

STATE OF HAWAII

**Enhanced 911 Board Meeting  
(Combined Meeting)  
Kalanimoku Bldg., Room 322B  
1151 Punchbowl St., Honolulu  
Tuesday, April 12, 2016  
10:00 am - 12:00 pm**

**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. IWCE Infrastructure Forum recap
    - ii. APCO Western Region recap
    - iii. 2016 Legislative Investigative Committee update – Paul Ferreira
    - iv. Others.
  - b. Technical Committee – Thalia Burns
    - i. Investigative Regulatory Committee – Davlynn Racadio
    - ii. FCC update
    - iii. Text-to-911 update
    - iv. Others
  - c. Finance Committee – Kiman Wong
    - i. Review of Monthly Cash Flow & Budget Financial reports.
    - ii. Others.
- VI. PSAP Status Updates**
  - a. Kauai – Mark Begley

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

## **VII. Executive Director's Report**

- a. The ED will provide updates on the following items:
  - i. Website timeline of human interest success stories update.
  - ii. Encumbrance planning and FY2016 Accounting Close
  - iii. Review and Approval of Board Policies:
    - 1. Conference & Professional Development Policy
    - 2. E911 Fund Disbursement Policy
    - 3. PSAP WSP Cost Reimbursement Policy
  - iv. National 911 Program Database & FCC Data Collection projects.
  - v. FY2017-21 Strategic Budget Planning (PSAP Planning Session after May 12 Board Mtg).

## **VIII. Items for Discussion, Consideration and Action**

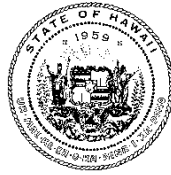
- a. 911 Timeline update.
- b. Request for Approval:
  - i. Two-year extension of the Spiegel & McDiarmid LLP legal services contract beginning July 2016 for \$25,000.
  - ii. KPD (3) – APCO Conference, August 14 -17, 2016, Orlando, FL - \$10,500.
- c. Others

## **IX. Announcements**

- a. Future meeting dates (10am – 12 noon).
  - i. Thursday, May 12, 2016 (Combined meeting)
  - ii. Thursday, June 9, 2016 (Combined meeting)
  - iii. Thursday, July 14, 2016 (Combined meeting)

## **X. Executive Session: HRS 92-5(a)(4) and HRS 92F (a)(2) to consult with the board's attorney on questions and issues pertaining to the board's powers, duties, privileges, immunities, and liabilities.**

- XI. Open Forum: Public comment on issues not on the agenda for consideration for Board agenda at the next meeting.**
- XII. Adjournment**



STATE OF HAWAII

**Enhanced 911 Board Meeting  
(Combined Meeting)  
Kalanimoku Bldg., Room 322B  
1151 Punchbowl St., Honolulu  
Tuesday, April 12, 2016  
10:00 am - 12:00pm**

**Board members present:** Mark Begley, Thalia Burns, Lisa Hiraoka, John Jakubczak, Steven Schutte, Mark Wong, Kiman Wong, Ryan Freitas, Dean Rickard and Jeff Riewer.

**Board members absent:** Paul Ferreira (Chair), Todd Nacapuy and Roy Irei.

**Staff members present:** Courtney Tagupa, Kerry Yoneshige and Stella Kam.

**Guests:** Antonio Ramirez (Akimeka), Davlynn Racadio (MPD), Marshall Kanehailua (HiPD), Gary Lum (HFD), Travis Ing (HiPD), Darren Horio (HiPD), Diana Chun (ESD), Eleni Papakiristis (HT), Clement Chan (DIT), Melodey Lewellen (HPD), Ah Lan Leong (HPD), Allan Nagata (HPD), Rob Gausepohl (KPD), Ben Morgan (HT), Eric Butler (Pictometry), Mark Begley (KPD), Ken Schulte (TriTech), Kenison Tejada (APCO NENA Pacific Chapter), and Liz Gregg (AT&T).

**Minutes**

**I. Call to Order, Public Notice, Quorum**

- a. The meeting was called to order at 11:13 am by Communications Committee Chair Steven Schutte.
- b. Public notice has been issued.
- c. Quorum was present for all committees and the Board.

**II. Public testimony on all agenda items**

- a. Communications Committee Chair 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 Communications Chair Schutte.

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

- a. Mr. Jeff Riewer motioned to approve the March 2016 meeting minutes. The motion was seconded and approved by voice vote by all Board

members present.

