transactions Processed**				
KINGS SHOPS	CARRY OVER	2015	75	0				
KINGS SHOPS	690250 WAIKOLOA BEACH DR, WAIKOLOA	Jan-	125	197				
MAUNA LANI SHOPS	681330 MAUNA LANI DR, KAMUELA	July	123	197				
QUEENS MARKETPLACE	690201 WAIKOLOA BEACH DR, WAIKOLOA	Aug	88	88				
MAUNA LANI SHOPS	681330 MAUNA LANI DR, KAMUELA	Aug	59	59				
HILTON WAIKOLOA RESORT	690425 WAIKOLOA BEACH DR, WAIKOLOA	Sont	224	225				
KUHIO PLAZA	111 E PUAINAKO ST, HILO	Sept	224	225				
KUHIO PLAZA	111 E PUAINAKO ST, HILO	Oct	129	129				
		Total	700	698				

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 West 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.

Hawaii County October 2016

Hawaii County E9-1-1 Status Report

October 1, 2016 – October 31, 2016

CHARTER COMMUNICATIONS (TIME WARNER) VOIP DATABASE TNCR

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 Cilivian	82,256	5	66				
TOTAL	124,931	17	145				

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

Hawaii County E9-1-1 Status Report

October 1, 2016 - October 31, 2016

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – OCTOBER 2016

MAPPING LAYERS UPDATED (PART I)

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

		HAV	VAII COUNTY
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
C	RITICAL 9-1-1 P	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
			d Alphabetically)
	10/31/2016		Spatially corrected two hundred one (201) address points in Hilo.
	10/28/2016		Spatially corrected twenty-seven (27) address points in Hilo.
		10/26/16	
	10/19/2016		Corrected location name to two (2) address points (990252 Crater Rim Dr 34 and 990252 Crater Rim Dr 59) in HVNP.
	10/19/2016		Added one (1) address point (816314 Mamalahoa Hwy F) in Kealakekua.
	10/18/2016		Added three (3) address points (890925 Hawaii Belt Rd, 816282 Hind Dr and 830677 Keei Beach Rd) in Captain Cook.
	10/18/2016		Added one (1) address point (294651 Opihi Point PI) in Hakalau.
	10/18/2016		Added five (5) address points in Hilo.
	10/18/2016		Added one (1) address point (755273 Mamalahoa Hwy) in Holualoa.
	10/18/2016		Added seven (7) address points in Kailua Kona.
	10/18/2016		Added thirty-eight (38) address points in Kamuela.
	10/18/2016		Added fourteen (14) address points in Keaau.
	10/18/2016		Added four (4) address points in Kealakekua.
	10/18/2016		Added nine (9) address points in Kurtistown.
Address Points	10/18/2016		Added nineteen (19) address points in Mountain View.
	10/18/2016		Added two (2) address points (946520 Makaleka Rd and 946450 Palaoa Rd) in Naalehu.
	10/18/2016		Added nine (9) address points in Ocean View.
	10/18/2016		Added two (2) address points (443126 Kula Kahiko Rd and 411441 Niupea Homestead Rd) in Paauilo.
	10/18/2016		Added four (4) address points in Pahoa.
	10/18/2016		Spatially corrected fifteen (15) address points in Pahoa.
	10/18/2016		Added one (1) address point in Papaikou.
	10/18/2016		Added two (2) address points (281156 Loa Rd and 270573 Onohi Loop) in Pepeekeo.
	10/18/2016		Added twelve (12) address points in Volcano.
	10/18/2016		Added thirty-seven (37) address points in Waikoloa.
	10/18/2016		Completed monthly update on address points.
	10/17/2016		Corrected location name to two (2) address points (255 Kinoole St and 177 Ululani St) in Hilo.
	10/17/2016		Corrected location name to three (3) address points (735600 Maiau St, 735598 Olowalu St and 745588 Palani Rd) in Kailua Kona.

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October 1, 2016 - October 31, 2016

MAPPING LAYERS UPDATED (PART II)

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

		HAV	VAII COUNTY
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
Cl	RITICAL 9-1-1 P		Y LAYERS FOR DISPATCH & RESPONSE
	1	(Liste	d Alphabetically)
	10/17/2016		Corrected address to two (2) address points (761501 Ulu Manako PI and 761509 Ulu Manako PI) in Kailua Kona.
	10/14/2016		Spatially corrected eighty-three (83) address points in Hilo.
	10/14/2016		Corrected location name to one (1) address point (453626 Mamane St) in Honokaa.
	10/11/2016		Corrected location name to fifteen (15) address points in Hilo.
	10/11/2016		Spatially corrected eighteen (18) address points in Hilo.
	10/11/2016		Deleted four (4) address points in Hilo.
	10/7/2016		Corrected location name to fifteen (15) address points in Hilo.
	10/7/2016		Deleted eight (8) address points in Hilo.
	10/6/2016		Corrected location name to one (1) address point (821040 Kiloa Rd) in Captain Cook.
	10/6/2016		Spatially corrected two (2) address points (550514 Hawi Rd and 550514 Hawi Rd B) in Hawi.
	10/6/2016		Corrected address to one (1) address point (550514 Hawi Rd) in Hawi.
	10/6/2016		Corrected location name to one (1) address point (550514 Hawi Rd B) in Hawi.
Address Points	10/6/2016		Corrected location name to nineteen (19) address points in Hilo.
	10/6/2016		Spatially corrected eleven (11) address points in Hilo.
	10/6/2016		Corrected location name to three (3) address points (766204 Alii Dr, 755870 Kahakai Rd, and 770297 Kalani Way) in Kailua Kona.
	10/6/2016		Corrected location name to one (1) address point (811038 Nani Kupuna PI) in Kealakekua.
	10/6/2016		Corrected location name to one (1) address point (787045 Kaluna St) in Keauhou.
	10/5/2016		Aliased one (1) point of interest (Paniolo Greens) in Waikoloa.
	10/5/2016		Corrected location name to one (1) address point (550510 Hawi Rd) in Hawi.
	10/5/2016		Corrected location name to ten (10) address points in Hilo.
	10/5/2016		Spatially corrected seven (7) address points in Hilo.
	10/5/2016		Corrected location name to one (1) address point (453468 Mamane St) in Honokaa.
	10/5/2016		Corrected location name to twenty-two (22) address points in Kailua Kona.
	10/5/2016		Corrected location name to two (2) address points (786890 Alii Dr, and 786920 Alii Dr) in Keauhou.



Hawaii County E9-1-1 Status Report

October 1, 2016 - October 31, 2016

MAPPING LAYERS UPDATED (PART III)

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

		HAV	VAII COUNTY
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
CI	RITICAL 9-1-1 I	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
		(Liste	d Alphabetically)
	10/5/2016		Corrected location name to one (1) address point (194178 Wright Rd) in Volcano.
	10/5/2016		Corrected location name to one (1) address point (683883 Lua Kula St) in Waikoloa.
	10/5/2016		Deleted four (4) address points in Volcano.
	10/4/2016		Spatially corrected seventy-one (71) address points in Hilo.
	10/4/2016		Added one (1) address point (961219 Kamani St) in Pahala.
Address Points	10/3/2016		Corrected address to one (1) address point (826120 Mamalahoa Hwy) in Captain Cook.
	10/3/2016		Corrected location name to one (1) address point (835308 Mamalahoa Hwy) in Captain Cook.
	10/3/2016		Added location name to three (3) address points (745454 Makala Blvd, 755530 Kuakini Hwy, and 755550 Kuakini Hwy) in Kailua Kona.
	10/3/2016		Spatially corrected sixteen (16) address points in Kailua Kona.
	10/3/2016		Deleted ten (10) address points in Captain Cook.
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline	10/13/2016		Corrected boundary to 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			

October 1, 2016 - October 31, 2016

MAPPING LAYERS UPDATED (PART IV)

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

Type of Layer Date Created Date Created Date GIS Delivered Delivere			HAV	VAII COUNTY
(Listed Alphabetically) Gas Stations Gate Codes Government Buildings Harbors Helipads Hiking Trails Hospitals Hydrants Hydrants Hydrology Layers Incident Response Areas Lodging Major Roads Medic Beats Medic Districts Medic Response Areas 10/13/2016 Corrected boundary to one (1) Medic Response Area (M20). Medic Stations Medic Stations Medic Stations Medic Agency Stations Medic Response Area (M20). Corrected boundary to one (1) Medic Response Area (M20). Corrected boundary to one (1) Medic Response Area (M20). Corrected boundaries to Ocean Rescue Boundaries. Ocean Rescue Boundaries Ocean Rescue Boundaries Ocean Rafety Parks Parks Parks Parks Parks Parks Ocean Spatially corrected four (4) points of interest in Hilo.	Type of Layer	Server Date Created/		Other/Remarks
Gas Stations Gate Codes Government Buildings Harbors Helipads Hiking Trails Hospitals Hydrants Hydrants Hydrology Layers Incident Response Areas Lodging Major Roads Medic Beats Medic Beats Medic Districts Medic Response Areas 10/13/2016 Corrected boundary to one (1) Medic Response Area (M20). Medic Stations Medical Facilities Milepost Markers MSAG Communities Net Junctions Ocean Rescue Boundaries Ocean Safety Parcels Parks Parks Parks Parks Parks Parks Polygon 10/31/2016 Spatially corrected four (4) points of interest in Hilo.	CI	RITICAL 9-1-1 F	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
Gate Codes Government Buildings Harbors Helipads Hiking Trails Hospitals Hydrants Hydrants Hydrology Layers Incident Response Areas Lodging Major Roads Medic Beats Medic Districts Medic Response Areas Indied Response Areas Medic Response Areas Medic Stations Medical Facilities Milepost Markers MSAG Communities Net Junctions Ocean Rescue Boundaries Ocean Safety Parcels Parks Parks Parks Polygon 10/31/2016 Spatially corrected four (4) points of interest in Hilo.			(Liste	d Alphabetically)
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Medical Facilities Milepost Markers MSAG Communities Net Junctions Ocean Rescue Boundaries Ocean Safety Parcels Parks Parks Parks Polygon 10/31/2016 Spatially corrected four (4) points of interest in Hilo.	Medic Response Areas	10/13/2016		Corrected boundary to one (1) Medic Response Area (M20).
Milepost Markers MSAG Communities Net Junctions Ocean Rescue Boundaries Ocean Safety Parcels Parks Parks Polygon 10/31/2016 Spatially corrected four (4) points of interest in Hilo.	Medic Stations			
MSAG Communities Net Junctions Ocean Rescue Boundaries Ocean Safety Parcels Parks Parks Polygon 10/31/2016 Spatially corrected four (4) points of interest in Hilo.	Medical Facilities			
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Ocean Safety Parcels Parks Parks Parks Polygon 10/31/2016 Spatially corrected four (4) points of interest in Hilo. 10/26/16	Net Junctions			
Parcels Parks Parks Parks Polygon 10/31/2016 Spatially corrected four (4) points of interest in Hilo. 10/26/16	Ocean Rescue Boundaries	10/13/2016		Corrected boundaries to Ocean Rescue Boundaries.
Parks Parks Polygon 10/31/2016 Spatially corrected four (4) points of interest in Hilo. 10/26/16	Ocean Safety			
Parks Polygon 10/31/2016 Spatially corrected four (4) points of interest in Hilo. 10/26/16	Parcels			
10/31/2016 Spatially corrected four (4) points of interest in Hilo. 10/26/16	Parks			
10/26/16	Parks Polygon			
		10/31/2016		Spatially corrected four (4) points of interest in Hilo.
			10/26/16	
		10/19/2016		Added two (2) points of interest (Kilauea Military Camp Fire Station, and
Rilauea Military Camp Post Office) in HVNP.	Points of Interest			
10/19/2016 Deleted three (3) points of interest in Volcano.				1.1.1
10/17/2016 Added one (1) point of interest (McDonalds Hilo) in Hilo.		10/17/2016		
Added two (2) points of interest (Costco, and Home Depot Kona) in Kailua Kona.		10/17/2016		

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MAPPING LAYERS UPDATED (PART V)

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

		HAV	VAII COUNTY				
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks				
C	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)						
	10/14/2016	(Liste)	Spatially corrected one (1) point of interest (Paukaa) in Hilo.				
	10/14/2016		Deleted six (6) points of interest in Honokaa.				
	10/11/2016		Corrected location name to seven (7) points of interest in Hilo.				
	10/11/2016		Deleted thirteen (13) points of interest in Hilo.				
	10/7/2016		Added one (1) point of interest (Chengs Chop Suey House) in Hilo.				
	10/7/2016		Aliased two (2) points of interest (Hale Pohaku, and Honolii Beach Park) in Hilo.				
	10/7/2016		Corrected location name to one (1) point of interest (Hilo Drive Inn) in Hilo.				
	10/7/2016		Deleted twenty-three (23) points of interest in Hilo.				
	10/6/2016		Added one (1) point of interest (Hale Anuhea) in Captain Cook.				
	10/6/2016		Added fourteen (14) points of interest in Hilo.				
	10/6/2016		Aliased two (2) points of interest (Aha Punana Leo, and Hale Kahakai) in Hilo.				
	10/6/2016		Aliased one (1) point of interest (Hale Hauoli) in Honokaa.				
	10/6/2016		Added three (3) points of interest (Hale Kai O Kona Apartments, Hale Kalani Apartments, and Hale Kona Kai Condos) in Kailua Kona.				
	10/6/2016		Aliased one (1) point of interest (Hale Aloha O Puna) in Keaau.				
Points of Interest	10/6/2016		Corrected location name to one (1) point of interest (Hale Hookipa Apartments) in Kealakekua.				
	10/6/2016		Added one (1) point of interest (Hale Kehau Condos) in Keauhou.				
	10/6/2016		Deleted four (4) points of interest in Hawi.				
	10/5/2016		Corrected location name to one (1) point of interest (Hale Alii Apartments) in Hawi.				
	10/5/2016		Added ten (10) points of interest in Hilo.				
	10/5/2016		Aliased three (3) points of interest in Hilo.				
	10/5/2016		Added one (1) point of interest (Garcia Apartments) in Honokaa.				
	10/5/2016		Added two (2) points of interest (Casa Del Sol, and Duarte Apartments) in Kailua Kona.				
	10/5/2016		Corrected location name to one (1) point of interest (Hale Koloko) in Kailua Kona.				
	10/5/2016		Added one (1) point of interest (Country Club Villas) in Keauhou.				
	10/5/2016		Corrected location name to one (1) point of interest (Chalet Kilauea Hotel) in Volcano.				
	10/5/2016		Added one (1) point of interest (Elima Lani) in Waikoloa.				
	10/5/2016		Deleted four (4) points of interest in Volcano.				

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MAPPING LAYERS UPDATED (PART VI)

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

		HAV	VAII COUNTY				
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks				
CI	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE						
	Г	(Liste	d Alphabetically)				
	10/4/2016		Spatially corrected two (2) points of interest (Hilo High School, and Performing Arts Learning Center) in Hilo.				
	10/4/2016		Added one (1) point of interest (Pahala Gym) in Pahala.				
Points of Interest	10/3/2016		Corrected address to one (1) point of interest (Captain Cook Fire Station) in Captain Cook.				
	10/3/2016		Added three (3) points of interest (Kekuaokalani Gym, Kona Community Aquatic Center, and Ross) in Kailua Kona.				
	10/3/2016		Deleted ten (10) points of interest in Captain Cook.				
Police Beats	10/14/2016		Corrected boundary to one (1) police beat (Beat 130).				
Police Districts							
Police Response Areas	10/14/2016		Corrected boundary to one (1) police response area (Response Area 130).				
Police Stations							
Post Offices							
Schools							
	10/31/2016		Spatially corrected eight (8) street centerlines in Hilo.				
		10/26/16					
	10/28/2016		Corrected elevation to two (2) street segments of Hawaii Belt Rd in Hilo.				
	10/27/2016		Spatially corrected forty-three (43) street segments in Hilo.				
	10/27/2016		Added twenty-five (25) street segments in Keauhou.				
	10/27/2016		Corrected range to one (1) street segment of Alii Dr in Keauhou.				
	10/27/2016		Spatially corrected sixty-four (64) street segments in Keauhou.				
Street Centerlines	10/27/2016		Split one (1) segment of Alii Dr in Keauhou.				
	10/18/2016		Corrected range to four (4) street segments in Paauilo.				
	10/18/2016		Corrected range to four (4) street segments in Papaikou.				
	10/18/2016		Corrected range to four (4) street segments in Waikoloa.				
	10/18/2016		Completed monthly update on street centerlines.				
	10/17/2016		Corrected street name to one (1) street segment (Ehiku PI) in Kamuela.				
	10/3/2016		Added thirty (30) street segments in Kailua Kona.				
	10/3/2016		Split eight (8) street segments in Kailua Kona.				
Subdivisions							
Tow Jurisdictions							
Tsunami Evacuation Zones							
Tsunami Heights							

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MAPPING LAYERS UPDATED (PART VII)

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

HAWAII COUNTY								
Type of Layer	Akimeka GIS Server	Date GIS						
	Date Created/ Edits Performed	Delivered	Other/Remarks					
CI	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE							
		(Listed	d Alphabetically)					
Waste Water Plants								
		10/26/16						
WSP Cell Sectors	10/25/2016		Per VZW CRS					
war cen sectors	10/12/2016		Per VZW CRS					
	10/3/2016		Per VZW CRS					
		10/26/16						
W/CD C -11 /T	10/25/2016		Per VZW CRS					
WSP Cell Towers	10/12/2016		Per VZW CRS					
	10/3/2016		Per VZW CRS					

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						
10/26/2016	MapFlex deliverable which included the following updated layers: Address Points,						
	Cell Sectors, Cell Towers, Points of Interest, and Street Centerlines.						
10/25/2016	Spillman deliverable which included the following updated layers: Address Points,						
	Cell Sectors, Coastline, Common Names Alt Table, Display Streets, Medic Zones,						
	Ocean Rescue Boundaries, Points of Interest, POI Alt Names, Police Zones, Street						
	Centerlines, Street Alt Names, and Street Routes.						
10/18/2016	Spillman deliverable which included the following new response area layers: Water						
	Fire, Water Medic, and Water Police.						
10/11/2016	Spillman deliverable which included the following updated layers: Address Points,						
	Cell Sectors, Common Names Alt Table, Display Streets, Points of Interest, POI Alt						
	Names, Street Centerlines, Street Alt Names, and Street Routes.						

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ADDRESS POINTS AND STREET CENTERLINES UPDATE COMPARISON

On a routine basis, upon receipt of Hawai'i County Planning Department's Address Points and Street Centerlines layer updates, Akimeka compares and incorporates any of the County's additions, changes, and deletions into the Akimeka Address Points and Street Centerlines layers that appear necessary for the dispatch and response of 911 personnel.