## **V. Committee Updates by Committee Chairs**

### **a. Communications Committee – Steven Schutte**

- i. IWCE Infrastructure Forum recap
  - 1. The Committee Chair acknowledged that there were no updates to what was presented at the Joint Committee meeting.
- ii. APCO Western Region recap
  - 1. The Committee Chair acknowledged that there were no updates to what was presented at the Joint Committee meeting.
- iii. 2016 Legislative Investigative Committee update – Paul Ferreira
  - 1. The Committee Chair acknowledged that there were no updates to what was presented at the Joint Committee meeting.
- iv. Others.
  - 1. The Committee Chair extended appreciation to E911 Executive Director and the Honolulu Police Department for the outstanding article in the Honolulu Star Advertiser regarding Text to 911.

### **b. Technical Committee – Thalia Burns**

- i. Investigative Regulatory Committee – Davlynn Racadio
  - 1. The Committee Chair acknowledged that there were no updates to what was presented at the Joint Committee meeting.
- ii. FCC update
  - 1. The Committee Chair acknowledged that there were no updates to what was presented at the Joint Committee meeting.
- iii. Text-to-911 update
  - 1. The Committee Chair acknowledged that there were no updates to what was presented at the Joint Committee meeting.
- iv. Others
  - 1. The Committee Chair acknowledged that there were no updates to what was presented at the Joint Committee meeting.

c. **Finance Committee – Kiman Wong**

- i. Review of Monthly Cash Flow & Budget Financial reports.
  - 1. The Committee Chair acknowledged that there were no updates to what was presented at the Joint Committee meeting.
- ii. Others.
  - 1. The Committee Chair acknowledged that there were no additional items for discussion.

**VI. PSAP Status Updates**

a. **Kauai – Mark Begley**

- 1. The PSAP representative acknowledged that there were no updates to what was presented at the Joint Committee meeting.

b. **Oahu HPD – Allan Nagata**

- 1. The PSAP representative acknowledged that there were no updates to what was presented at the Joint Committee meeting.

c. **Oahu HFD – Gary Lum**

- 1. The PSAP representative acknowledged that there were no updates to what was presented at the Joint Committee meeting.

d. **Molokai – Dean Rickard**

- 1. The PSAP representative acknowledged that there were no updates to what was presented at the Joint Committee meeting.

e. **Maui – John Jakubczak**

- 1. The PSAP representative acknowledged that there were no updates to what was presented at the Joint Committee meeting.

f. **Hawaii – Paul Ferreira**

- 1. The PSAP representative acknowledged that there were no updates to what was presented at the Joint Committee meeting.

**VII. Executive Director's Report**

- a. The ED will provide updates on the following items:
  - i. Website timeline of human interest success stories update

1. The ASA provided an update that the human interest success

stories task is complete based on the information previously submitted by the PSAPs, but if additional information regarding articles or press releases is provided by the PSAPs or individuals to the ASA, we can continue to update our agency website. The ASA will also continue to monitor the press for additional stories and post accordingly.

ii. Encumbrance planning and FY2016 Accounting Close

1. The ED mentioned during the Finance Committee meeting that we are trying to increase the amount of qualified encumbrances to assist in increasing total FY2016 disbursements up to the legislative ceiling limit of \$9M. It will take a lot of coordination with DAGS and the Counties. He sees major encumbrances from imagery, DIT and contracts that are currently in the process of being signed with Hawaiian Telcom. To reach this ceiling would demonstrate to the legislators for next session that we are spending down the moneys they perceive as being in excess of our needs. FY2017 budget has been approved for a ceiling increase to \$10.2k. The ED anticipates another request for a ceiling increase in FY2018 with the CAD upgrades coming online for Oahu.

iii. Review and Approval of Board Policies:

1. Conference & Professional Development Policy

The ASA presented Power Point slides concerning travel policies for the Joint Committee and Board members who travel to attend professional conferences. Many of the members who are State or County employees are familiar with travel policies regarding airfare, hotel, and car rental and per diem, so this was to familiarize non-State or County Committee and Board members with the policies and procedures in order to conform to those already in place. The ASA announced that she will coordinate all Committee and Board approved travel for those non-State employees and to please contact her or the Executive Director with your upcoming travel requests. This was requested by Board Chair Paul Ferreira.

The following are the three items most used policies by the PSAPs and the WSPs. The ED thanked the PSAPs for their feedback on the three policies. The ED thanked individuals for making their trip as economical as possible. The purpose of this presentation is also for auditing purposes.