The Address Points and Street Centerlines layer comparative analysis was completed on the updates received from the Hawai'i County Planning Department on October 18, 2016. Results are as follows:

HAWAII COUNTY	Address Points Layer	Street Centerlines Layer
New Addresses Added	170	
Addresses Removed	0	
Address Street Name Changes	0	
Address Street Number Changes	0	
New Street Segments Added		0
Street Segments Removed		0
Street Segment Range Changes		0
Street Segment Name Changes		0

NOTE:

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

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POLICE BEAT REVIEW

Beginning in late 2015 and continuing in January 2016, Akimeka has been conducting a Police Beats review process as part of an annual update and in addition, preparation for Hawaii County's CAD system deployment. During this time, the Police Beats are also reviewed with the written descriptions of the Hawaii Police Beat Boundaries, whereby corrections are made to the Police Beat GIS layer where applicable in an effort to synchronize the GIS layer with the written descriptions and provide the 911 centers in Hawaii with a more accurately defined boundary layer which align with operational jurisdictions.

- To better service the public safety needs of Hawaii County, Akimeka compared the written descriptions of the Hawaii Police Beats as recorded in Document Number GO 204 with an effective date of June 27, 2011, and made corrections to the Police Beats GIS layer where needed. In addition, Akimeka has been documenting any recommendations for document description updates.
 - Akimeka reviewed the written descriptions for the Hawaii Police Beats and cross referenced it to the Police Beats GIS layer. The boundaries to all seventy-six police beats as well as the area falling within the jurisdiction of the Hawaii Volcanoes National Park were edited for greater accuracy.
 - b. Akimeka has documented all potential discrepancies between the written descriptions and GIS layer for a thorough review upon completion. Akimeka has also produced several maps to better illustrate some of the larger discrepancies.
 - c. Upon completion of the GIS editing procedures, Akimeka will participate in a Police Beat review process with the Hawaii Police Department to further refine the boundaries to the Police Beats GIS layer and the written descriptions for those boundaries. This process will finalize the synchronization between the GIS layer and the written descriptions; provide additional precision and accuracy to both the GIS layer and written descriptions; and eliminate all discrepancies so that confusion and/or misinterpretation of those boundaries do not hinder public safety needs.
 - During the month of February 2016, Akimeka corrected the boundaries to the GIS layers that are associated with the Police Beats so that proper alignment would occur between the associated layers. This included correcting boundaries to six ESNs and three Police Districts. Those corrected layers were delivered to MapFlex and made available to the dispatchers on February 17th.
 - During the month of March 2016, Akimeka corrected the boundaries to the Police Response Areas so they would be aligned properly with the Police Beats and be topologically error free. This included correcting the boundaries to all seventy-six police response areas as well as the area falling within the jurisdiction of the Hawaii Volcanoes National Park.
 - During the month of August 2016, Akimeka is awaiting the final review process of the Police Beat layer with the Hawaii Police Department, Besides the Police Beat layer, the review process with the Hawaii Police Department will also likely include a review process of the Police Districts layer as well as the Police Response Areas layer.
 - During the month of September 2016, Akimeka began creating a series of large-scale maps to illustrate in detail the police beat boundaries. The maps are anticipated to be completed during October 2016, at which time they will be made available for examination by the Hawaii Police Department for accuracy.
 - During the month of October 2016, Akimeka created the first draft of a series of seventy-seven large-scale maps one map for each police beat as well as one map of the entire county. Besides police beat boundaries, streets, and aerial imagery, the maps also contain points of interest that are referenced within the written descriptions of the Hawaii Police Beat Boundaries, as well as other important features such as high schools, colleges, and major attractions so that the maps will be easier to validate the accuracy of. After reviewing the maps, Akimeka recognized enhancements that could be made to them to further their value as a communication device. These enhancements will be taking place in November 2016.

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CAD SYSTEM DEPLOYMENT

During the 2015 year, the Hawaii County Police Department has conducted thorough research and has decided to implement a new CAD (Computer Aided Dispatch) system. Through their selection process, they have chosen the Spillman Technologies CAD system to best fit their operational needs. Throughout the coming months there will be much coordination between the Hawaii Police Department, Hawaii IT Department, Akimeka, and Spillman Technologies to deploy the Spillman Technologies CAD system with absolute success.

- 1. The Hawaii Police Department, Akimeka, and Spillman Technologies have begun introductory coordination and information sharing to ensure a successful deployment of the new CAD system, which will improve dispatch efficiency.
 - a. On January 15, 2016, Spillman Technologies held a webinar and discussion on their Geobase process which HPD, Spillman Technologies, and Akimeka were in attendance. The discussion was high-level and pertaining to the GIS database and how it is integrated within the Spillman Technologies CAD architecture.
 - b. In February 2016, Spillman Technologies was on-site at the Hawaii Police Department to host an official kick-off meeting and technical discussion which Akimeka was also in attendance. During the meeting Akimeka presented the entire GIS dataset via webinar. Spillman Technologies was impressed with the quality of the GIS data and is looking forward to the project.
 - c. In May 2016, the final NDA were completed with Akimeka, Spillman Technologies, and the Hawaii Police Department.
 - d. On May 31, 2016, Akimeka's GIS Manager and two representatives from the Spillman Technologies team met to discuss the timeline, requirements, and where they can work together to make this a successful project and on schedule.
 - i. Spillman Technologies is currently in the process of getting the server(s) packaged/shipped on site. Once these are in place, more timeline milestones will be established with preparing the data for configuration on the server, etc.
 - e. During the month of August 2016, there was significant coordination done between Akimeka and Spillman Technologies to get an initial GIS dataset ready for configuration.
 - i. There was a slight delay in getting a connection to the Hawaii County server during the beginning of August but was quickly remediated. In the meantime while, Spillman was on-site getting server connections set up, Akimeka was preparing the GIS data for the CAD system. Several preparation took place and included a variety of QA items to ensure the best possible data to be configured.
 - ii. On August 24, 2016, Akimeka uploaded an initial GIS dataset containing the core data, meaning the functional data that makes the system work. The display layers intended to perform labeling, set up different symbols, and establish the basemaps will come after the initial data has been given the go ahead.
 - iii. On August 29, 2016, Spillman Technologies followed up with Akimeka to let them know the data looked good on their end. They ran testing on addresses, common places, and mile markers and all were good.
 - iv. On August 30, 2016, Akimeka was on-site to meet with the Hawaii Police Department and Spillman Technologies. Akimeka, along with the supervisors of the Hawaii Police 911 Center, observed during a Spillman Cad Mapping demonstration that the initial base GIS layers that were provided by Akimeka were installed and functioning flawlessly with no issues. CAD project proceeding as planned. Previous issues regarding the 911 GIS layers for the Hawaii Fire Department were discussed and resolved. Spillman Technologies will be reaching out to the Hawaii Fire Department personnel regarding data input into the Spillman CAD System. This information was conveyed to the Hawaii Fire Department representative along with the Hawaii County Information Technology Manager during a separate meeting that Akimeka and Hawaii Police Department attended at the Hawaii County ITD office.
 - v. During the month of September, Akimeka continued with routing deliverables for the Spillman CAD system. One deliverable during the beginning of September included 45 display layers to be used for making the pin maps more aesthetically pleasing and useful for the dispatchers.

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- vi. During the month of October, Hawaii County Police and Fire, Akimeka, and Spillman was on-site for the mock Go-Live.
 - 1. The on-site meetings were a success and Akimeka and Spillman worked together to provide some enhancements to the mapping, such as hillshades to provide some terrain features in the mapping.
 - 2. Spillman rolled out their new mapping display which was well received by Hawaii County.
 - Akimeka met with Hawaii Fire to go over the First In boundaries and agreed to make some slight modifications to include third, fourth, and fifth level responses, which will be a follow on item to work on.
 - 4. There were some records that needed some updating and Akimeka took this as an action item.
- vii. Throughout the remainder of October 2016, Akimeka and Spillman continued to work together to ensure the project is successful.
 - Akimeka provided several addition GIS updates, which included new Water Response Areas for Police, Fire, and Medics. In addition, several deliverables that included new Common Names and updates as well.

COMMON NAMES UPDATE

In September 2016, Akimeka was provided a spreadsheet by the Hawaii Fire Department of common names that they wished to be included in the Spillman Technologies CAD system. Akimeka immediately reviewed the spreadsheet and developed a strategy and timeline for ensuring that all the common names on the spreadsheet be included in the GIS data that is used in their Spillman Technologies CAD and MapFlex systems.

- 1. In late September 2016, Akimeka received, and immediately reviewed, a spreadsheet by the Hawaii Fire Department of common names that they would like included in their Spillman CAD system. The spreadsheet contains a list of four hundred eighteen multi-family residential complexes, most of which are apartment, condominium, and townhouse complexes.
 - a. Akimeka developed a strategy for completing this large update, which includes a timeline whereby thirty of the updates will be completed before the Spillman CAD go-live date, which takes place in the first week of October 2016, followed by a minimum of fifty updates for each of the subsequent Spillman CAD updates taking place every two weeks. At that projected rate, the updates will be completed in January 2017.
 - b. During the month of October 2016, Akimeka kept the projected pace to be completed with the multi-family residential complexes updates in January 2017.

MAPFLEX SYSTEM

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During the month of October 2016, the MapFlex system received some updates but not part of the normal upload processes as a result of MapFlex having several issues.

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.

During the month of October 2016, there was only one GIS deliverable made to MapFlex. 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.

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in September 2016
 - a. **Hawaii County** October 27, 2016
 - b. **Maui County** October 27, 2016
 - c. Kauai County October 27, 2016
 - d. **Honolulu** October 27, 2016

MAPFLEX ISSUE

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.

4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS - OCTOBER 2016

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#	Date	Ticket #	Description	PSAP	Urgency	Comments
1	07/13/16	856	Updated Address	FIRE	Normal	TN has been referred to telco via email by West Safety Services (Intrado). RMS
2						
3						

Note* There is one (1) opened service request pending for October 2016.

SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY – 2016

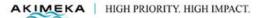
HAWAII COUNTY				MSAG SERVICE REQUEST CATEGORIES						
2016	TOTAL		0	WIRELINE		WIRELESS		VoIP		
	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed	
2015 Carryover*			3							
January	9	10	2	8	8	0	1*	1	1	
February	1	2	1	1	1	0	0	0	1*	
March	2	2	1	1	1	0	0	1	1	
April	6	5	2	6	5	0	0	0	0	
Мау	5	5	2	5	5	0	0	0	0	
June	2	2	2	2	2	0	0	0	0	
July	3	2	3	3	2	0	0	0	0	
August	2	2	3	2	2	0	0	0	0	
September	1	1	3	1	1	0	0	0	0	
October	1	3	1	1	3	0	0	0	0	
November										
December										
TOTAL	32	34	1	30	30	0	1	2	3	

* 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.

	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) for correction			

5. E9-1-1 DATABASE SYNCHRONIZATION



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

Next Scheduled Database Synchronization – November 2016

AUDIT SUMMARY RESULTS – NOVEMBER 2016 TBA
AUDIT SUMMARY RESULTS COMPARISION – NOVEMBER 1, 2016 VS AUGUST 1, 2016 TBA
AUDIT SUMMARY RESULTS TBA
INVALID MSAG STREETS AND ADDRESS RANGES – ESN X99 RECORDS TBA

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA

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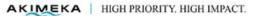
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1. PSAP OPERATIONS

9-1-1 CALL VOLUME - OCTOBER 2016

(Source: West Safety Services Viper system

	9-1-1 Call Volume																
KAUA	I PSAP	Wire	eline		Wire	less		VC)IP		With ALI	Admir	n Calls		doned Ills	Other	Calls
2016	Total 9-1-1 Calls Processed	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	% of Total Calls
Oct	3,949	589	14.92%	2,624	66.45%	42.72%	57.28%	174	4.41%	6	0.15%	0	0.00%	556	14.08%	0	0.00%

9-1-1 CALL VOLUME - CALENDAR YEAR 2016

	9							1-1 Call Volume									
KAUA	N 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	% of Total Calls
JAN	4,281	637	14.88%	2,816	65.78%	46.27%	53.73%	153	3.57%	10	0.23%	0	0.00%	665	15.53%	0	0.00%
FEB	4,090	609	14.89%	2,690	65.77%	46.02%	53.98%	116	2.84%	16	0.39%	0	0.00%	659	16.11%	0	0.00%
MAR	4,638	742	16.00%	2,986	64.38%	46.28%	53.72%	133	2.87%	15	0.32%	0	0.00%	762	16.43%	0	0.00%
APR	4,447	673	15.13%	2,944	66.20%	47.52%	52.48%	131	2.95%	12	0.27%	0	0.00%	687	15.45%	0	0.00%
MAY	4,177	580	13.89%	2,861	68.49%	45.51%	54.49%	131	3.14%	9	0.22%	0	0.00%	596	14.27%	0	0.00%
JUNE	4,020	605	15.05%	2,681	66.69%	42.15%	57.85%	129	3.21%	10	0.25%	0	0.00%	595	14.80%	0	0.00%
JULY	4,757	697	14.65%	3,194	67.14%	45.77%	54.23%	144	3.03%	11	0.23%	0	0.00%	711	14.95%	0	0.00%
AUG	4,386	687	15.66%	2,926	66.71%	41.66%	58.34%	162	3.69%	10	0.23%	0	0.00%	601	13.70%	0	0.00%
SEPT	4,105	585	14.25%	2,677	65.21%	45.05%	54.95%	159	3.87%	13	0.32%	0	0.00%	671	16.35%	0	0.00%
ост	3,949	589	14.92%	2,624	66.45%	42.72%	57.28%	174	4.41%	6	0.15%	0	0.00%	556	14.08%	0	0.00%
NOV																	
DEC																	
YTD	42,850	6,404		28,399				1432		112		0		6,503		0	
MON AVG	4,285	640	14.93%	2,840	66.28%	44.90%	55.10%	143	3.36%	11	0.26%	0	0.00%	650	15.17%	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 total Wireline and Wireless counts respectively.
- All VoIP (Voice over Internet Protocol) type of 911 calls is combined in the Call Volume statistic.
- *911 Calls with no Ali 0.15% Statewide average = 0.18% Year 2015

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TEXT TO 911 - CURRENT MONTH - OCTOBER 2016

NOTE:

- Kauai County has deployed a soft launch for Text to 911 on December 21, 2015.
- During this soft launch period, internal testing and training will be conducted.
- 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.
- 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 Kauai County					
Month	Total received				
January	23				
February	11				
March	22				
April	4				
May	2				
June	11				
July	26				
August	42				
September	25				
October	18				
November					
December					
YTD	184				
Monthly Avg.	18.4				

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WIRELESS PSAP TESTING - OCTOBER 2016

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

NOTES:

• There were no scheduled Wireless 911 tests for the month of October, 2106.

FOR YOUR INFORMATION

FYI	For Your Information
MLTS (Multi L	ine Telephone System)

"Most MLTS/PBX systems enable the digits 9-1-1 to be dialed and routed to a Public Safety Answering Point (PSAP). However, the vast majority of these systems do not provide granular location information with the 9-1-1 call to enable emergency responders to know the actual location of the emergency. In many instances a call from the 12th floor of a large office building may only provide the street address of the building. If the caller is unable to provide his or her location and no one else is available to provide assistance, such a lack of location information can prove fatal." (NENA: Multi-Line Telephone System & Private Branch Exchange) Technical

PRIMARY	MLTS/PBX 911 CALLS RECEIVED						
PSAPS*	Oct 2016	YEAR TO DATE 2016					
Oahu	3,239	32,371					
Hawaii	162	779					
Maui	147	1,015					
Molokai	0	1					
Kauai	26	207					
Total**	3,574	34,373					

*PSAP totals does not include Military 911 calls.

** Total numbers are a minimum estimated count. Presently, CENTRX & VoIP call volumes are combined with Multi & Single line systems and were not added to the total MLTS 911 calls.

October 1, 2016 - October 31, 2016

FOR YOUR INFORMATION

FY1	For '	Your Ir	nformation	
911 Calls Rece	eived	From 1	Payphones	

Approximately 95% of 911 calls received from Payphones are "one way" lines. These Payphones are not capable of receiving calls which makes it impossible for the 911 operator to re-contact the caller should there be a location discrepancy or additional information needed.

PRIMARY	911 CALLS RECEIVED via Payhone
PSAPS	October 2016
Oahu	2,694
Hawaii	308
Maui	240
Molokai	14
Kauai	128
Total**	3,384

*PSAP totals does not include Military 911 calls.

Class of Service (COS) COIN = 1 way out line PAY\$ = 2 way line

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - OCTOBER 2016

KAUAI	9-1-1 TRANSACTIONS									
COUNTY		MSAG ALI Submitted			Discre	Customer				
2016	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Addresses Affected	
JANUARY	14	14	0	0	0	198	0	0	70	
FEBRUARY	83	53	30	0	0	217	0	0	60	
MARCH	30	8	22	0	0	232	0	0	9	
APRIL	25	21	4	0	0	234	0	0	19	
MAY	37	30	7	0	0	208	0	0	78	
JUNE	14	9	5	0	0	125	0	0	89	
JULY	23	8	15	0	0	119	0	0	63	
AUGUST	105	13	92	0	0	54	0	0	158	
SEPTEMBER	9	8	0	0	1	44	0	0	11	
OCTOBER	96	5	91	0	0	42	0	0	91	
NOVEMBER										
DECEMBER										
TOTAL YTD	436	169	266	0	1				648	
AVG PER MONTH	44	17	27	0	0				65	

Definitions

- (A) Master Street Address Guide Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (B) **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 499 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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October 2016 Kauai County



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MSAG CURRENT MONTH NOTES:

A total of ninety-six (96) MSAG transactions were processed in 9-1-1 Net during the month of October 2016. All requests were processed relating to the MSAG database, 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 Military response areas, and inserting new MSAG records.

There were ninety-one (91) customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

All Kauai Telephone Number Change Requests (TN CR) transactions have been processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 499 clean-up effort. ESN 499 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record. Akimeka is awaiting feedback from West on the TN CRs that have been submitted for correction. There were three (3) ESN 499 TN CRs completed in October 2016, and as a result two (2) ESN 499 street records were deleted from the MSAG database.

In October 2016 Kauai Department of Public Works (DPW) Engineering Division sent Akimeka new addresses assigned to the Lihue Airport. As a result, eighty-nine (89) TN CRs were submitted to update existing structures at the airport with their new addresses. One (1) of these TN CRs remains open, in Referred Status with Time Warner Communications.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are 42 Open TN CR Transactions as of October 31, 2016.
- Please refer to "TNCR Current Status" chart in the next section.

41 Open TN CR transactions are a direct result of the ESN 499 clean-up and are awaiting approval from Hawaiian Telcom, Inc. One (1) Open TN CR is the result of the Kauai DPW Lihue Airport Address Updates. 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 ALI-DRs as of October 31, 2016
- There are no Open VoIP DRs as of October 31, 2016

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TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS - OCTOBER, 2016

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)									
PSAP	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									
KAUAI	42	19	10	13						

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.