2. E911 Fund Disbursement Policy

The ED stated that he would like to make it a point that this policy is rarely used. In the past, he could count only a handful of organizations who have taken advantage of this policy. The

ED wanted to point out that there is a difference between a disbursement and a reimbursement. A reimbursement is when the Counties or the individual have actually paid for the service or equipment and are asking for the Board to reimburse them for the payment that they have made. A disbursement is documented in Chapter 138 HRS and gives the counties the ability to request funds from the Board before they expend any of their funds. They may not have the money or there may be additional reasons they may not be able to pay for the services or equipment. It does involve a different procedure, mainly the Board Chair has the responsibility to release the disbursement after it has been formally approved by the Board.

Disbursements are very rarely used. As an alternative, what has been happening in particular with the Oahu PSAP, they have used an official funding letter issued by the Executive Letter in which the funds have been Board approved and available for disbursement or reimbursement and they have used it as a means of giving this to their Finance people as assurance that the required funds will be available when they procure these items. The ED will post the policy online to the agency website and it will outline all documentation necessary and outlines what expenditures are allowed, which are those outlined in Chapter 138 HRS. The accounting involves making sure that the moneys that were disbursed have indeed been paid, so that will require additional reporting on behalf of the County to the Board on how the moneys have been spent or will be spent and needs periodic follow through until all of the funds have been completely disbursed. Mr. Mark Wong asked if there are any bylaws concerning disbursement request. The ED states that the request must be approved by the Board Chair, but the Board Chair has authority to disburse the Funds and the funding is located in the Strategic Budget Plan, but it is the Counties who decide whether they go the reimbursement route or the disbursement route. Mr. Wong is inquiring what controls the Board has before that happens. The ED stated there is not anything laid out in the Bylaws with the exception of this policy. He is looking for chain of approval and if it is specified anywhere. The ED stated it would be located in the reimbursement policy and will be outlined in that next part of the presentation.

### 3. PSAP WSP Cost Reimbursement Policy

This is the process and the request has to follow Chapter 138, HRS which specifies exactly what constitutes a reimbursable expense. What happens is the approval process begins with the strategic budget plan, which is done every year and all of the proposed expenditures of the Counties are reviewed and then presented to the Technical and Finance Committees and



then moved forward for final approval by the Board. As soon as it is approved by the Board, the funds are made available for disbursement or reimbursement and the County can elect to pay for the item in advance and request reimbursement from the Board. The rest of the items outlined in the policy detail what is reimbursable. These items may be a little dated, but Chapter 138 HRS specifies what is reimbursable. The Board will reimburse items from local exchange carriers in terms of trunk charges, long distance items as well as Text-to-911 costs charged to the Counties. This policy outlines the request for the reimbursement process in which a RRW must be completed and submitted to the ED. The Board will review and if consistent with what is approved in the strategic budget plan, the ED will issue a check from the Fund to be signed by authorized signatories (Counties again may elect reimbursement or disbursement). Mr. Tony Ramirez suggested an amendment to include Text-to-911 as a reimbursable cost to the PSAPs. Mr. Mark Begley inquired if there was a limit that could be given upfront. The ED stated that the limit was due to the budget limitation. Mr. Begley inquired about the issue of disbursements and procurement delays and then the money is stuck in the County's bank account and can't be used in a timely basis. It is not technically encumbered until there is a contract, but if disbursed to a County, if another County needed it and could use it, how do we protect ourselves from overextending funds? The ED stated as far as funds available in E911 funds, amounts have been reserved for payment, so it is always done before the fact and not after. If a County cannot justify why they need to hang on to money, it is required to be returned to the Fund if they have no immediate use for it. The ED stated there is a reporting requirement of every 90 days of what is being done with the money and what has been expended. If at end of process, money is left over, it is required to be returned to the Fund. Authorized funding letters to counties are not considered disbursement but just informs County that money authorized by Board and will be available when needed. Ms. Lisa Hiraoka inquired what the auditor's thought of the revised policies and asked if questions. The auditors mentioned that the policies looked to be dated, but they did not have any specific suggestions. They noticed that the names of the individuals were no longer related to the Board. They didn't have any specific suggestions because the policies are really a Board matter and they are quite technical in their language.

WSP – There is only one WSP presently involved and that is Sprint. They manage the cell towers and there are approximately 200+ cell towers that they manage and

administer and they in turn are the only ones to utilize this policy. They provide a WSP plan before they ask for reimbursement and they describe in detail what they are going to do and what it cost and any administrative expenses that will be incurred and they will provide documentation every six months and the Board reviews the documentation in accordance with the policies for reimbursement.

Reimbursement – As requests come in, two designated Board members review items being requested for reimbursement and when approved it is sent to the ED and a check is issued to be signed by authorized signatories. There are two authorized Board members who sign off on the check for payment and we remit the check for payment. In the case of Sprint, they provide documentation on cost recovery and send it to the ED for the same review process as he just mentioned and in turn, they are issued a check. Mr. Tony Ramirez asked if they were still limited to 1/3 of the fund and the ED stated yes. According to Chapter 138, we cannot reimburse a WSP (Sprint) for more than we receive in surcharge fees. Sprint has been a major contributor into the E911 Fund, but their total reimbursements have never exceeded what they have contributed to the Fund.

iv. National 911 Program Database & FCC Data Collection projects.

1. This is something that will be compiled during the last quarter of this year. We will be reviewing data with the Counties for accuracy. This is something vital that we need to do and he doubts seriously that we may not be entitled to grants if this information is not completed and reported.
2. Mr. Tony Ramirez stated that they ACLU is involved regarding location information and the FCC's address database and the sensitivity of the data. The other thing going on with this national database program is back on mainland because of what happened in Alpharetta, GA with girl drowning, because she called 911 and they couldn't find her, what is going on in GA is that many of the LEC's (Local Exchange Carriers) are getting sued because they are all collecting 911 fee to provide location information and addresses, they were in violation of the Truth in Billing Act, so now there are class action lawsuits against the LEC's. This will take a lot of coordination and Tony recommends involvement of PSAPs, DCAA and the AG's office. FCC Data Collection project asks for similar information but will try to eliminate redundancies and this is another project we will be completing and reviewing with the Counties and the Board.

v. FY2017-21 Strategic Budget Planning (PSAP Planning Session following

May 12 Board Meeting).

1. The ED received all but one of the inputs from the Counties and will hopefully receive the last one soon. This is very important and there are a lot of issues regarding funding. It hasn't officially been approved, but he has seen paperwork concerning our request for the ceiling increase of an additional \$1.2M for FY2017 and is hopeful it will be approved soon. In FY2018 we will be applying for another ceiling increase to accommodate CAD upgrades for Oahu. This will be a combined effort and hopefully we are able to put the plan together.

## **VIII. Items for Discussion, Consideration and Action**

- a. 911 Timeline update.
  - i. Communications Chair Schutte requested that the PSAPs report any timeline updates to be posted on the 911 website to the Executive Director.
- b. Request for Approval:
  - i. Two-year extension of the Spiegel & McDiarmid LLP legal services contract beginning July 2016 for \$25,000.
    1. Ms. Stella Kam announced that the current contract with Spiegel & McDiarmid LLP will expire on June 19, 2016, so the contract extension should begin effective June 20, 2016.
    2. Mr. Mark Wong motioned to approve the contract extension with the effective date of June 20, 2016, per Ms. Kam's announcement in the amount of \$25,000. The motion was seconded and approved by voice vote by all Board members present.
  - ii. KPD (3) – APCO Conference, August 14 -17, 2016, Orlando, FL -\$10,500.
    1. Ms. Thalia Burns made a motion to approve the three personnel from KPD to attend the August 2016 APCO conference at a total cost of \$10,500. The motion was seconded and approved by voice vote by all Board members present.
- c. Others
  1. Communications Chair Schutte stated that regarding the Executive Director's performance evaluation, he is waiting on one more member of the Committee to reply back. Chair Schutte extended thanks to Mr. Kerry Yoneshige of DAGS for

providing the official forms and from there the Board will coordinate with the ED to provide his first performance review.

## **IX. Announcements**

- a. Future meeting dates (10am – 12 noon).
  - i. Thursday, May 12, 2016 (Combined meeting) (**DLNR Board Room 132**)
  - ii. Thursday, June 9, 2016 (Combined meeting)
  - iii. Thursday, July 14, 2016 (Combined meeting)
  - iv. Thursday, August 11, 2016 (Combined Meeting)

## **X. Executive Session: HRS 92-5(a)(4) and HRS 92F (a)(2) to consult with the board's attorney on questions and issues pertaining to the board's powers, duties, privileges, immunities, and liabilities.**

- i. Communications Committee Chair Schutte announced that an Executive Session was not necessary during this month's Board meeting, as the ED confirmed this was a standing item on the agenda.