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DISPATCHABLE LOCATION - STATUS AS OF - OCTOBER 2016 - 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 **Kukui Grove Center at 302600 Kaumualii Hwy, Lihue**. 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.

As Akimeka awaits for the notice to proceed, Akimeka has continued to research and prepare "Driving Instructions" for other shopping malls that will assist the Kauai Dispatchers with their 911 calls for service. A total of 1146 telephone records are complete and ready for submittal, and transactions that were submitted in 2015 are now being processed.

	Dispatchable Location										
Common Name Place	2016	Number of TNCR* Transactions Prepared	Number of TNCR* Transactions Submitted	Number of Transactions Processed**							
	2015 Carryover	2015	286	62	0						
*Common Name Place and MSAG A	ddresses available upon request	Jan-Mar	544	0	0						
		Apr	0	0	0						
		May	0	0	2						
Kukuiula Shopping Center	2829 Ala Kalanikaumaka, Kukuiula	June	87	0	56						
		July	74	44	26						
Kukui Grove Center	302600 Kaumualii Hwy, Lihue	Aug	30	0	22						
		Sept	125	0	0						
		Oct	0	0	0						
		Total	1146	106	106						

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

TNCR* Telephone Number Change Request - Transactions submitted to WEST 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.

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CHARTER COMMUNICATIONS (TIME WARNER) VOIP DATABASE TNCR

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 Cilivian	82,256	5	66						
TOTAL	124,931	17	145						

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



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3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – OCTOBER 2016

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.

KAUAI COUNTY								
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks					
CI	RITICAL 9-1-1 I		Y LAYERS FOR DISPATCH & RESPONSE					
			d Alphabetically)					
		10/27/16						
Address Points	10/27/2016		Spatially corrected two hundred seventy-three (273) address points in Kalaheo					
	10/27/2016		Spatially corrected sixty-two (62) address points in Lawai					
Airports	10/6/2016		Included MUN info					
Bridges	10/6/2016		Included MUN info					
Building Footprints								
Bus Stops								
Churches	10/6/2016		Included MUN info					
Coastal Names	10/6/2016		Included MUN info					
Coastline								
Common Places								
Correctional Facilities								
Emergency Callboxes	10/6/2016		Included MUN info					
Emergency Operation Centers	10/6/2016		Included MUN info					
Emergency Shelters	10/6/2016		Included MUN info					
ESZ/ESN								
Fire Beats	10/31/2016		Modified Fire Beats					
Fire Districts								
Fire Response Areas								
Fire Stations	10/6/2016		Included MUN info					
Food & Beverage	10/6/2016		Included MUN info					
Gas Stations	10/6/2016		Included MUN info					
Gate Codes								
Government Buildings	10/6/2016		Included MUN info					
Harbors	·							
Helipads	10/6/2016		Included MUN info					
Hiking Trails	10/7/2016		Included MUN info					
Hospitals	10/6/2016		Included MUN info					
Hydrants								
Hyrdology Layers	10/6/2016		Included MUN info					
Incident Response Areas								
Lodging	10/6/2016		Included MUN info					
2008118	. 5, 5, 2010							



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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.

KAUAI COUNTY									
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks						
CI	RITICAL 9-1-1 I	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE						
(Listed Alphabetically)									
Major Roads	10/7/2016		Updated roads to match the spatially corrected street centerlines						
Wajor Roads	10/7/2016		Included MUN info						
Medic Beats									
Medic Districts									
Medic Response Areas									
Medic Stations	10/6/2016		Included MUN info						
Medical Facilities	10/6/2016		Included MUN info						
Milepost Markers									
MSAG Communities									
Net Junctions									
Ocean Rescue Boundaries									
Ocean Safety									
Parcels									
Parks	10/6/2016		Included MUN info						
Parks Polygon									
Points of Interest									
Police Beats									
Police Districts									
Police Response Areas									
Police Stations	10/6/2016		Included MUN info						
Post Offices	10/6/2016		Included MUN info						
Schools	10/6/2016		Included MUN info						
		10/27/16							
	10/20/2016		Spatially corrected fifteen (15) street centerline segments in Kukuiula						
Street Centerlines	10/19/2016		Spatially corrected four (4) street centerline segments in Kukuiula						
	10/13/2016		Modified the range for four (4) street centerline segments in Kukuiula						
	10/13/2016		Spatially corrected one (1) street centerline segment in Kukuiula						
Subdivisions	10/6/2016		Included MUN info						
Tow Jurisdictions									
Tsunami Evacuation Zones									
Tsunami Heights									
Waste Water Plants									

October 2016

Kauai County E9-1-1 Status Report

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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.

KAUAI 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)								
WSP Cell Sectors		10/27/16						
war den sectors	10/13/2016		Per VZW CRS					
WCD Coll Torrors		10/27/16						
WSP Cell Towers	10/13/2016		Per VZW CRS					

NOTE:

Kauai County

• The Parcels layer is provided by Kauai 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
10/31/2016	Delivered Fire Beats for Spillman
10/27/2016	Delivered Address Points, IRA, Points of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers for GeoComm
10/27/2016	Delivered Address Points, Points of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers for MapFlex
10/26/2016	Delivered Fire Hydrants, Fire Water Response Zones, Medic Water Response Zones and Police Water Response Zones for Spillman
10/13/2016	Delivered Address Points, Points of Interest, WSP Cell Sectors, WSP Cell Towers and Landmark.xml for GeoComm

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MAPFLEX SYSTEM

During the month of October 2016, the MapFlex system received some updates but not part of the normal upload processes as a result of MapFlex having several issues.

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.

During the month of October 2016, there was only one GIS deliverable made to MapFlex. 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.

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in October 2016
 - a. **Hawaii County** October 27, 2016
 - b. Maui County October 27, 2016
 - c. **Kauai County** October 27, 2016
 - d. Honolulu October 27, 2016

MAPFLEX 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.

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SPILLMAN PROJECT

Kauai County is moving forward with the implementation of their new Spillman Technologies CAD system and there has been some significant progress beginning in May 2016.

- 1. At the end of May 2016, Akimeka started preparing GIS data for Kauai's Spillman CAD system.
 - a. Akimeka configured the Spillman Toolbox to process GIS data into Spillman's data specifications.
- 2. During June 2016, an initial data deliverable included Address Points, MSAG Communities, Street Centerlines, Fire Response Areas, Medic Beats, Police Response Areas, Points of Interest and Street Centerline Alternate Names.
- 3. On June 30, 2016, Akimeka delivered this data to Spillman Technologies and worked with Spillman Technologies to stand up data on Kauai's server.
 - a. The GIS data was copied over into the Kauai Spillman server and loaded into file designation used for staging.
- 4. On July 20, 2016, Akimeka met with Spillman via teleconference.
 - a. Reviewed pinmaps
 - b. Discussed closest route module
 - i. Akimeka will be sending data to support this module once Spillman is ready
- 5. On July 26, 2016, Akimeka sent Spillman the data to support the closest route module, which were mostly street centerlines containing the necessary attribution with speed limits, one way codes, etc.
- 6. On August 18, 2016, Akimeka recognized a change needed for the law zones and included the update into the next deliverable to Spillman.
- 7. On August 19, 2016, Akimeka sent Spillman the supporting map layers for display. There may be additional layers to configured subsequently to getting the initial maps set up, and Akimeka will work with Kauai and Spillman on getting any additional content into the system.
- 8. Akimeka received the updated City Codes from Spillman on August 23, 2016 and began incorporating them into the source GIS data to be used for all following GIS deliverables to the CAD system.
- 9. During the month of September 2016, Akimeka continued to send routine deliverables for the Spillman CAD system.
- 10. During the month of October 2016, Akimeka continued to send routine deliverables for the Spillman CAD system.
- 11. On October 26, 2016, Akimeka sent Fire Hydrant data along with Water Response Zones for Fire, Medic and Police.
- 12. On October 31, 2016, Akimeka sent updated Fire Beat Zones as requested by the Kauai Fire Department.

October 1, 2016 - October 31, 2016

OPEN SERVICE REQUESTS - OCTOBER 2016

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

NOTE:

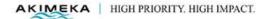
There are no open service requests for October 2016.

SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY – 2016

ı	KAUAI COUNTY					MSAG SERVICE REQUEST CATEGORIES						
2046	TOT	ΓAL	•	WIRE	LINE	WIRELESS		VolP				
2016	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed			
2015 Carryover*			0									
January	0	0	0	0	0	0	0	0	0			
February	0	0	0	0	0	0	0	0	0			
March	0	0	0	0	0	0	0	0	0			
April	0	0	0	0	0	0	0	0	0			
May	0	0	0	0	0	0	0	0	0			
June	0	0	0	0	0	0	0	0	0			
July	0	0	0	0	0	0	0	0	0			
August	0	0	0	0	0	0	0	0	0			
September	1	1	0	0	0	0	0	1	1			
October	0	0	0	0	0	0	0	0	0			
November												
December												
TOTAL	0	0	0	0	0	0	0	0	0			

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

	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 Time Warner Cable (TWCBL) for correction		



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5. E9-1-1 DATABASE SYNCHRONIZATION

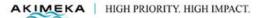
(<u>Reference:</u> NENA 71-501, Version 1.1 – NENA Information Document for Synchronizing Geographic Information System databases with MSAG & ALI)

As part of Akimeka's value added services, Akimeka conducted a database synchronization audit for Kauai County in October 2016.

The database synchronization effort included comparing Kauai County's 9-1-1 MSAG received from the 911 Database provider, West on October 1, 2016, against its 9-1-1 GIS Street Centerline data. A total number of **1,346** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on October 1, 2016 for Kauai 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

		As of January 1, 2016		As of April 1 , 2016		As of July 1 , 2016		As of October 1 , 2016	
9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	9-1-1 MSAG Dated 1-01-15		9-1-1 MSAG Dated 4-01-16		9-1-1 MSAG Dated 7-01-16		9-1-1 MSAG Dated 10-01-16	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		1,300		1,331		1,337		1,346	
Less: 9-1-1 MSAG Exception Records	(1)	72	5.5%	77	5.8%	84	6.3%	84	6.2%
Net 9-1-1 MSAG Records Eligible for Comparison		1,228		1,254		1,253		1,262	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG GIS Match No Corrections Required)		1,223	99.6%	1,249	99.6%	1,249	99.7%	1,262	100.0%
9-1-1 MSAG GIS No Match - Minor Correction Required	(2)	5	0.4%	4	0.3%	2	0.2%	0	0.0%
9-1-1 MSAG Record With No GIS Record	(3)	0	0.0%	1	0.1%	2	0.2%	0	0.0%
Total 9-1-1 MSAG Records No Match		5	0.4%	5	0.4%	4	0.3%	0	0.0%

Objective: NENA Recommended Match Rate = 98%

The two-way (MSAG – GIS) database synchronization audit for the Kauai County was completed as scheduled. The match rate remained consistent from July 2016 with a 99.7% Match Rate to a 100% Match Rate as of October 2016.

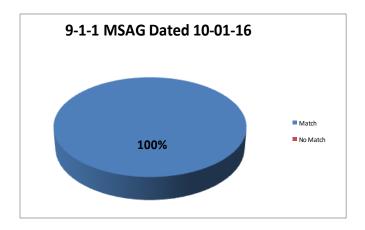
NOTES:

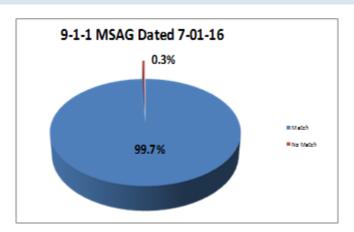
- An MSAG Record that will not have a corresponding GIS Street Centerline Record but is required for the routing of E9-1-1 calls (i.e., Emergency Call Box, Foreign Exchange Records, Wireless Shell Records, etc.). No further action is required.
- An MSAG Record that requires minor MSAG attention in 9-1-1Net 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.).
- 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.



October 1, 2016 - October 31, 2016

AUDIT SUMMARY RESULTS - OCTOBER 1, 2016 MSAG VS. JULY 1, 2016 MSAG





Kauai County level of accuracy for 9-1-1 Match percentage remained consistent with a 100% as of October 1, 2016 compared to 99.7% as of July 1, 2016

- Akimeka continues to work with Kauai County GIS and Planning departments to validate streets and communities.
- ❖ In achieving and exceeding the NENA minimum match rate of 98% for data accuracy, Kauai County is ready for Next Generation 9-1-1 (NG9-1-1) from a database perspective.
- A constant effort to keep the databases synchronized and maintained are required to ensure the level of accuracy of the E9-1-1 databases each time an MSAG or GIS record is "last modified".
- * "MSAG record that doesn't match the GIS" decreased 100% (2 to 0) from June 2016 to October 2016 with no records falling under section.
- * "MSAG record with no GIS record" decreased 100% (2 to 0) from June 2016 to October 2016. MSAG records with no matching record were due primarily to the verification of the MSAG records against multiple GIS databases to determine if the roads are existing within Kauai County.
- * "MSAG Records Corrections Required" remained consistent at **100%** (0 to 0) from June 2016 to October 2016 respectively. MSAG records have been combined, split, and high/low ranges have been changed, to match the Street Centerlines.
- Accurate location and GIS information will ensure proper dispatching and response in a timely manner for all Public Safety agencies.
- All the hard work to maintain and synchronize the E9-1-1 databases is validated when a life and/or property is saved.
- ❖ Coordinating the clean-up of the ALI discrepancy records associated with an assigned ESN of 499 with the respective Service Providers is needed to ensure all records are MSAG valid.

October 1, 2016 - October 31, 2016

INVALID MSAG STREETS AND ADDRESS RANGES - ESN X99 RECORDS

At the request of the Kauai County Chief of Police, Hawaiian Telcom, Inc. (HTI) provided Kauai County and Akimeka, as the PSAP's agent, with access and visibility to the ESN x99 MSAG records which are "known" invalid streets and address ranges. Akimeka will be investigating and reporting on these ESN x99 MSAG records as a separate project and add-on to the Database Synchronization quarterly report.

Results of the data provided are as follows:

	Invalid MSAG Records											
KAUAI	9-1-1 MSAG Dated 1-01-16		9-1-1 MSAG Dated 04-01-16		9-1-1 MSAG [Dated 07-01-16	9-1-1 MSAG Dated 10-01-16					
	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records				
ESN 499	43	3.2%	38	2.8%	36	2.6%	21	1.5%				

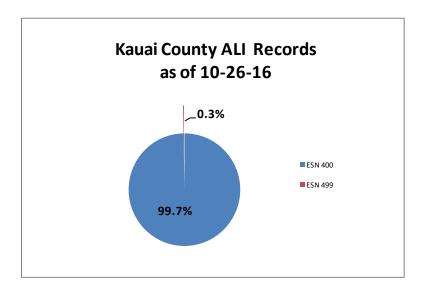
These invalid MSAG records represent **1.5%** of the Total MSAG records for Kauai County as of the October 1, 2016 MSAG as compared to **2.6%** as of the April 1, 2016 MSAG. The individual ALI records associated with these records are provided below.

The decrease in the number of invalid MSAG records is a result of Akimeka's research and validation of telephone numbers (TNs) assigned an invalid MSAG address. In order for a TN to be corrected, Akimeka submits the update to the Service Provider via West for approval.

October 1, 2016 - October 31, 2016

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT

As part of Akimeka's ongoing database synchronization efforts, Akimeka reviewed and summarized the ALI discrepancies by community in 9-1-1Net for Kauai County. As of October 23, 2016, there are **64** ESN 499 ALI records, representing **0.3%** of Kauai County's Total ALI records. The number of ESN 499 ALI records was further reduced by **40%** (108 to 64) from June 27, 2016 to October 26, 2016 respectively.



Although the ESN 499 is a "valid" MSAG utilized for overflow addressing, the voice portion of the 9-1-1 call will still be routed to the PSAP. However, the address information will present an invalid address/location to the dispatcher or a "No Record Found" condition which may affect the processing of the 9-1-1 response and/or cause confusion or delay during the dispatch of 9-1-1 resources to the caller's location.

The goal, which requires the cooperation among all service providers, is to clean-up all ESN 499 MSAG records to a valid Kauai County ESN 400 – 448 to ensure that all ALI records assigned to the County of Kauai have an "MSAG valid address".

October 1, 2016 - October 31, 2016





October 1, 2016 - October 31, 2016

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October 1, 2016 - October 31, 2016

1. PSAP OPERATIONS

9-1-1 CALL VOLUME MAUI PSAP - OCTOBER 2016

(Source: West Safety Services Viper system

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

							9-1-	-1 Call V	olume								
MAUI PSAP Wireline		Wir	eless		vo	IP	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		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
ОСТ	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%

CALL VOLUME MAUI PSAP NOTES:

*Calls with no Ali 0.13% - Statewide average = 0.18% Year 2015

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

	9-1-1 Call Volume																
MAU	JI PSAP	Wir	eline	Wireless			VO	VOIP		vith No LI	Admin Calls			doned Ills	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		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%
ОСТ	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																	
DEC																	
YTD	111,423	20,404		74,890				2,859		138		0		13,132		0	
MON AVG	11,142	2,040	18.33%	7,489	67.20%	57.17%	42.83%	286	2.57%	14	0.12%	0	0.00%	1,313	11.77%	0.00	0.00%

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

	9-1-1 Call Volume																
MOLOKAI PSAP		Wireline		Wir	/ireless		VO	IP	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		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
ОСТ	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%

CALL VOLUME MOLOKAI PSAP NOTES:

*Calls with no Ali 0.29% - Statewide average = 0.18% Year 2015

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

	9-1-1 Call Volume																
	LOKAI PSAP	Wir	reline		Wir	eless		vo	VOIP			Admii	n Calls	- 110 0111	doned Ills	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%
ОСТ	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																	
DEC																	
YTD	3,913	1,233		2,172				19		37		0		452		0	
MON AVG	391	123	31.86%	217	55.31%	56.10%	43.90%	1.90	0.51%	4	0.94%	0	0.00%	45.2	11.38%	0	0.00%



October 1, 2016 - October 31, 2016

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

	9-1-1 Call Volume																
_	COUNTY SAPs	Wii	reline		Wir	eless		VOIP	Calls	Calls V	Vith No LI	Admir	n Calls		doned alls	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		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
ОСТ	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%

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

	9-1-1 Call Volume																
	COUNTY SAPs	Wir	eline		Wir	eless				Calls with No ALI		Admir	n 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		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%
ОСТ	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																	
DEC																	
YTD	115,336	21,637		77,062				2,878		175		0		13,584		0	
MON AVG	11,534	2,164	18.78%	7,706	66.81%	57.15%	42.85%	288	2.50%	18	0.15%	0.00	0.00%	1,358	11.77%	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 - OCTOBER 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.

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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									
December									
YTD	278	33							
Monthly Avg.	27.80	3.30							

October 1, 2016 - October 31, 2016

WIRELESS PSAP TESTING - OCTOBER 2016

	MAUI COUNTY - OCTOBER 2016									
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:				
10/14/2016	AT&T	1	3	Maui PSAP	Pass	Hana site				
10/28/2016	Verizon	1	4	Maui PSAP	Pass					

NOTES:

• There were two (2) scheduled Wireless tests conducted in October, 2016 for the Maui and Molokai PSAP

FOR YOUR INFORMATION

FYI	For Your Information
MLTS (Multi L	ine Telephone System)

"Most MLTS/PBX systems enable the digits 9-1-1 to be dialed and routed to a Public Safety Answering Point (PSAP). However, the vast majority of these systems do not provide granular location information with the 9-1-1 call to enable emergency responders to know the actual location of the emergency. In many instances a call from the 12th floor of a large office building may only provide the street address of the building. If the caller is unable to provide his or her location and no one else is available to provide assistance, such a lack of location information can prove fatal." (NENA: Multi-Line Telephone System & Private Branch Exchange) Technical

PRIMARY	MLTS/PBX	911 CALLS RECEIVED
PSAPS*	Oct 2016	YEAR TO DATE 2016
Oahu	3,239	32,371
Hawaii	162	779
Maui	147	1,015
Molokai	0	1
Kauai	26	207
Total**	3,574	34,373

^{*}PSAP totals does not include Military 911 calls.

^{**} Total numbers are a minimum estimated count. Presently, CENTRX & VoIP call volumes are combined with Multi & Single line systems and were not added to the total MLTS 911 calls.

October 1, 2016 - October 31, 2016

FOR YOUR INFORMATION

FYI For Your Information 911 Calls Received From Payphones

Approximately 95% of 911 calls received from Payphones are "one way" lines. These Payphones are not capable of receiving calls which makes it impossible for the 911 operator to re-contact the caller should there be a location discrepancy or additional information needed.

PRIMARY	911 CALLS RECEIVED via Payhone
PSAPS	October 2016
Oahu	2,694
Hawaii	308
Maui	240
Molokai	14
Kauai	128
Total**	3,384

*PSAP totals does not include Military 911 calls.

Class of Service (COS) COIN = 1 way out line PAY\$ = 2 way line

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - OCTOBER 2016

MAUI	9-1-1 TRANSACTIONS								
COUNTY		MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer
2016	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Addresses Affected
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									
DECEMBER									
TOTAL YTD	854	192	652	8	2				3,755
AVG PER MONTH	85	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) **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 399/359 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.



October 1, 2016 - October 31, 2016

MSAG CURRENT MONTH NOTES:

A total of **23** MSAG transactions were processed in 9-1-1 Net during the month of October 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 36 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

15 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. Akimeka is awaiting feedback from West on the TN CRs that have been submitted for correction. In October 2016, there were 33 TN CRs completed and as a result, three (3) ESN 359/399 street records were deleted from the MSAG database. One (1) ALI DR was submitted as the result of 9-1-1 calls made from a residence in Haiku. Maui PSAP submitted the request to Akimeka to update the customer information and the discrepancy was corrected in 9-1-1 Net.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are 359 Open TN CR Transactions as of October 31, 2016.
- Refer to chart in the next section "TNCR Current Status"

321 Open TN CR transactions are a direct result of the ESN 399 clean-up and are awaiting approval from Hawaiian Telcom, Inc. **38** 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 October 31, 2016
- There are no VoIP DRs Open as of October 31, 2016

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TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS - OCTOBER, 2016

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 Nu	nber Change Req	uest (TNCR) Stati	us)	
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	268	64	109	95	
MOLOKAI	91	22	55	14	
TOTAL	359	86	164	109	

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.

<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.



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DISPATCHABLE LOCATION - STATUS AS OF - OCTOBER 2016 - 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. There are currently 1293 transactions prepared for submission. Present observations indicate that previous transactions that were submitted in 2015 are currently being processed.

Dispatchable Location						
Common Name Place	imon Name Place MSAG Address		Number of TNCR* Transactions Prepared	Number of TNCR* Transactions Submitted	Number of Transactions Processed**	
Queen Kaahumanu Center	Carryover from 2015	2015		368	299	
*Common Name Place and Address Available Upon Request			877	6	27	
Azeka Kihei	1280 S. Kihei Rd, Kihei	۸۰۰	49	0	0	
Piilani Shopping Center	Piikea Ave, Kihei	Aug	118	0	0	
Maui Marketplace	270 Dairy Rd, Kahului	Sept	129	0	1	
University of Hawaii, Maui Campus	310 Kaahumanu Ave, Kahului	Oct	120	0	9	
		Total	1293	374	336	

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 WEST 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.

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CHARTER COMMUNICAATIONS (TIME WARNER) VOIP DATABASE TNCR

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 Cilivian	82,256	5	66	
TOTAL	124,931	17	145	

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

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3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – OCTOBER 2016

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					
		(Liste	d Alphabetically)		
		10/26/16			
	10/26/2016		Spatially corrected one (1) address point in Hana		
	10/26/2016		Spatially corrected one (1) address point in Kaluakoi		
	10/26/2016		Added one (1) address in Kaluakoi		
	10/26/2016		Changed one (1) address in Kula		
	10/26/2016		Added one (1) address in Makawao		
	10/24/2016		Added two (2) addresses in Hana		
	10/24/2016		Added one (1) MM address in Kahului		
	10/24/2016		Added one (1) address in Kula		
	10/24/2016		Added one (1) address in Makawao		
	10/24/2016		Added one (1) address in Napili		
	10/17/2016		Spatially corrected one (1) address point in Haiku		
	10/17/2016		Added four (4) addresses in Haiku		
	10/14/2016		Spatially corrected one (1) address point in Haiku		
	10/14/2016		Added two (2) addresses in Haiku		
	10/14/2016		Added one (1) address in Makawao		
Address Points		10/12/16			
	10/11/2016		Spatially corrected one (1) address point in Haiku		
	10/11/2016		Added one (1) address in Haiku		
	10/11/2016		Added Location Name for one (1) address in Hana		
	10/11/2016		Added Location Name for one (1) address in Kahului		
	10/11/2016		Spatially corrected one (1) address point in Kula		
	10/11/2016		Spatially corrected one (1) address point in Kihei		
	10/11/2016		Added one (1) address in Kihei		
	10/11/2016		Added one (1) address in Kula		
	10/11/2016		Added one (1) address in Lahaina		
	10/3/2016		Spatially corrected four (4) street centerline segments in Wailuku		
	10/3/2016		Added two (2) addresses in Haiku		
	10/3/2016		Added one (1) address in Kaunakakai		
	10/3/2016		Added two (2) addresses in Makawao		
	10/3/2016		Added one (1) address in Maunaloa		
	10/3/2016		Added one (1) address in Pukalani		
	10/3/2016		Added seven (7) addresses in Waikapu		

- 11/6-1-1-1-1

Maui County



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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.

		MA	UI COUNTY
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
CI	RITICAL 9-1-1 I		Y LAYERS FOR DISPATCH & RESPONSE d Alphabetically)
	10/3/2016	(Liste)	Spatially corrected one (1) address point in Makawao
	10/3/2016		Changed one (1) address in Makawao
	10/3/2016		Spatially corrected five (5) address points in Pukalani
Address Points	10/3/2016		Spatially corrected four (4) address points in Waikapu
	10/3/2016		Spatially corrected five hundred twenty-eight (528) address points in Wailuku
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation			
Centers			
Emergency Shelters			
ESZ/ESN	10/4/2016		Modified boundary between ESN 312 and 314 to match spatially corrected street centerlines
Fire Beats			
Fire Districts			
Fire Response Areas			
Fire Stations			
Food & Beverage			
Gas Stations			
Gate Codes	10/11/2016		Spatially corrected two (2) gate codes in Wailea
Government Buildings			
Harbors			
Helipads			
Hiking Trails			
Hospitals			

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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.

		MA	AUI COUNTY
	Akimeka GIS	D 4 CIG	
Type of Layer	Server	Date GIS	Other/Remarks
	Date Created/ Edits Performed	Delivered	
CI	RITICAL 9-1-1 H	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
		(Liste	d Alphabetically)
Hydrants			
Hyrdology Layers			
Incident Response Areas			
Lodging			
Major Roads			
Medic Beats	10/18/2016		Modified boundary between Medic 1 & 11 to match spatially corrected street centerlines
Medic Districts			
Medic Response Areas			
Medic Stations			
Medical Facilities			
Milepost Markers			
MSAG Communities	10/4/2016		Modified boundary between Kahului and Wailuku to match spatially corrected street centerlines
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
		10/26/16	
	10/12/2016		Added four (4) POI in Kihei
Points of Interest	10/12/2016		Corrected address for one (1) POI in Maalaea
Points of Interest	10/12/2016		Added fifteen (15) POI in Maalaea
	10/11/2016		Added eleven (11) POI in Kahului
	10/11/2016		Spatially corrected one (1) POI in Haiku
Police Beats			
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
	10/31/2016		Spatially corrected two (2) street centerlines in Kula
Street Centerlines	10/28/2016		Spatially corrected two (2) street centerlines in Kula
		10/26/16	

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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.

		MA	UI COUNTY
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
CI	RITICAL 9-1-1 F		Y LAYERS FOR DISPATCH & RESPONSE
		(Liste	d Alphabetically)
	10/25/2016		Spatially corrected one (1) street centerline segment in Kula
	10/24/2016		Spatially corrected five (5) street centerline segments in Kula
	10/18/2016		Spatially corrected twelve (12) street centerline segments in Kula
	10/17/2016		Spatially corrected eight (8) street centerlines in Kula
	10/14/2016		Spatially corrected three (3) street centerline segments in Kula
	10/14/2016		Corrected street name for two (2) street centerline segments in Kihei
		10/12/16	
	10/11/2016		Spatially corrected two (2) street centerline segments in Kula
	10/11/2016		Modified four (4) street centerline range segments in Kula
	10/11/2016		Added one (1) street centerline segment in Kula
Street Centerlines	10/11/2016		Added Alias "Haleakala Bypass" for four (4) street centerline segments in
			Pukalani as requested by Maui Dispatch
	10/5/2016		Spatially corrected one (1) street centerline segment in Kahului
	10/5/2016		Spatially corrected four (4) street centerline segments in Makawao
	10/4/2016		Spatially corrected one (1) street centerline segment in Kahului
	10/4/2016		Spatially corrected one (1) street centerline segment in Waikapu
	10/4/2016		Spatially corrected three (3) street centerline segments on the boundary of Kahului and Wailuku
	10/4/2016		Spatially corrected three (3) street centerline segments in Wailuku
	10/3/2016		Modified three (3) street centerline range segments in Waikapu
	10/3/2016		Changed street name of one (1) street centerline segment in Waikapu
	10/3/2016		Spatially corrected four (4) street centerline segments in Wailuku
Subdivisions		10/12/16	
Subdivisions	10/11/2016		Added one (1) subdivision in Wailea
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors			
WSP Cell Towers			

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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
10/26/2016	Delivered .map, ply., .str, rte. and Maui Cell Coverage.cvs which included updated Address Points, Medic Beats, MPD Look Up Table, Street Centerlines, and WSP Cell Towers for Intergraph CAD Map
10/26/2016	Delivered the following data for MapFlex: Address Points, Points of Interest, Street Centerlines, WSP Cell Sectors, and WSP Cell Towers
10/26/2016	Added street labels and highway shields on the Intergraph CAD Map. Deleted duplicate and overlapping street and stream labels.
10/12/2016	Delivered .map, .str, rte. and Maui Cell Coverage.cvs which included updated Address Points, MPD Look Up Table, Gate Codes, Street Centerlines, Subdivisions and WSP Cell Towers for Intergraph CAD Map
10/12/2016	Added street labels on Intergraph CAD Map. Deleted duplicate and overlapping street and stream labels.

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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 October 12, 2016, the following data was delivered for an Intergraph CAD Map update:
 - a. Address Points, Common Places Lookup Table, Gate Codes, Street Centerlines, Subdivisions, and WSP Cell Towers.
 - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
 - c. Added Street labels to the CAD map.
 - d. Deleted duplicate and overlapping Street and Stream labels.
- 2. Akimeka delivered an updated Intergraph CAD map on October 26, 2016 which included:
 - a. Address Points, Common Places Lookup Table, Medic Beats, Street Centerlines, and WSP Cell Towers.
 - b. .map, .str, .rte, .ply, CAD Map Build database and Cell Coverage.csv
 - c. Added Street labels and Highway Shields to the CAD map.
 - d. Deleted duplicate and overlapping Street and Stream labels.

During November 2016, 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 October 2016, the MapFlex system received some updates but not part of the normal upload processes as a result of MapFlex having several issues.

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.

During the month of October 2016, there was only one GIS deliverable made to MapFlex. 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.

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in September 2016
 - a. **Hawaii County** October 27, 2016
 - b. Maui County October 27, 2016
 - c. Kauai County October 27, 2016
 - d. **Honolulu** October 27, 2016

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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.

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4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - OCTOBER 2016

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

NOTE:

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

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

	MAUI COU	NTY			MSAG SERVICE REQUEST CATEGORIES								
204.6	TO	ΓAL	0	WIRE	LINE	WIRE	LESS	VoIP					
2016	Created	Closed	Open	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													
December													
TOTAL	13	13	0	11	11	0	0	2	2				

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

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

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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)

Next Scheduled Database Synchronization – December 2016

AUDIT SUMMARY RESULTS - 2015-2016 -- TBA

MSAG AUDIT SUMMARY RESULTS - DECEMBER 1, 2016 VS SEPTEMBER 1, 2016 -- TBA

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

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA

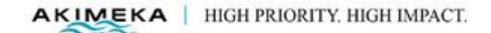
Maui County October 2016

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Oahu Civilian E9-1-1

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October 1, 2016 - October 31, 2016

1. PSAP OPERATIONS

9-1-1 CALL VOLUME - OCTOBER 2016

(Source: West Safety Services Viper system

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

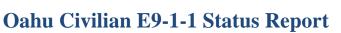
	9-1-1 Primary PSAP Call Volume																
Honolulu City & County PSAPs		Wire	Vireline		Wireless			VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	Wireless	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		No. of Other Calls	% of Total Calls
October	83,447	18,108	21.70%	62,151	74.48%	52.56%	21.92%	3,146	3.77%	42	0.05%	2,581	3.09%	11,448	13.72%	662	0.79%

9-1-1 CALL VOLUME - CALENDAR YEAR 2016

						9-1-1	Primary	PSAP C	all Volui	me							
Honolulu City & County PSAPs		Wire	eline	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	No. of Total Call Received	% of Total Calls
JAN	88,400	20,120	22.76%	64,868	73.38%	51.49%	21.89%	3,359	3.80%	53	0.06%	2,193	2.48%	12,706	14.37%	2,249	2.54%
FEB	81,812	19,079	23.32%	59,641	72.90%	50.74%	22.16%	3,043	3.72%	49	0.06%	1,950	2.38%	11,815	14.44%	611	0.75%
MAR	86,041	19,385	22.53%	63,498	73.80%	50.08%	23.72%	3,097	3.60%	60	0.07%	1,482	1.72%	13,099	15.22%	642	0.75%
APR	85,009	19,510	22.95%	62,431	73.44%	49.70%	23.74%	3,026	3.56%	42	0.05%	2,332	2.74%	11,895	13.99%	635	0.75%
MAY	86,950	19,555	22.49%	64,108	73.73%	50.05%	23.68%	3,235	3.72%	52	0.06%	2,003	2.30%	12,015	13.82%	838	0.96%
JUNE	80,312	18,255	22.73%	58,821	73.24%	48.33%	24.91%	3,180	3.96%	56	0.07%	1,981	2.47%	11,411	14.21%	776	0.97%
JULY	86,586	19,231	22.21%	64,108	74.04%	49.47%	24.57%	3,186	3.68%	61	0.07%	2,281	2.63%	11,999	13.86%	512	0.59%
AUG	85,574	18,963	22.16%	63,410	74.10%	51.22%	22.88%	3,166	3.70%	34	0.04%	2,000	2.34%	11,786	13.77%	671	0.78%
SEPT	79,098	17,884	22.61%	58,255	73.65%	51.40%	22.25%	2,935	3.71%	24	0.03%	1,928	2.44%	10,284	13.00%	669	0.85%
ост	83,447	18,108	21.70%	62,151	74.48%	52.56%	21.92%	3,146	3.77%	42	0.05%	2,581	3.09%	11,448	13.72%	662	0.79%
NOV																	
DEC																	
YTD	843,229	190,090		621,291				31,373		473		20,731		118,458		8,265	
MON AVG	84,323	19,009	22.55%	62,129	73.68%	50.50%	23.17%	3,137	3.72%	47	0.06%	2,073	2.46%	11,846	14.04%	827	0.97%

NOTE:

• *Calls with no Ali 0.05% - Statewide average = 0.18% Year 2015



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9-1-1 CALL VOLUME BY AGENCY - OCTOBER 2016

		9-1-1 Call Volume by Agency												
2016		Hor	olulu Poli	ce Departn		Honolulu Fire Department								
2010	No. of Total Calls Received	% of Total Calls	Number of Emergency Calls	Number of Non Emergency Calls	Admin	Number of Dropped Calls	No. of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls				
October	71,700	85.92%	19,437	39,569	1,246	11,448	2,385	2.86%	74	0				

2016		9-1-1 Call Volume by Agency										
	Е	mergency M	edical Servic	es	Ocean Safety							
	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls				
October	8,652	10.37%	1,214	90	48	0.06%	47	0				

9-1-1 CALL VOLUME BY AGENCY - CALENDAR YEAR 2016

							(9-1-1 Ca	II Volu	me by A	gency							
2016		Honol	ulu Polic	ce Depar	tment		Honol	ulu Fire	Depart	tment	En	nergend Serv	•	cal		Ocean	Safety	
	Number of Total Calls Received	% of Total Calls	No. of Emergency Calls	No. of Non Emergency Calls	No. of Admin Calls	No. of Dropped Calls	No. of Total Calls Received	% of Total Calls	No. of Admin Calls	No. of Dropped Calls	No. of Total Calls Received	% of Total Calls	No. of Admin Calls	No. of Dropped Calls	No. of Total Calls Received	% of Total Calls	No. of Admin Calls	No. of Dropped Calls
JAN	76,128	86.12%	19,451	42,722	1,249	12,706	2,284	2.58%	103	0	7,648	8.65%	755	146	91	0.10%	86	6
FEB	70,806	86.55%	18,378	39,567	1,046	11,815	2,021	2.47%	83	0	8,314	10.16%	762	108	60	0.07%	59	1
MAR	74,275	86.33%	19,350	40,633	1,193	13,099	3,256	3.78%	115	0	7,804	9.07%	121	123	64	0.07%	53	8
APR	73,760	86.77%	19,959	40,560	1,346	11,895	2,388	2.81%	119	0	8,179	9.62%	824	140	47	0.06%	43	14
MAY	75,195	86.48%	20,540	41,427	1,213	12,015	2,655	3.05%	55	0	8,204	9.44%	682	107	58	0.07%	53	11
JUNE	69,658	86.73%	18,803	38,227	1,217	11,411	1,957	2.44%	58	0	7,851	9.78%	647	109	70	0.09%	59	8
JULY	74,558	86.11%	20,966	40,311	1,282	11,999	2,750	3.18%	93	0	8,693	10.04%	837	116	73	0.08%	69	19
AUG	74,042	86.52%	41,441	19,624	1,191	11,786	2,535	2.96%	67	0	8,284	9.68%	701	115	42	0.05%	41	1
SEPT	68,803	86.98%	18,589	38,759	1,171	10,284	1,783	2.25%	62	0	7,792	9.85%	645	215	51	0.06%	50	2
ост	71,700	85.92%	19,437	39,569	1,246	11,448	2,385	2.86%	74	0	8,652	10.37%	1,214	90	48	0.06%	47	0
NOV																		
DEC																		
YTD	728,925		216,914	381,399	12,154	118,458	24,014		829	0	81,421		7,188	1,269	604		560	70
MON AVG	72,893	86.45%	21,691	38,140	1,215	11,846	2,401	2.84%	83	0	8,142	9.67%	719	127	60	0.07%	56	7

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PSAP OPERATION NOTES:

- Total call volumes does not include Administrative Calls. Administrative calls = Calls originating on Administrative lines that required 911 service.
- 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) types of 911 calls are combined in the Call Volume statistic.

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TEXT TO 911 - CURRENT MONTH - OCTOBER 2016

NOTE:

- The Oahu Civilian PSAPs have deployed a soft launch for Text to 911 on December 21, 2015.
- During this soft launch period, PSAP personnel will utilize this period to sharpen their Texting skills and procedures.
- 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.
- 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 Oahu	ı Civilian P	SAPs 2016		
Month	Total	HPD	HFD	EMS	OS	911 (handled)
January	110	96	1	0	0	13
February	109	75	0	3	0	31
March	160	110	28	2	0	20
April	132	124	1	4	0	3
May	143	131	2	0	0	10
June	137	135	1	0	0	1
July	156	143	1	1	0	11
August	133	115	2	3	0	13
September	148	130	2	1	0	15
October	209	195	10	4	0	0
November						
December						
YTD	1437	1254	48	18	0	117
Monthly Avg.	143.7	125.4	4.8	1.8	0.0	11.7

NOTE:

The 9-1-1 handled texts were incidents in which the Division conducted testing or the texter texted 911 in error.

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WIRELESS PSAP TESTING - OCTOBER 2016

	OAHU CIVILIAN - OCTOBER 2016								
Date	WSP	Sites Sectors Tested Tested		Tested By:	Test Pass/Fail	Comments:			
10/31/2016	Verizon	2(1)	12(6)	Oahu PSAP	Pass/Fail	1 site not ready			
10/31/2016	Verizon	1	1	Oahu PSAP	Pass				

NOTES:

• There were two (2) scheduled Wireless 911 Tests for the Oahu Civilian PSAP in October, 2016.

FOR YOUR INFORMATION

F11 For four information
MLTS (Multi Line Telephone System)
"Most MLTS/PBX systems enable the digits 9-1-1 to be dialed and routed to a Public Safety
Answering Point (PSAP). However, the vast majority of these systems do not provide granular
location information with the 9-1-1 call to enable emergency responders to know the actual
location of the emergency. In many instances a call from the 12th floor of a large office building
may only provide the street address of the building. If the caller is unable to provide his or her

For Vour Information

location and no one else is available to provide assistance, such a lack of location information can prove fatal." (NENA: Multi-Line Telephone System & Private Branch Exchange) Technical

PRIMARY	MLTS/PBX	911 CALLS RECEIVED		
PSAPS*	Oct 2016	YEAR TO DATE 2016		
Oahu	3,239	32,371		
Hawaii	162	779		
Maui	147	1,015		
Molokai	0	1		
Kauai	26	207		
Total**	3,574	34,373		

^{*}PSAP totals does not include Military 911 calls.

FVI

^{**} Total numbers are a minimum estimated count. Presently, CENTRX & VoIP call volumes are combined with Multi & Single line systems and were not added to the total MLTS 911 calls.

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FOR YOUR INFORMATION

FYI For Your Information 911 Calls Received From Payphones

Approximately 95% of 911 calls received from Payphones are "one way" lines. These Payphones are not capable of receiving calls which makes it impossible for the 911 operator to re-contact the caller should there be a location discrepancy or additional information needed.

PRIMARY	911 CALLS RECEIVED via Payhone
PSAPS	October 2016
Oahu	2,694
Hawaii	308
Maui	240
Molokai	14
Kauai	128
Total**	3,384

*PSAP totals does not include Military 911 calls.

Class of Service (COS) COIN = 1 way out line PAY\$ = 2 way line

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - OCTOBER 2016

OAHU	9-1-1 TRANSACTIONS										
CIVILIAN	Total	MSAG	ALI Submitted			Discre	Customer				
2016		MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Addresses Affected		
JANUARY	24	23	0	1	0	468	0	0	515		
FEBRUARY	244	26	216	2	0	497	0	1	421		
MARCH	97	22	71	3	1	426	0	0	737		
APRIL	96	25	71	0	0	358	0	0	955		
MAY	106	22	83	1	0	295	0	0	93		
JUNE	133	46	87	0	0	280	0	0	3,537		
JULY	117	29	86	2	0	208	0	0	2,561		
AUGUST	108	29	79	0	0	156	0	0	724		
SEPTEMBER	79	14	65	0	0	93	1	0	208		
OCTOBER	68	24	43	1	0	93	0	0	3,336		
NOVEMBER											
DECEMBER											
TOTAL YTD	1,072	260	801	10	1				13,087		
AVG PER MONTH	107	26	80	1	0				1,309		

Definitions

(A) Master Street Address Guide - Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.

- (B) **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 199 attached to them which indicates the need for validation.
- (C) **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. These record corrections are treated with a higher priority and should be processed within 48 hours as a general guideline.
- (D) **V**oice **o**ver **I**nternet **P**rotocol **D**iscrepancy **R**ecord 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 **68** MSAG transactions were processed in 9-1-1 Net during the month of October 2016. Twenty-four (**24**) 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 Military response areas, and inserting new MSAG records. One (**1**) ALI DR was submitted as the result of 9-1-1 calls for a business in Ala Moana Center.

There were 3,336 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

43 Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 199 clean-up effort. ESN 199 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are 93 Open TN CR Transactions as of October 31, 2016.
- Refer to chart in the next section "TNCR Current Status"

93 Open TN CR transactions are a direct result of the ESN 199 clean-up and are awaiting approval from Hawaiian Telcom, Inc. 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 is zero Open ALI-DR as of October 31, 2016.
- There is zero Open VoIP DR as of October 31, 2016.

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

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)							
PSAP	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				
OAHU CIVILIAN	93	0	87	6				

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.

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CHARTER COMMUNICATIONS (TIME WARNER) VOIP DATABASE TNCR

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 SUBMITTED BY CHARTER REQUIRING FURTHER INFORMATION BY CHARTER RECORDS CORRECTE RETURNED TO CHART AKIMEKA (C)						
HAWAII County	19,135	5	33					
KAUAI County	7,911	7	39					
MAUI County	15,629	0	7					
OAHU Cilivian	82,256	5	66					
TOTAL	124,931	17	145					

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

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MSAG COMMUNITIES PROJECT

MSAG COMMUNITY AND STREET SEGMENT SWEEP - PHASE VII

MSAG Community and Street Segment Sweep - Phase VII

Subsequent to the completion of the MSAG Community and Street Segment Sweep - Phase V work on June 27, 2014, and the Database Synchronization Phase VI in July 2014, a project plan for Phase VII, with regards to the spatial accuracy of Street Centerlines, was approved by the Honolulu Police Department on July 31, 2014. The MSAG Community and Street Segment Sweep - Phase VII project is aimed to identify and correct the spatial accuracy of Street Centerlines throughout the island of Oahu, through a methodical counterclockwise approach, following the same community correction path in the previous phases, to ultimately increase the accuracy of the data and to be in compliance with NENA standards. Street Centerlines that are corrected through this process will then achieve the NENA recommended standard of being accurate to within 10 feet or less.

Below is the latest Phase VII work effort as of October 31, 2016:

	MSAG CO	MMUNITY AN	D STREET SEGME	ENT SWEEP PHASE VII GIS UPDATES				
MSAG COMMUNITY (In Order of Effort)	TARGET START DATE	TARGET COMPLETION DATE	AKIMEKA COMPLETION DATE	NOTES/COMMENTS	DATE GIS DELIVERED TO HPD	DATE GIS LOADED TO CAD BY HPD		
Waimanalo	08/01/14	08/12/14	08/09/14		08/11/14	08/22/14		
Kailua	08/13/14	09/16/14	09/11/14		09/19/14	09/26/14		
Kaneohe	09/17/14	10/24/14	10/27/14	Completed 1 business day behind schedule due to approved special requests	10/31/14	11/07/14		
Kahaluu	10/27/14	11/04/14	10/29/14					
Kaaawa	11/05/14	11/07/14	10/31/14					
Punaluu	11/10/14	11/11/14	11/05/14					
Hauula	11/12/14	11/17/14	11/06/14		11/14/14	11/21/14		
Laie	11/18/14	11/24/14	11/14/14					
Kahuku	11/25/14	12/02/14	11/25/14		11/28/14	12/08/14		
Sunset	12/03/14	12/10/14	12/08/14		12/12/14	12/18/14		
Haleiwa	12/12/14	12/24/14	01/14/15	There are many farming and cane roads that require lengthy and detailed editing, slowing down progress	01/23/15	02/05/15		
Wahiawa	01/02/15	01/21/15	02/03/15		02/06/15	02/13/15		
Waialua	01/22/15	01/29/15	02/09/15					
Mokuleia	01/30/15	02/05/15	02/12/15		00/40/45	00/05/45		
Kalanianaole Hwy Project	02/09/15	03/04/15	02/19/15		02/19/15	02/25/15		
Makaha	03/05/15	03/12/15	02/17/15					
Waianae	03/13/15	03/24/15	03/09/15		02/20/45	04/00/45		
Maili	03/25/15	04/02/15	03/17/15		03/20/15	04/02/15		
Nanakuli	04/03/15	04/13/15	03/27/15		04/06/15	04/17/15		
Makakilo	04/14/15	04/28/15	04/15/15		04/17/15	04/29/15		
Kapolei	04/29/15	05/21/15	05/19/15		5/1/2015, 5/15/2015			

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MSAG Community and Street Segment Sweep - Phase VII continued

	MSAG COM	GIS UP	DATES			
MSAG COMMUNITY (In Order of Effort)	TARGET START DATE	TARGET COMPLETION DATE	AKIMEKA COMPLETION DATE	NOTES/COMMENTS	DATE GIS DELIVERED TO HPD	DATE GIS LOADED TO CAD BY HPD
Kalaeloa	05/22/15	06/08/15	06/08/15		06/12/15	06/25/15
Ewa Beach	06/09/15	07/27/15	07/24/15		06/26/15	07/13/15
Iroquois	07/28/15	08/03/15	07/27/15		07/10/15	07/14/15
Waipahu	08/04/15	09/07/15	08/25/15		08/7/15,	
Kunia	09/08/15	09/11/15	08/26/15		08/21/15	
Waipio	09/14/15	09/29/15	09/18/15		09/18/15	10/12/15
Mililani	09/30/15	11/19/15	11/10/15		11/10/15	12/14/16
Pearl City	11/20/15	12/17/15	12/02/16		12/11/16	
Aiea	12/18/15	01/26/16	01/19/16		12/23/16	04/44/46
PC PEN	01/27/16	02/02/16	01/19/16		01/08/16	01/14/16
McGrew PT	02/03/16	02/04/16	01/20/16			
Halawa	02/05/16	02/08/16	01/20/16			
Aliamanu	02/12/16	02/17/16	01/21/16	1	04/00/40	
Moanalua T	02/18/16	02/23/16	01/26/16	ArcGIS License Issues at	01/22/16	
Hale Moku	02/24/16	02/29/16	01/26/16	HPD on workstation		
Maloelap	03/01/16	03/02/16	01/27/16			
Hokulani	03/03/16	03/07/16	02/08/16		02/05/16	
Moanalua	03/08/16	03/10/16	02/12/16			25.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.
Airport	03/11/16	03/25/16	02/12/16	ArcGIS License Item was	02/19/16	02/23/16
Catlin Pk	03/28/16	03/31/16	02/16/16	resolved		
Miller Pk	04/01/16	04/05/16	02/19/16			
Halsey T	04/06/16	04/11/16	02/22/16			
Radford T	04/12/16	04/14/16	02/23/16		-	
Mapunapuna	04/15/16	04/20/16	03/03/16		03/04/16	03/15/16
Salt Lake	04/21/16	Not Defined	03/03/16	Salt Lake was Missing from the list and was inserted		
Moanalua V	04/21/16	04/29/16	03/14/16		03/18/16	03/30/16
Kalihi	05/02/16	06/21/16	06/24/16	ArcGIS License Issues at HPD on workstation	04/01/16 - 05/27/16	
Nuuanu	06/22/16	07/07/16	06/28/16		06/24/16	
Punchbowl	07/08/16	07/20/16	07/07/16		07/08/16	
Downtown	07/21/16	08/02/16	07/20/16		07/00/40	00/00/40
Kakaako	08/03/16	08/08/16	07/20/16		07/22/16	08/08/16
Ala Moana	08/09/16	08/11/16	07/26/16		00/07/10	
Honolulu	08/12/16	08/29/16	08/02/16		08/05/16	08/19/16
Makiki	08/30/16	09/07/16	08/08/16		08/19/16	
Manoa	09/08/16	09/27/16	09/01/16	Motorola ftp issue delayed ArcMap connection	09/02/16	



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MSAG Community and Street Segment Sweep – Phase VII continued

	MSAG COM	MUNITY AND	GIS UPDATES			
MSAG COMMUNITY (In Order of Effort)	TARGET START DATE	TARGET COMPLETION DATE	AKIMEKA COMPLETION DATE	NOTES/COMMENTS	DATE GIS DELIVERED TO HPD	DATE GIS LOADED TO CAD BY HPD
McCully	09/28/16	10/12/16	09/19/16		09/16/16	09/29/16
Ft Derussy	10/13/16	10/13/16	09/21/16		00/20/46	
Waikiki	10/14/16	10/26/16	09/27/16		09/30/16	
Kahala	10/27/16	11/08/16	10/05/16		10/14/16	
Kapahulu	11/09/16	11/17/16	10/11/16		10/28/16	
Kaimuki	11/18/16	112/19				
Waialae	11/20/16	12/28/16				
Aina Haina	12/29/16	01/11/17				
Hawaii Kai	01/12/17	02/08/17				

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3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – OCTOBER 2016

MAPPING LAYERS UPDATED (PART I)

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

OAHU CIVILIAN							
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks				
C	RITICAL 9-1-1 F	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE				
	(Listed Alphabetically)						
		10/28/16					
	10/28/2016		Deleted nine (9) address points in Kaimuki				
	10/28/2016		Corrected four (4) TMK in Kaimuki				
	10/28/2016		Added one (1) routing id in Kaimuki				
	10/28/2016		Spatially corrected one thousand ninety-five (1095) address points in Kaimuki				
	10/28/2016		Deleted twenty-two (22) address points in Waikiki				
	10/28/2016		Deleted eleven (11) address points in Kahala				
		10/27/16					
	10/27/2016		Deleted one (1) address point in Kapahulu				
	10/27/2016		Added one (1) routing id in Kapahulu				
	10/27/2016		Spatially corrected ninety-five (95) address points in Kapahulu				
	10/27/2016		Added two (2) address points in Kaimuki				
	10/27/2016		Added one (1) location name in Kaimuki				
	10/27/2016		Spatially corrected four hundred fifty (450) address points in Kaimuki				
	10/26/2016		Added ten (10) location names in Kapahulu				
Address Points	10/26/2016		Deleted eleven (11) address points in Kapahulu				
Address I office	10/26/2016		Added seven (7) address points in Kapahulu				
	10/26/2016		Deleted eight (8) location names in Kapahulu				
	10/26/2016		Corrected two (2) TMK in Kapahulu				
	10/26/2016		Spatially corrected one thousand three hundred forty-eight (1348) address points in Kapahulu				
		10/14/16					
	10/14/2016		Corrected one (1) apartment number in Kapahulu				
	10/14/2016		Corrected one (1) address in Kapahulu				
	10/14/2016		Corrected one (1) TMK in Kapahulu				
	10/14/2016		Spatially corrected three hundred fifty-nine (359) address points in Kapahulu				
	10/13/2016		Corrected one (1) TMK in Kapahulu				
	10/13/2016		Spatially corrected three hundred twenty-three (323) address points in Kapahulu				
	10/12/2016		Corrected two (2) location names in Aiea				
	10/12/2016		Corrected three (3) location names in Kalihi				
	10/12/2016		Corrected one (1) location name in Haleiwa				
	10/12/2016		Corrected one (1) location name in Hawaii Kai				

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MAPPING LAYERS UPDATED (PART II)

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

OAHU CIVILIAN							
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks				
CI	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE						
	(Listed Alphabetically)						
	10/12/2016		Corrected one (1) location name in Hauula				
	10/12/2016		Corrected one (1) location name in Kailua				
	10/12/2016		Corrected one (1) location name in Kaimuki				
	10/12/2016		Corrected one (1) location name in Honolulu				
	10/12/2016		Corrected one (1) location name in McCully				
	10/12/2016		Corrected one (1) location name in Pearl City				
	10/12/2016		Corrected one (1) location name in Waianae				
	10/12/2016		Corrected one (1) location name in Waipahu				
	10/12/2016		Corrected one (1) location name in Waipio				
	10/12/2016		Corrected two (2) location name in Mililani				
	10/12/2016		Deleted three (3) address points in Kahala				
	10/12/2016		Added three (3) location names in Kahala				
	10/12/2016		Added sixteen (16) address points in Kahala				
	10/12/2016		Added one (1) address point in Ewa Beach				
	10/12/2016		Spatially corrected thirteen (13) address points in Kahala				
	10/11/2016		Added three (3) location names in Kahala				
Address Points	10/11/2016		Spatially corrected seven (7) address points in Kahala				
	10/7/2016		Added one (1) location name in Kahala				
	10/7/2016		Deleted one (1) address point in Kahala				
	10/7/2016		Added one (1) address point in Kahala				
	10/7/2016		Corrected one (1) address in Kahala				
	10/7/2016		Added one (1) apartment number in Kahala				
	10/7/2016		Spatially corrected nine hundred thirty-five (935) address points in Kahala				
	10/6/2016		Deleted one (1) address point in Kahala				
	10/6/2016		Spatially corrected eight hundred twenty-two (822) address points in Kahala				
	10/5/2016		Added three (3) location names in Waikiki				
	10/5/2016		Added four (4) address points in Waikiki				
	10/5/2016		Deleted three (3) address points in Waikiki				
	10/5/2016		Corrected two (2) TMK in Waikiki				
	10/5/2016		Deleted one (1) location name in Waikiki				
	10/5/2016		Spatially corrected one hundred forty-two (142) address points in Waikiki				
	10/5/2016		Added two (2) location names in Kahala				
	10/5/2016		Added one (1) address point in Kahala				

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MAPPING LAYERS UPDATED (PART III)

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

OAHU CIVILIAN						
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks			
Cl	RITICAL 9-1-1 I	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE			
		(Liste	d Alphabetically)			
	10/5/2016		Deleted one (1) address point in Kahala			
	10/5/2016		Spatially corrected four hundred twenty (420) address points in Kahala			
	10/4/2016		Spatially corrected five (5) address points in Ft Derussy			
	10/4/2016		Spatially corrected twenty-nine (29) address points in Waikiki			
	10/4/2016		Added one (1) location name in Ft Derussy			
	10/4/2016		Added three (3) location names in Waikiki			
Address Points	10/3/2016		Added two (2) address point in Waikiki			
	10/3/2016		Added one (1) address point in Waianae			
	10/3/2016		Added one (1) address point in Aiea			
	10/3/2016		Corrected one (1) address in Kaneohe			
	10/3/2016		Added one (1) alias in Kaneohe			
	10/3/2016		Added one (1) location name in Pearl City			
	10/3/2016		Spatially corrected one hundred one (101) address points in Waikiki			
Airports						
Bridges						
Building Footprints						
Bus Stops						
Churches						
Coastal Names						
Coastline						
		10/28/16				
	10/28/2016		Spatially corrected one (1) location in Kaimuki			
		10/27/16				
	10/27/2016		Spatially corrected seven (7) locations in Kaimuki			
	10/26/2016		Spatially corrected forty-seven (47) locations in Kapahulu			
		10/14/16				
Common Places	10/12/2016		Corrected one (1) name in Ewa Beach			
	10/12/2016		Corrected one (1) name in Haleiwa			
	10/12/2016		Corrected one (1) name in Hauula			
	10/12/2016		Corrected one (1) name in Hawaii Kai			
	10/12/2016		Corrected one (1) name in Kailua			
	10/12/2016		Corrected one (1) name in Kaimuki			
	10/12/2016		Corrected one (1) name in Kapolei			

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MAPPING LAYERS UPDATED (PART IV)

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

OAHU CIVILIAN						
Type of Layer	Type of Layer Akimeka GIS Server Date Created/ Edits Performed Description:		Other/Remarks			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE						
(Listed Alphabetically)						
	10/12/2016		Corrected one (1) name in Honolulu			
	10/12/2016		Corrected one (1) name in McCully			
	10/12/2016		Corrected one (1) name in Nanakuli			
	10/12/2016		Corrected one (1) name in Pearl City			
	10/12/2016		Corrected one (1) name in Waianae			
	10/12/2016		Corrected one (1) name in Waipio			
	10/12/2016		Corrected two (2) names in Aiea			
	10/12/2016		Corrected two (2) names in Mililani			
	10/12/2016		Corrected two (2) names in Waipahu			
	10/12/2016		Corrected three (3) names in Kalihi			
Common Places	10/12/2016		Spatially corrected twenty-eight (28) locations in Kahala			
	10/11/2016		Spatially corrected seven (7) locations in Kahala			
	10/7/2016		Spatially corrected seven (7) locations in Kahala			
	10/5/2016		Spatially corrected twenty-six (26) locations in Waikiki			
	10/5/2016		Spatially corrected eleven (11) locations in Kahala			
	10/4/2016		Spatially corrected thirteen (13) locations in Waikiki			
	10/4/2016		Spatially corrected seven (7) locations in Ft Derussy			
	10/3/2016		Added one (1) new common place in Waikiki			
	10/3/2016		Added one (1) new common place in Kalihi			
	10/3/2016		Added one (1) new common place in Pearl City			
	10/3/2016		Corrected one (1) address in Hawaii Kai			
	10/3/2016		Corrected one (1) addresses in Kaneohe			
	10/3/2016		Spatially corrected one (1) location in Waikiki			
Correctional Facilities						
Emergency Callboxes						
Emergency Operation						
Centers						
Emergency Shelters						
ESZ/ESN	10/11/2016		Corrected boundary for ESN 110, 109			
Fire Beats						
Fire Districts						
Eiro Dooporoo Areas		10/14/16				
Fire Response Areas	10/11/2016		Corrected boundary for STA29, STA7			

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MAPPING LAYERS UPDATED (PART V)

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

OAHU CIVILIAN							
	Akimeka GIS	D (CIG					
Type of Layer	Server	Date GIS	Other/Remarks				
	Date Created/ Edits Performed	Delivered					
CI	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE						
		(Liste	d Alphabetically)				
Fire Stations							
Food & Beverage							
Gas Stations							
Gate Codes							
Government Buildings							
Harbors							
Helipads							
Hiking Trails							
Hospitals							
Hydrants							
Hyrdology Layers							
Incident Response Areas							
Lodging							
Major Roads							
Medic Beats							
Medic Districts							
Medic Response Areas							
Medic Stations							
Medical Facilities							
Milepost Markers							
MSAG Communities							
Net Junctions							
Ocean Rescue Boundaries							
Ocean Safety							
Parcels							
Parks							
Parks Polygon							
• 0							
Points of Interest							
		10/14/16					
Police Beats	10/6/2016		Corrected police beats 764, 765, 766, 768, 770, 772, 774 according to HPD policies and procedures				

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MAPPING LAYERS UPDATED (PART VI)

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

OAHU CIVILIAN							
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks				
CF	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE						
		(Liste	d Alphabetically)				
Police Districts							
Police Response Areas							
Police Stations							
Post Offices							
Schools							
	10/31/2016		Spatially corrected one hundred seventy-two (172) street segments in Kaimuki				
		10/28/16					
		10/27/16					
	10/27/2016	10/2//10	Spatially corrected fifteen (15) street segments in Kaimuki				
	10/25/2016		Spatially corrected two hundred nineteen (219) street segments in Kaimuki				
			Corrected range to two (2) street segments in Waikiki				
	10/24/2016		Corrected range to four (4) street segments in McCully				
	10/24/2016		Corrected range to two (2) street segments in Kapahulu				
	10/24/2016		Corrected range to two (2) street segments in Kajandiu Corrected range to two (2) street segments in Kajandiu				
	10/24/2016		Spatially corrected one hundred sixty-five (165) street segments in Kaimuki				
	10/24/2010	10/14/16	opatiany contested one number sixty live (100) street segments in Naminuki				
	10/14/2016	10/1-4/10	Split one (1) street segment in Kahala				
	10/14/2016		Spatially corrected thirteen (13) street segments in Kaimuki				
Street Centerlines	10/13/2016		Added nineteen (19) street segments in Ala Moana				
	10/13/2016		Split ten (10) street segments in Ala Moana				
	10/12/2016		Spatially corrected one hundred eight (108) street segments in Kaimuki				
	10/11/2016		Corrected range to two (2) street segments in AMR				
	10/11/2016		Corrected two (2) street names in AMR				
	10/11/2016		Added five (5) street segments in Kapahulu				
	10/11/2016		Split seven (7) street segments in Kapahulu				
	10/11/2016		Spatially corrected one hundred sixty-nine (169) street segments in Kapahulu				
	10/6/2016		Spatially corrected fourteen (14) street segments in Kaimuki				
	10/6/2016		Split one (1) street segment in Kaimuki				
	10/5/2016		Added five (5) street segments in Kahala				
	10/5/2016		Split eight (8) street segments in Kahala				
	10/5/2016		Corrected range to one (1) street segment in Kahala				

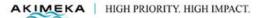
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MAPPING LAYERS UPDATED (PART VII)

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

OAHU CIVILIAN					
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks		
CI	RITICAL 9-1-1 P	UBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE		
		(Liste	d Alphabetically)		
	10/4/2016		Split one (1) street segment in Kahala		
Street Centerlines	10/4/2016		Spatially corrected two hundred two (202) street segments in Kahala		
Street Centermies	10/3/2016		Corrected range to one (1) street segment in Waianae		
	10/3/2016		Corrected range to one (1) street segment in Aiea		
Subdivisions					
Tow Jurisdictions					
Tsunami Evacuation Zones					
Tsunami Heights					
Waste Water Plants					
		10/28/16			
	10/28/2016		Per VZW CRS		
		10/27/16			
WSP Cell Sectors		10/14/16			
	10/12/2016		Per ATT CRS		
	10/12/2016		Per VZW CRS		
	10/3/2016		Per ATT CRS		
		10/28/16			
	10/28/2016		Per VZW CRS		
		10/27/16			
WSP Cell Towers		10/14/16			
	10/12/2016		Per ATT CRS		
	10/12/2016		Per VZW CRS		
	10/3/2016		Per ATT CRS		



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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
10/28/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
10/28/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
10/27/2016	Address Points, Common Places, Street Centerlines, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety
10/14/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
10/14/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD

POLICE BEATS CORRECTIONS

Background

The Police Beats layer was previously identified as a layer requiring corrective action in preparation for the ESZ/ESN project and ensuring spatial accuracy.

Subsequent to the Police Beat corrections that took place during the month of August 2013, upon loading the GIS data for Street Centerlines in the current Motorola Premier CAD, HPD PMT confirmed that there were no issues with regards to the CAD system recommendations. HPD PMT also reviewed the Police Beats corrections worksheet and confirmed that there were no issues with the document. As such, Akimeka proceeded to make corrections to the Police Beats layer utilizing HPD's written Policies and Procedures document for boundary descriptions.

Status to Date

Based on HPD PMT's confirmation, Akimeka continued to make corrections to the Police Beats during the month of October 2016 and has corrected seven (7) Police Beats (764, 765, 766, 768, 770, 772, and 774) according to the HPD written Policies and Procedures.

Upload Process

It was agreed that the Police Beats layer will be uploaded to the current Motorola CAD system given some delays with the new Motorola PremierOne CAD system. During the month of April 2015, Akimeka had worked with HPD PMT to design a new upload procedure that would provide the updated Police Beats into the system, along with other corrected layers now previously loaded to the Motorola CAD system. For more information regarding the latest CAD upload procedure, refer to the May 2015 Monthly Status Report, section on Motorola CAD Upload. Updated Police Beats are continuously delivered with this new process on a bi-monthly update with the other GIS deliverables.

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MAPFLEX SYSTEM

During the month of October 2016, the MapFlex system received some updates but not part of the normal upload processes as a result of MapFlex having several issues.

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.

During the month of October 2016, there was only one GIS deliverable made to MapFlex. 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.

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in September 2016
 - a. **Hawaii County** October 27, 2016
 - b. Maui County October 27, 2016
 - c. Kauai County October 27, 2016
 - d. **Honolulu** October 27, 2016

MAPFLEX ISSUE

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.

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STREET UTILITY CHECK

This is an ongoing project to correct the errors identified. A comparison of the raw CAD generated report from the Street Check Utility was performed between the Street Centerline GIS data on September 26, 2016 and October 3, 2016.

Street Utility Check									
	First Report 06/01/13	9/26/2016	10/3/2016	Improvements/Corrections					
Total Number of GIS Records	26,602	29,614	29,655	Increased by 41 records					
		Errors Identifie	d						
Zero Errors	5,112	12	18	Increased by 6 errors					
Low > High Errors	3	1	0	Decreased by 1 error					
Mixed Parity Errors	1	1	0	Decreased by 1 error					
Changed Parity Errors	105	0	3	Increased by 3 errors					
Address Gap Errors	2,629	0	2	Increased by 2 errors					
Address Overlap Errors	423	0	3	Increased by 3 errors					
Flipped Link Errors	1,030	601	620	Increased by 19 errors					
Total Errors	9,303	615	646	Increased by 31 errors					

In addition to Akimeka's internal validation tools, Akimeka will continue to utilize the various CAD reports to further identify and correct the multitude of discrepancies in the GIS data. This is an ongoing and routine process which Akimeka has been using to improve the accuracy of the GIS data for Public Safety.

Akimeka plans to continue its work effort to complete corrections of the discrepancies identified and/or identify any valid exceptions which Akimeka will tag with the proper information so the CAD system will accept the record(s) and not jeopardize the full functionality of the CAD system from the upload to RMS. Akimeka plans to complete all Street Utility Check errors prior to the implementation of the Motorola PremierOne CAD "go live" date.

Due to the MSAG Community and Street Sweep – Phase VII project, Akimeka expects there to be fluctuation in the results of the Street Check Utility moving forward, especially with regards to Zero Errors, Flipped Link Errors, Address Gap Errors, and Address Overlap Errors. These errors are as a direct result of the spatial corrections made on the Street Centerline network, where many new ingress segments are added. The preference is that the system can generate these non-impacting and non-critical errors instead of overriding them beforehand. The errors that are identified through this process are subsequently corrected based on the results of the Street Check.

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October 1, 2016 - October 31, 2016

4. E9-1-1 DATABASE SYNCHRONIZATION

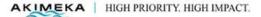
(<u>Reference:</u> NENA 71-501, Version 1.1 – NENA Information Document for Synchronizing Geographic Information System databases with MSAG & ALI)

As part of Akimeka's value added services, Akimeka conducted a database synchronization audit for the Oahu Civilian PSAP in October 1, 2016.

The database synchronization effort included comparing Oahu Civilian's 9-1-1 MSAG received from the 911 Database provider, West Safety Servicers on October 1, 2016, against the PSAP's 911 GIS Street Centerline data. A total number of **7,754** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on October 1, 2016 for the Oahu Civilian PSAP are reported below.

Database synchronization should be part of an ongoing and continuous process to ensure that the databases remain current and synchronized. Since neither database is static in nature, the synchronization process will never yield a 100 percent match rate. As such, NENA's recommended minimum match rate is 98%.

The database synchronization process is essential to monitor and ensure the level of accuracy of the E9-1-1 databases and prepare for Next Generation 9-1-1 (NG9-1-1). As such, Akimeka will perform database synchronization audits on a quarterly basis as part of its ongoing maintenance process. Results of the database synchronization audit will be included and reported in the Monthly Status Report (MSR) accordingly.



October 1, 2016 - October 31, 2016

AUDIT SUMMARY RESULTS - 2016

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of January 1, 2016 9-1-1 MSAG Dated 1-01-16		As of April 1, 2016 9-1-1 MSAG Dated 4-01-16		As of July 1, 2016 9-1-1 MSAG Dated 7-01-16		As of October 1, 2016 9-1-1 MSAG Dated 10-01-16	
		Total 9-1-1 MSAG Records Reviewed		7,752		7,766		7,755	
Less: 9-1-1 MSAG Exception Records	(1)	30	0.4%	33	0.4%	33	0.4%	35	0.5%
Net 9-1-1 MSAG Records Eligible for Comparison		7,722		7,733		7,722		7,719	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG GIS Match No Corrections Required)		7,710	99.8%	7,719	99.8%	7,718	99.9%	7,718	100.0%
9-1-1 MSAG GIS No Match - Minor Correction Required	(2)	11	0.1%	13	0.2%	3	0.0%	2	0.0%
9-1-1 MSAG Record With No Matching GIS Record	(3)	1	0.0%	1	0.0%	1	0.0%	1	0.0%
Total 9-1-1 MSAG Records No Match		12	0.2%	14	0.2%	4	0.1%	3	0.0%

Objective: NENA Recommended Match Rate = 98%

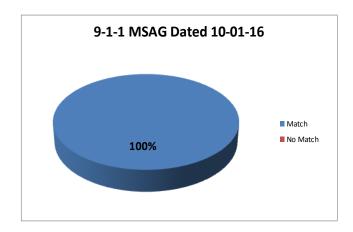
The two-way (MSAG – GIS) database synchronization audit for the City & County of Honolulu (Civilian PSAPs) was completed as scheduled. The match rate remained consistent from July 2016 with a 99.9% Match Rate to a 100% Match Rate as of October 2016

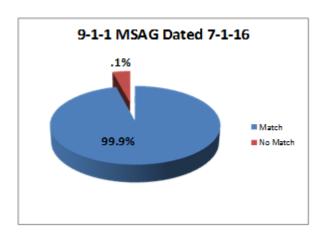
NOTES:

- 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.
- 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.).
- 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.

October 1, 2016 - October 31, 2016

AUDIT SUMMARY RESULTS - OCTOBER 1, 2016 MSAG VS. JULY 1, 2016 MSAG





Oahu Civilian's level of accuracy or 9-1-1 Match percentage remained consistent with a 100% as of October 1, 2016 compared to 99.9% as of July 1, 2016.

- As agreed between HPD PMT and Akimeka, Akimeka would initially focus on the <u>existing MSAG</u> and GIS records to produce a match which will benefit the PSAP in the interim.
- This effort would not include the MSAG Communities project to implement the <u>new MSAG</u> Communities and associated GIS Street Centerlines. This would be handled as a separate project as identified and agreed to.
- As a result of the MSAG Community and Street Segment Sweep project, the majority of the remaining discrepancies resides in the Honolulu MSAG Community and will be addressed during the Phase V effort.
- The previously completed MSAG Communities as a result of the MSAG Community and Street Segment Sweep project are now considered part of ongoing maintenance.
- * "MSAG GIS Minor Corrections" decreased (3 to 2) from July 2016 to October 2016. Low and high address ranges, odd/even combines, and street suffixes were adjusted in the MSAG to correspond with the GIS record. Although identified as a minor correction, customer telephone numbers (TNs) must be validated in 9-1-1Net prior to correcting the MSAG record to ensure the correction will not result in an orphan ALI Record or TN Fall-out.

Oahu Civilian October 2016

October 1, 2016 - October 31, 2016

AUDIT SUMMARY RESULTS - OCTOBER 1, 2016 MSAG VS. JULY 1, 2016 MSAG CONTINUED

- * "MSAG Record with No GIS Record" remained the same (1 to 1) from July 2016 to October 2016. MSAG records with no matching record were due primarily to the verification of the MSAG records against multiple GIS databases to determine if the roads are existing within City and County Honolulu.
- "GIS MSAG Records with No Matching E9-1-1 MSAG Record" decreased (3 to 0) from July 2016 to October 2016. Records with no matching record was due primarily to the verification of the MSAG records against the single source 9-1-1 GIS databases created by Akimeka from the multiple public safety agencies' databases to determine if the roads exist within City & County of Honolulu and Military bases GIS records.
- * "GIS –Minor Corrections" decreased (5 to 0) from July 2016 to October 2016. Low and high address ranges, street suffixes, and MSAG Community were adjusted in the GIS database to correspond with the MSAG record.
- A constant effort to keep the databases synchronized and maintained are required to improve the level of accuracy of the E9-1-1 databases each time an MSAG or GIS record is "last modified".
- Accurate location and GIS information will ensure proper dispatching and response in a timely manner for all Public Safety agencies.

All the hard work to maintain and synchronize the E9-1-1 databases is validated when a life and/or property is saved.

October 1, 2016 - October 31, 2016

INVALID MSAG STREETS AND ADDRESS RANGES - ESN X99 RECORDS

At the request of the Kauai County and Hawai'i County Chief of Police, Hawaiian Telcom, Inc. (HTI) provided all State of Hawai'i PSAPs and Akimeka, as the PSAP's agent, with access and visibility to the ESN x99 MSAG records which are "known" invalid streets and address ranges. Akimeka will be investigating and reporting on these ESN x99 MSAG records as a separate project and add-on to the Database Synchronization quarterly report.

Results of the Oahu Civilian data provided are as follows:

		Invalid MSAG Records											
CALILL	9-1-1 MSAG Dated 01-01-16		9-1-1 MSAG Dated 04-01-16		9-1-1 MSAG D	ated 07-01-15	9-1-1 MSAG Dated 10-01-15						
OAHU CIVILIAN	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records	# of Records	% of Total MSAG Records (Valid and Invalid)	# of Records	% of Total MSAG Records (Valid and Invalid)					
ESN 199	122	1.5%	114	1.4%	72	0.9%	46	0.6%					

These invalid MSAG records represent **0.6%** of the Total MSAG records for the City & County of Honolulu as of the October 1, 2016 MSAG. The individual ALI records associated with these records are provided below.

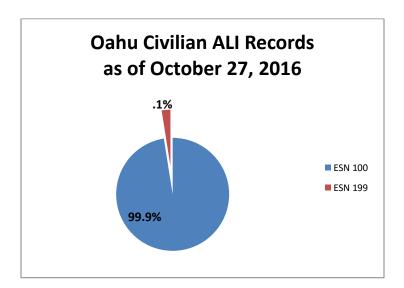
TN CRs are submitted by Akimeka when valid MSAG addresses are identified and validated against the GIS data. Akimeka will continue to investigate and report on these ESN 199 MSAG records as a separate project and add-on to the Database Synchronization quarterly report.

October 1, 2016 - October 31, 2016

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT

As part of Akimeka's ongoing database synchronization efforts, Akimeka reviewed and summarized the ALI discrepancies by community in 9-1-1Net for the City & County of Honolulu (Oahu Civilian). As of October 27, 2016, there are **423** ALI records with an assigned ESN of 199, representing **.1%** of the City & County of Honolulu (Oahu Civilian) total ALI records.

With Akimeka's continuing MSAG Community and Street Segment Sweep effort, the percentage of ESN 199 records may increase as low and high address ranges and new communities are verified.



The number of Ali records with an ESN 199 records decreased by 22% (542 to 423) from July 2016 to October 2016 respectively. The decrease was due primarily to Akimeka's effort to identify the invalid MSAG records and verify their correct locations against current County GIS data.

Although the ESN 199 is a "valid" MSAG utilized for overflow addressing, the voice portion of the 9-1-1 call will still be routed to the PSAP. However, the address information will present an invalid address/location to the dispatcher or a "No Record Found" condition which may affect the processing of the 9-1-1 response and/or cause confusion or delay during the dispatch of 9-1-1 resources to the caller's location.

The goal, which requires the cooperation among all service providers, is to clean-up all ESN 199 MSAG records to a valid City & County of Honolulu ESN 100 to ensure that all ALI records assigned to the City & County of Honolulu (Oahu Civilian) have an "MSAG valid address".

Oahu Civilian October 2016

	Budget A	-		
FV 2016 17	A	ctuals	Annual Budget	% of Budget
FY 2016-17	October	FY-to-DATE	Annual Budget	Expended
Receipts:				
Enhanced 911 Surcharge Collection	830,241	3,270,032	9,650,000	34%
Interest Income	4,197	15,499	36,000	43%
Receipts	834,438	3,285,531	9,686,000	34%
Disbursements:				
New & Emerging Tech. Training	(9,307)	194	(226,980)	0%
Non-Recurring Expenses		0	(2,106,438)	0%
Recurring Expenses:				
Administration	(12,601)	(56,241)	(1,069,510)	5%
Maintenance	(140,895)	(364,320)	(3,015,434)	12%
Telecommunications	(153,259)	(561,703)	(2,694,625)	21%
Other			(7,600)	0%
Disbursements	(316,062)	(982,070)	(9,120,587)	11%
Net Receipts/(Disbursements)	518,376	2,303,461	565,413	
	Cash Flow	Analysis		
Net Receipts/(Disbursements)	518,376	2,303,461		
Encumbrance Paydowns:				Encumb. Bal.
FY 2011 (Kauai)				115,648
FY 2014		(1,481)		1,117,079
FY 2015	(1,185,170)	(1,199,450)		1,119,313
FY 2016	(943,018)	(2,336,205)		2,530,060
Accounts Receivable Paydown		785,960	Note 1	
Net Encumbrance Adds/(Paydown)	(2,128,188)	(2,751,176)		
Net Cash Inflow/(Outflow)	(1,609,812)	(447,715)		
Bank Balance Analysis:				
ADD: July 1, 2016 Beginning Balance		19,469,440		
Net Bank Balance		19,021,725		
Outstanding Ecumb/Accruals		(4,882,099)		
Unencumbered Cash Balance		14,139,626		
Note1- Cash Refund due to early term	mination of H	PD CAD Upgrade		

MONTH OF OCTOBER 2016	Haw aii PSAP	Kauai PSAP	Maui PSAP	Oahu PSAP	ADMIN	TOTAL
Total RECEIPTS:	-	-	-	-	834,438	834,438
DISBURSEMENTS:						
6200 New & Emerg. Tech Train.						
6204 APCO Conference	-	9,307	-	-	-	9,307
Total 6200 New & Emerg. Tech Train.	-	9,307	•	•	-	9,307
6400 RECURRING EXPENSES						
6401 ADMINISTRATION						
6401.01 Exec Dir. Services	-	-	-	-	8,514	8,514
6401.08 Board Member Travel	-	1,828	-	-	1,784	3,612
6401.22 Office Supplies	-	-	-	-	476	476
Total 6401 ADMINISTRATION	-	1,828	•	•	10,774	12,601
6402 MAINTENANCE						
6402.07 0011 9-1-1MSAG Maint.	44,964	34,117	20,148	41,667	-	140,895
Total 6402 MAINTENANCE	44,964	34,117	20,148	41,667	-	140,895
6403 Other RECURRING						
6403.01 Telcom Charges						
6403.0102 Long Distance	58	-	29	-		87
6403.0109 Telcom Trunk	51,057	-	23,208	78,907		153,172
Total 6403.01 Telcom Charges	51,115	-	23,237	78,907	-	153,259
Total 6403 Other RECURRING	51,115	-	23,237	78,907	•	153,259
Total 6400 RECURRING EXPENSES	96,078	35,944	43,385	120,573	10,774	306,755
Total DISBURSEMENTS:	96,078	45,251	43,385	120,573	10,774	316,062

EV 2047 00T0	DED (2040	· · ·	DATE (4)	Haw aii PSAP	Kauai PSAP	Maui PSAP	Oahu PSAP	ADMIN		TOTAL	
FY 2017 OCTO	BER 2	2016	Y-1-	DAIE (4 mos.)	4 MOS.	4 MOS.	4 MOS.	4 MOS.	4 MOS.	4 MOS.	ANNUAL Budget	\$ Over/(UNDER) Budget
Total RECEIPTS:					-	-	-	-	3,285,531	3,285,531	9,686,000	(6,400,469)
DISBURSEMENTS:												
6200 New	&Emerg	g. Tech	Train	•								
	6201	911 G	oes to	WashDC	-	-	-	-	-	-	37,500	(37,500)
	6202 I	WCEC	onfer	ence	-	-	-	-	-	-	2,500	(2,500)
	6203 A	APCO E	merg	. Tech Forum	-	(2,768)	-	-	-	(2,768)	-	(2,768)
	6204				-	9,307	-	-	2,614	11,922	41,600	(29,678)
	6205				-	-	-	-	-	-	25,000	(25,000)
				nference	-	-	-	(2,982)	-	(2,982)	7,000	(9,982)
	6209 P		-		-	-	-	-	-	-	7,000	(7,000)
				erence	-	-	-	-	-	-	2,800	(2,800)
	6213				-	-	-	-	-	-	8,000	(8,000)
		Nena C			883	180	(4,658)	(2,052)	-	(5,648)	41,000	(46,648)
	_			ev. Conf	-	-	-	-	-	-	3,500	(3,500)
				CTR Mgr	-	-	-	-	-	-	18,580	(18,580)
	6217 8	•			-	-	-	-	-	-	7,000	(7,000)
	6222										40.000	(40.000)
	_	6222.01			-	-	-	-	-	-	10,000	(10,000)
	_			n CAD Users	-	-	-	-	-	-	10,000	(10,000)
				cagon Conf	-	-	(840)	-	-	(840)	10,500	(11,340)
				y Svcs Trng	-	-	122	-	-	122	-	122
T-1-1-0000	6231 /				-	- 0.740	(5.070)	(5.00.4)	- 0.044	- (40.4)	5,000	(5,000)
Total 6200			recn	irain.	883	6,719	(5,376)	(5,034)	2,614	(194)	226,980	(227,174)
6300 Non-				h							25 222	(05.000)
			-	Jpgrade						-	65,000	(65,000)
		6301.01			-	-	-	-	-	-	331,000	(331,000)
	-			Maui Buildout	-	-	-		-	-	466,438	(466,438)
				plac/Upgrade	-	-	-	-	-	-	862,438	(862,438)
	6303						(0)			(0)		(0)
				/erPhone	-	-	(0)	-	-	(0)	-	(0)
		6303.20	HFD	kstation							40,000	(40.000)
		Total 6		Workstation	-	-	-		-	-	40,000	(40,000)
	_		303.20	Workstation	-		-		-	-		(40,000)
	-	HPD		4	-	-	- (0)	-	-	-	148,000	(148,000)
	Total 6				-	-	(0)	-	-	(0)	188,000	(188,000)
				d Expenses							050 000	(050,000)
				Record JTMC	-	-	-	-	-	-	356,000	(356,000)
				per/CAD/Excom	-	-	-	-	•	-	100,000	(100,000)
				MC Relocation	-	-	-	-	-		500,000	(500,000)
				Related Expenses	-	-	-	-	-	-	956,000	(956,000)
				TR Console	-	-	-	-	-	-	60,000	(60,000)
	6309 H			ring	-	-	- (0)	-	-	-	40,000	(40,000)
Total 6300	Non-R	ECURRI	NG		-	-	(0)	-	-	(0)	2,106,438	(2,106,438)

		0040 V T	DATE (4)	Haw aii PSAP	Kauai PSAP	Maui PSAP	Oahu PSAP	ADMIN		TOTAL	
117 00 10	BEK	2016 Y-1-	·DATE (4 mos.)	4 MOS.	4 MOS.	4 MOS.	4 MOS.	4 MOS.	4 MOS.	ANNUAL Budget	\$ Over/(UNDER) Budget
6400 REC	URRING	EXPENSES									
	6401	ADMINISTRA	TION								
		6401.01 Exec	Dir. Services	-	-	-	-	53,677	53,677	184,850	(131,173
		6401.02 Elect	tronSignatur	-	-	-	-	-	•	260	(260
		6401.05 Aud	dit Expense	-	-	-	-	-	-	13,000	(13,000
		6401.06 Ban	k Charge	-	-	-	-	-	-	50	(50
		6401.08 Boa	ard Member Travel	-	1,828	-	-	3,473	5,301	36,180	(30,879
			&F Assessments								
			.0101 DB&FAdmin. As	-	•	-	-	(5,490)	(5,490)	182,280	(187,770
			.0102 DB&FRev Asses	-		-	-	2,773	2,773	457,640	(454,867
	\perp	Total 6401.09	DB&F Assessments	-	-	-	-	(2,717)	(2,717)	639,920	(642,637
		6401.11 Mis	cellaneous Expense	-	-	-	-	(0)	(0)	-	((
		6401.13 Par	king Permits	-	-	-	-	-	-	400	(400
			P Cost Recovery								
		6401.	.0101 Sprint/Nextel	-	-	-	-	37	37	-	37
		6401.	.15 WSP Cost Recovery	-	-	-	-	-	-	80,000	(80,000
		Total 6401.15	WSP Cost Recovery	-	-	-	-	37	37	80,000	(79,963
		6401.16 Mee	ting Expenses	-	-	-	-	117	117	500	(383
		6401.17 ADA	Compliance	-	-	-	-	-	•	150	(150
		6401.18 AG	Legal Fees	-	-	-	-	-	-	8,000	(8,000
		6401.19 Pub	lic Education	-	-	-	-	(1,279)	(1,279)	90,000	(91,279
		6401.21 Cell	Phone Charges	-	-	-	-	102	102	1,200	(1,098
		6401.22 Offic	ce Supplies	-	-	-	-	1,014	1,014	5,000	(3,986
		6401.24 O	ffice Furn EQ	-	-	-	-	(11)	(11)	7,500	(7,511
		6401.26 Intra	aState Travel	-	-	-	-	-	-	2,500	(2,500
	Total	6401 ADMIN	ISTRATION	-	1,828	-	-	54,414	56,241	1,069,510	(1,013,269
	6402	MAINTENANO	CE								
		6402.02 lm a	agery Lic Agree	-	-	-	-	-	-	1,123,570	(1,123,570
		6402.05 Log	gging RecordMaint	-	-	-	-	-	-	60,775	(60,775
		6402.07 001	1 9-1-1MSAG Maint.	44,964	34,117	102,110	83,333	-	264,524	1,261,089	(996,565
		6402.08 CAI	D Maintenance	-	-	-	104,401	-	104,401	570,000	(465,599
		6402.11 Geo	Comm Maint	(4,604)	-	-	-	-	(4,604)	-	(4,604
	Total	6402 MAINT	ENANCE	40,360	34,117	102,110	187,733	-	364,320	3,015,434	(2,651,114
	6403	Other RECUR	RRING								
		6403.01 Telc	om Charges								
	\perp		.0118 KPD Viper ADC	-	104,810	-	-	-	104,810	-	104,810
			.0101 Alt. PSAP 9-1-1 D	-	(202)	-	-	-	(202)	600,804	(601,006
	1		.0102 Long Distance	57	(30)	(138)	-		(110)	2,103	(2,213
	1		.0109 Telcom Trunk	51,057	0	69,625	315,627		436,310	1,643,243	(1,206,933
	1		.0112 HPD CML Viper-Ka		-	-	(2,038)	•	(2,038)	122,330	(124,368
	-		.0113 HPDCMLViper-Ala		-	-	3,501	-	3,501	14,003	(10,502
	-		.0114 SD Viper (OSL) (3		-	-	6,980	•	6,980	40,202	(33,222
	-	6403.	.0115 Text-to-911 Servi	ce							
			Wailuku Maui Station	-	-	880	-	•	880	3,500	(2,620
			6403.0115 Text-to-911	-	-	880	-	-	880	3,500	(2,620
	-		.0116 Alt PSAP Call Rou	-	-	-	-	-	-	300	(300
	1	6403.	.0118 Smart911								
	-		EMS	-	-	-	-	-	-	78,600	(78,600
			HPD	-	-	-	1,754	-	1,754	27,540	(25,786
	1		6403.0118 Smart911	-	-	-	1,754	-	1,754	106,140	(104,386
			.0119 KPD VIPER	-	9,820	-	-	-	9,820	-	9,820
	1	6403.	.0121 HFD Viper	-	-	-	-	-	-	162,000	(162,000
		Total 6403.01	1 Telcom Charges	51,115	114,398	70,367	325,823	-	561,703	2,694,625	(2,132,922
		6403.02 EM	S Tower Lease	-	-	-	-	-	-	7,600	(7,600
					114,398	70,367	325,823		561,703	2,702,225	(2,140,522
	Total	6403 Other I	RECURRING	51,115	114,330	10,501	020,020		301,703	2,102,223	(2,::0,022
Total 6400	-	6403 Other I		91,475	150,342	172,477	513,556	54,414	982,265	6,787,169	(5,804,904

FY 2016 STRATEGIC BUDGET PLAN	HAWAII PSAP	OAHU PSAP	MAUI PSAP	KAUAI PSAP	ADMIN	TOTAL	Board Approval Date
Approved FY 2017 Strategic Budget Plan	1,688,345	3,898,350	2,599,048	779,796	1,020,009	9,985,548	6/9/2016
7,7		geogea	-,000,000	,			4,4,====
APCO Conf. Aug. 14-17, 2016 (Orlando) (B.Morgan)					3,300	3,300	7/14/2016
NASNA Conf, Oct 25-26, 2016 (Kansas City)					1,800	1,800	7/14/2016
APCO Colorado Chapter Conference, Oct. 6- 7. 2016, Denver, CO		5,000				5,000	7/14/2016
MPD (1) NENA Development Conference & Critical Issues Forum Train(DR)			3,500			3,500	8/11/2016
MPDEquipment to Complete Kihei Comm Center			466,438			466,438	8/11/2016
MPD - Delay of CAD Upgrade until 2018			(1,435,000)			(1,435,000)	8/11/2016
ADMIN - Public Education (Text-to-911)					90,000	90,000	10/13/2016
						-	
						•	
Totals	1,688,345	3,903,350	1,633,986	779,796	1,115,109	9,120,586	
						10,200,000	Ceiling

Page **5** of **12**

1,079,414 Balance

REMAINING ENCUMBRANCES

ENCUMBRANCES	Oct-16
Total FY 2011 CAD Upgrade: Kauai PSAP	115,647.66
CAD Upgrade- Hawaii PSAP	1,102,944.00
AG Legal Expenses for IRC - ADMIN	14,134.89
Total FY 2014 Encumbrances	1,117,078.89
CAD Upgrade - Hawaii PSAP	1,114,830.00
Imagery License - Hawaii PSAP	4,383.32
Kauai ADC	99.56
Total FY 2015 Encumbrances	1,119,312.88
Hawaii PSAP Text-to-911	20,800.00
Kauai PSAP Text-to-911	26,900.00
Maui PSAP Text-to-911	29,000.00
Oahu PSAP Text-to-911	114,407.18
Kauai CAD Upgrade	821,841.92
Maui Equipment Purchases	40,492.00
Maui Viper Equipment	1,443,711.40
So. Maui Buildout	32,907.00
Total FY 2016 Encumbrances	2,530,059.50
Total Encumbrances	4,882,098.93

Ched	cks tl	nat w	ere p	aid w	ith	only o	ne sig	natory	requ	uired
Month	Check#		PAYI	F		Amount	Reason			
Jul-16	2329	Director o		State of Ha	awaii	385.41	pCard			
Jui-10	2326		•	State of H		\$ 7,395.31	-			
	2333			State of H		\$ 7,586.69	_			
Aug-16				State of H		\$ 185.23	-			
7106 10	2356			State of H		\$ 7,395.31				
	2364		•	State of Ha		\$ 7,395.31	-			
Sep-16				State of Ha		\$ 6,791.29	-			
	2375			State of Ha		\$ 91.19	pCard			
	2378			State of Ha		\$ 8,599.20	•			
Oct-16	2386			State of Ha		\$ 8,516.86	-			
	2395	Director o	f Finance,	State of Ha	awaii	\$ 475.88	pCard			
Total						\$54,817.68				

EV	2017 00	TOR	ED 20	16 V-T-D A 1	ΓΕ (4 mos.)		Haw aii PSA	P
• •	2017 00	108		710 I-I-BA	TE (4 11103.)	4 MOS.	ANNUAL Budget	\$ Over/(UNDE Budget
ome								
tal RECE						-		
BURSEN								
	6200 New							
				oes to WashDC		-	7,000	(7,00
				onference		_		
				merg. Tech For Conference	um	_	7,000	(7,0
				SAP Forum		_	7,000	(7,0
				11 Conference		_		
				try Conf		_		
				Conference		-		
			Navigat			-		
		6214	Ne na C	onference		883	7,000	(6,1
		6215	NENA T	ech Dev. Conf		-		
		6216	HiFD Co	mm CTR Mgr		-	18,580	(18,5
		6217	Spillma	n Conf		-	7,000	(7,00
		6222	TriTecl	n CAD Users				
				EMS Users		-		
				riTech CAD Use		-		
				ve Hexagon Con		_		
				rgency Svcs Tri	ng	-		
				olorado CC		-		
	Total 6200			Tech Train.		883	46,580	(45,6
	6300 Non-	_						
		6301		plac/Upgrade				
		_	6301.01			_		
		T-4-1		So. Maui Build				
		-	Compu	AD Replac/Upgr	ade	-		
		6303						
				PowerPhone Workstation		_		
			0303.20	HFD		_		
			Total 6	303.25 Worksta	tion			
	_		HPD	303.23 WOIKSta	tion	_		
		Total		omputers		_		
				Related Expense				
	_	6307		gging Record J		_		
				MC Viper/CAD/E				
				per JTMC Reloc		_		
		Total		TMC Related Ex		_		
				mm CTR Conso		_	60,000	(60,0
				ct Wiring		_	40,000	(40,0
	Total 6300		RECURRI			_	100,000	(100,0
	6400 REC	JRRING	EXPENS	ES				
		_		ENANCE				
				Imagery Lic A	gree	_	926,570	(926,5
				Logging Reco		_		, , , , , ,
				0011 9-1-1MS		44,964	307,647	(262,6
			6402.08	CAD Maintena	ance	-		
			6402.11	GeoComm Ma	uint	(4,604)		
		Total	6402 N	IAINTENANCE		40,360	1,234,217	(1,193,8
		6403	Other F	RECURRING				
			6403.01	Telcom Charge	es			
				6304.0118 KPD	Viper ADC	-		
				6403.0101 Alt.	PSAP 9-1-1 Del	-		
				6403.0102 Lon		57	1,200	(1,1
				6403.0109 Teld		51,057	306,348	(255,2
					CML Viper-Kapolei	-		
		-			CMLViper-Alapai	-		
				6403.0114 SD V		-		
		-			-to-911 Service			
					Maui Station	-		
		-			Text-to-911 Service	-		
	-	-			SAP Call Route	-		
		+		6403.0118 Sm a	rty11			
		-		EMS		-		
				HPD		-		
		-		Total 6403.0118		-		
		-		6403.0119 KPD		-		
				6403.0121 HFD		-		
			Total 6	403.01 Telcom C	harges	51,115	307,548	(256,4
			6403.02	EMS Tower L	ease	-		
		Total	6403 C	ther RECURRING	3	51,115	307,548	(256,4
	Total 6400	RECU	RRING E	KPENSES		91,475	1,541,765	(1,450,2

FΥ	2017 O	CTOBER 2016 Y-T-DATE (4 mos.)		Kauai PSA	
	2017 0	CTOBER 2010 1-1-DATE (4 11103.)	4 MOS.	ANNUAL Budget	\$ Over/(UNDE Budget
come					
otal RECI ISBURSEI			-	-	ł
ISBURSE		w & Em erg. Tech Train.			
	0200 140	6201 911 Goes to WashDC	_	3,500	(3,50
		6202 IWCE Conference	_	-,	(=,==
		6203 APCO Emerg. Tech Forum	(2,768)		(2,76
		6204 APCO Conference	9,307	10,500	(1,19
		6205 E-911 PSAP Forum	_		-
		6206 Smart911 Conference	-		
		6209 Pictometry Conf	-		
		6212 NASNA Conference	-		
		6213 Navigator	-		
		6214 Nena Conference	180	7,000	(6,8
		6215 NENA Tech Dev. Conf	-		
		6216 HiFD Comm CTR Mgr			
	_	6217 Spillman Conf			
		6222 TriTech CAD Users			
	_	6222.01 EMS Users			
	_	Total 6222 TriTech CAD Users	-		
	_	6228 HxGN Live Hexagon Conf	-		
		6230.03 Emergency Svcs Trng	-		
		6231 APCO Colorado CC		a	
		New & Emerg. Tech Train.	6,719	21,000	(14,2
	6300 No	n-RECURRING			
		6301 CAD Replac/Upgrade			
	_	6301.01 EMS			
	_	6301.07 So. Maui Buildout			
	_	Total 6301 CAD Replac/Upgrade	-		
	_	6303 Computers			
		6303.11 PowerPhone			
		6303.25 Workstation			
		HFD			
		Total 6303.25 Workstation	-		
		HPD			
		Total 6303 Computers	-		
		6307 JTMC Related Expenses			
		DIT Logging Record JTMC			
	_	ESD JTMC Viper/CAD/Excom	_		
		HPD Viper JTMC Relocation			
		Total 6307 JTMC Related Expenses	-		
		6308 HiPD Comm CTR Console			
		6309 HiPD Elect Wiring			
	Total 630				
	6400 RE	CURRING EXPENSES			
		6402 MAINTENANCE			
		6402.02 Imagery Lic Agree		197,000	(197,0
		6402.05 Logging RecordMaint	-		
		6402.07 0011 9-1-1MSAG Maint.	34,117	211,880	(177,7
	_	6402.08 CAD Maintenance	-		
		6402.11 GeoComm Maint	-	.	1
		Total 6402 MAINTENANCE	34,117	408,880	(374,7
	_	6403 Other RECURRING			
	_	6403.01 Telcom Charges			-
	_	6304.0118 KPD Viper ADC	104,810	_	
		6403.0101 Alt. PSAP 9-1-1 Del	(202)	-	(237,9
		6403.0102 Long Distance	(30)		(5
		6403.0109 Telcom Trunk	. 0	111,400	(111,4
	_	6403.0112 HPD CML Viper-Kapole	-		-
	-	6403.0113 HPDCMLViper-Alapai	-		
	-	6403.0114 SD Viper (OSL) (3)	-		
	_	6403.0115 Text-to-911 Service			
	-	Wailuku Maui Station			-
	-	Total 6403.0115 Text-to-911 Serv			1
		6403.0116 Alt PSAP Call Route	-	300	(3
		6403.0118 Smart911			
		EMS	-		
		HPD	-		
		Total 6403.0118 Smart911	-	ļ	
		6403.0119 KPD VIPER	9,820		
		6403.0121 HFD Viper	-	ļ	Į
		Total 6403.01 Telcom Charges	114,398	349,916	(235,5
		6403.02 EMS Tower Lease	-		
		Total 6403 Other RECURRING	114,398	349,916	(235,5
	Total 640	-	150,342	758,796	(608,4
			. 50,0-72	,	, 555,-

FY 2017 OCT	DBER	2016	Y-T-DATE (4 mos.)		Maui PSAF	\$
				4 MOS.	Budget	Over/(UNDE Budget
SBURSEM ENTS:						
6200 Ne						
			oes to WashDC onference	- -	10,500	(10,50
			merg. Tech Forum	-		
			Conference	-	3,500	(3,50
			SAP Forum 11 Conference	_		
	6209 I	Pictome	try Conf	-	7,000	(7,00
		NASNA Navigat	Conference	-		
			onference	(4,658)	10,500	(15,15
	6215	NENA T	ech Dev. Conf		3,500	(3,50
		HiFD Co Spillm a	mm CTR Mgr	-		
			CAD Users	_		
		6222.01	EMS Users	-		
			riTech CAD Users ve Hexagon Conf	(840)	10,500	(11,3
			rgency Svcs Trng	122	10,555	(11,0
			olorado CC	-		
Total 620 6300 No			Tech Train.	(5,376)	45,500	(50,8
6300 No			plac/Upgrade		65,000	
		6301.01	EMS	-		
	Total		So. Maui Buildout AD Replac/Upgrade	-	466,438 531,438	(466,43 (531,43
		Comp		_	331,436	(331,4
		6303.11	PowerPhone	(0)		
		6303.25	Workstation HFD			
			HFD 303.25 Workstation			
		HPD		_		
			omputers	(0)		
	6307		Related Expenses gging Record JTMC	_		
			MC Viper/CAD/Excom	_		
			per JTMC Relocation	-		
			TMC Related Expenses	_		
			ect Wiring	_		
Total 630				(0)	531,438	(531,4
6400 RE	6401		SES STRATION			
	0401		Exec Dir. Services	_		
			EectronSignatur	-		
			Audit Expense Bank Charge	-		
			Board Member Travel			
		6401.09				
			6401.0101 DB&F Admin. As 6401.0102 DB&F Rev Asses	-		
		Total 6	401.09 DB&FAssessments	-		
			Miscellaneous Expense	-		
			Parking Permits WSP Cost Recovery	-		
			6401.0101 Sprint/Nextel	-		
			6401.15 WSP Cost Recover	-		
			401.15 WSP Cost Recovery Meeting Expenses	=		
			ADA Compliance	_		
		6401.18	AG Legal Fees	-		
			Public Education Cell Phone Charges	_		
		6401.22	Office Supplies	-		
			Office Furn EQ	-		
	Total		IntraState Travel DMINISTRATION	_		
	6402	MAINTI	ENANCE			
			Imagery Lic Agree	-		
		6402.05	Logging RecordMaint 0011 9-1-1MSAG Maint.	- 102,110	241,562	(139,4
		6402.08	CAD Maintenance	-	170,000	(170,00
			GeoComm Maint	-		
	Total 6403		AINTENANCE RECURRING	102,110	411,562	(309,45
	5-03		Telcom Charges			
			6304.0118 KPD Viper ADC	-		
			6403.0101 Alt. PSAP 9-1-1 D 6403.0102 Long Distance	- (138)	363,068 423	(363,00
			6403.0109 Telcom Trunk	69,625	278,495	(208,8
			6403.0112 HPD CML Viper-K			
			6403.0113 HPDCMLViper-Al 6403.0114 SD Viper (OSL) (3			
			6403.0114 SD viper (OSL) (3			
			Wailuku Maui Station	880	3,500	(2,6
			Total 6403.0115 Text-to-911	880	3,500	(2,6
			6403.0116 Alt PSAP Call Rou 6403.0118 Smart911	-		
			EMS	-		
			HPD	-		
			Total 6403.0118 Smart911 6403.0119 KPD VIPER	-		
			6403.0119 KPD VIPER 6403.0121 HFD Viper			
			403.01 Telcom Charges	70,367	645,486	(575,1
			EMS Tower Lease			
Total 640			ther RECURRING KPENSES	70,367 172,477	645,486 1,057,048	(575,1° (884,5°
				167,101	1,633,986	(1,466,8

EV 20:	17 OCTO	DED	2016	V T DA	ΓΕ (4 mos.)		Oahu PSA	
F 1 20	17 0010	BEK	2016	1-1-DA	1E (4 mos.)	4 MOS.	ANNUAL Budget	\$ Over/(UNDE Budget
ncome								
otal REC						-		
ISBURSE								
	6200 New			Train. Des to Was	hDC	_	10,500	(10.50
				onference	inde	_	10,500	(10,50
				merg. Tec	h Farum			
				Conferenc			17,300	(17,30
				SAP Forum		_	,000	(17,00
				11 Confere		(2,982)	7,000	(9,98
				try Conf		-		
		6212	NASNA	Conferen	се	-		
		6213	Navigat	or		-	8,000	(8,00
		6214	Nena C	onference		(2,052)	10,500	(12,55
		6215	NENA T	ech Dev. C	onf	_		
		6216	HiFD Co	mm CTR	/lgr	_		
			Spillma					
		6222		n CAD Use				
				EMS Use		-	10,000	(10,00
				riTech CA		-	10,000	(10,00
				ve Hexago		_		
				rgency Svo	_	-		/
				olorado C			5,000	(5,00
	Total 6200			Tech Train	n.	(5,034)	68,300	(73,33
	6300 Non-				• -			
		6301		plac/Upgra	ade		004	.
		+	6301.01		Puildout	-	331,000	(331,00
		Teta		So. Maui			224 000	(224.2
		_		AD Replac	/Upgrade	_	331,000	(331,00
		6303	Compu			_		
		_		PowerPi Workstat		_		
			6303.25	HFD	ion		40,000	(40,00
			Total 6	303.25 Wo	rkstation		40,000	(40,00
		_	HPD	303.23 440	rstation		148,000	(148,00
		Total		omputers			188,000	(188,00
		_					188,000	(188,00
		6307		Related Exp			256 000	/2FC 0/
				gging Rec		_	356,000	(356,00
		-			CAD/Excom	_	100,000	(100,00
		Takal			Relocation			(500,00
					ed Expenses		956,000	(956,00
				mm CTR C	onsole			
	Total 6300		RECURRII				1,475,000	(1,475,00
	6400 REC						1,475,000	(1,475,00
	6400 REC							
		U4U2	6402 02		Lic Agree	_		
					RecordMaint	_	60,775	(60,77
		1			·1MSAG Maint.	83,333	500,000	(416,66
		1		CADMai		104,401	400,000	(295,59
				GeoCom		,	,	,_55,5.
		Total		AINTENAN		187,733	960,775	(773,04
		6403		RECURRING		, ,	,	, , , , ,
			1	Telcom C				
					KPD Viper ADC	-		
					Alt. PSAP 9-1-1 D	-		
					Long Distance	_		
					Telcom Trunk	315,627	947,000	(631,37
					HPD CML Viper-Ka	(2,038)	122,330	(124,36
				6403.0113	HPDCMLViper-Ala	3,501	14,003	(10,50
					SD Viper (OSL) (3		40,202	(33,22
					Text-to-911 Servi	ce		
				Wail	uku Maui Station	-		
					.0115 Text-to-911	-		
					Alt PSAP Call Rou	_		
					Sm art911			
				EMS		_	78,600	(78,60
				HPD)	1,754	27,540	(25,78
				Total 6403	.0118 Smart911	1,754	106,140	(104,38
				6403.0119	KPD VIPER	_		
				6403.0121	HFD Viper	-	162,000	(162,0
			Total 64	403.01 Teld	om Charges	325,823	1,391,675	(1,065,8
				EMSTov			7,600	(7,60
		Total		ther RECU		325,823	1,399,275	(1,073,45
	Total 6400	_		KPENSES		513,556	2,360,050	(1,846,49
						,	, ,	. ,,

EV 20:	2017 OCTOBER 2016 Y-T-DATE (4 mos.)						ADMIN		
F1 20							4 MOS.	ANNUAL Budget	\$ Over/(UNDER) Budget
Income									
Total RECI	EIPTS:						3,280,336.08		
DISBURSE	MENTS:								
	6200 Ne	w&Emei	rg. Tech	Trair	1.				
		6201	911 G	ioes t	o WashDC		_	6,000	(6,000)
		6202	IWCEC	onfer	ence		_	2,500	(2,500)
		6203	03 APCO Emerg. Tech Forum				-		
		6204	APCO Conference				2,614	3,300	(686)
		6205	E-911 PSAP Forum				-	25,000	(25,000)
		6206	Smart911 Conference				-		
		6209	Pictometry Conf				-		
		6212	NASNA Conference				-	2,800	(2,800)
		6213	Naviga	tor			-		
		6214	Nena (Confe	rence		-	6,000	(6,000)
		6215	NENA T	Tech I	Dev. Conf		-		
		6216	HiFD C	omm	CTR Mgr		-		
		6217	Spillma	an Coi	nf		-		
		6222	TriTec	h CAI	O Users				
			6222.0	1 EM S	SUsers		-		
		Total	Total 6222 TriTech CAD Users				-		
		6228	6228 HxGN Live Hexagon Conf				-		
		6230.	6230.03 Emergency Svcs Trng				_		
		6231	6231 APCO Colorado CC				_		
	Total 620	0 New 8	New & Emerg. Tech Train.				2,614	45,600	(42,986)
	6400 RE	CURRING	URRING EXPENSES						
		6401	ADMIN	IISTRA	TION				
			6401.0	1 Exec	Dir. Services		53,677	184,850	(131,173)
			6401.02 ElectronSignatur				_	260	(260)
			6401.05 Audit Expense				_	13,000	(13,000)
			6401.06 Bank Charge				-	50	(50)
			6401.08 Board Member Travel				3,473	36,180	(32,707)
			6401.0	9 DB	&F Assessment	s			
				6401	.0101 DB&F Adn	nin. As	(5,490)	182,280	(187,770)
				6401	.0102 DB&FRev	Asses	2,773	457,640	(454,867)
			Total 6	6401.0	9 DB&FAssess	ments	(2,717)	639,920	(642,637)
			6401.1	1 Mis	cellaneous Exp	ense	(0)		
			6401.13 Parking Permits				-	400	(400)
			6401.15 WSP Cost Recovery						
				6401	.0101 Sprint/Ne	ctel	37		
				6401	.15 WSP Cost R	ecover	-	80,000	(80,000)
			Total 6	6401.1	5 WSP Cost Red	overy	37	80,000	(79,963)
			6401.1	6 Mee	ting Expenses		117	500	(383)
					A Compliance		-	150	(150)
			6401.1	8 AG	Legal Fees		-	8,000	(8,000)
			6401.1	9 Pub	lic Education		(1,279)	90,000	(91,279)
			6401.2	1 Cel	l Phone Charges		102	1,200	(1,098)
			6401.2	2 Offi	ce Supplies		1,014	5,000	(3,986)
			6401.2	4 0	ffice Furn EQ		(11)	7,500	(7,511)
			6401.2	6 Intr	aState Travel		-	2,500	(2,500)
		Total	al 6401 ADMINISTRATION				54,414	1,069,510	(1,015,096)
	Total 6400 RECURRING EXPENSES						54,414	1,069,510	(1,015,096)