## **XI. Open Forum: Public comment on issues not on the agenda for consideration for Board agenda at the next meeting.**

- i. Communications Committee Chair Schutte asked if there was anyone who wishes to comment on issues not on the agenda for consideration for the agenda at the next board meeting to please come forward. No one came forward.

## **XII. Adjournment**

- i. Mr. Mark Wong motioned to adjourn the meeting. The motion was seconded and approved by voice vote by all Board members present. The meeting was adjourned at 12:03 pm.

# Oahu Civilian E9-1-1

## Status Report

*April 1, 2016 – April 30, 2016*

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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# Oahu Civilian E9-1-1 Status Report

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# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME – APRIL 2016

(Source: West Safety Services (Intrado) Viper system)

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

9-1-1 Primary PSAP Call Volume																	
Honolulu City & 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
April	85,009	19,510	22.95%	62,431	73.44%	49.70%	23.74%	3,026	3.56%	43	0.05%	2,332	2.74%	11,895	13.99%	635	0.75%

### 9-1-1 CALL VOLUME – CALENDAR YEAR 2016

9-1-1 Primary PSAP Call Volume																	
Honolulu City & County PSAPs		Wireline		Wireless				VOIP Calls		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	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%	43	0.05%	2,332	2.74%	11,895	13.99%	635	0.75%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	341,262	78,094		250,438				12,525		205		7,957		49,515		4,137	
MON AVG	85,316	19,524	22.89%	62,610	73.38%	50.50%	22.88%	3,131	3.67%	51	0.06%	1,989	2.33%	12,379	14.51%	1,034	1.20%

#### NOTE:

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



# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 9-1-1 CALL VOLUME BY AGENCY – APRIL 2016

2016	9-1-1 Call Volume by Agency									
	Honolulu Police Department						Honolulu Fire Department			
	No. of Total Calls Received	% of Total Calls	Number of Emergency Calls	Number of Non Emergency Calls	Number of Admin Calls	Number of Dropped Calls	No. of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls
April	73,760	86.77%	19,959	40,560	1,346	11,895	2,388	2.81%	119	0

2016	9-1-1 Call Volume by Agency							
	Emergency Medical Services				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
April	8,179	9.62%	824	140	47	0.06%	43	14

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

2016	9-1-1 Call Volume by Agency																	
	Honolulu Police Department						Honolulu Fire Department				Emergency Medical Services				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																		
JUNE																		
JULY																		
AUG																		
SEPT																		
OCT																		
NOV																		
DEC																		
YTD	294,969		77,138	163,482	4,834	49,515	9,949		420	0	31,945		2,462	517	262		241	29
MON AVG	73,742	86.44%	19,285	40,871	1,209	12,379	2,487	2.91%	105	0	7,986	9.38%	616	129	66	0.08%	60	7

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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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.

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## TEXT TO 911 – CURRENT MONTH – APRIL 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.

TEXT TO 911 Oahu Civilian PSAPs 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						
June						
July						
August						
September						
October						
November						
December						
YTD	511	405	30	9	0	67
Monthly Avg.	127.8	101.3	7.5	2.3	0.0	16.8

### NOTE:

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

## Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### WIRELESS PSAP TESTING – APRIL 2016

OAHU CIVILIAN - APRIL 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
4/7/2016	Verizon	2	19	Oahu PSAP	Pass	2 Testers
4/8/2016	Verizon	11	31	Oahu PSAP	Pass	2 Testers
4/15/2016	Verizon	5	11	Oahu PSAP	6 Pass/5 Fail	Waipio site display error
4/15/2016	Verizon	4	26	Oahu PSAP	17 Pass/9 Fail	test sites not in the system
4/22/2016	Verizon	6	20	Oahu PSAP	Pass	2 Testers
4/29/2016	Verizon	1	8	Oahu PSAP	7 Pass/1 Fail	re-build sector required
4/29/2016	Verizon	1	8	Oahu PSAP	4/Pass/4 Fail	re-test next month

#### NOTES:

- There were ten (10) scheduled Wireless 911 Tests for the Oahu Civilian PSAP in April, 2016. A total of 123 Cell Sectors were tested. Failed sectors will be rescheduled after technical issues are resolved.

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – APRIL 2016

OAHU CIVILIAN	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
2016		MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	
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									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	461	96	358	6	1				2,628
AVG PER MONTH	115	24	90	2	0				657

### Definitions

- (A) **Master Street Address Guide** - Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (B) **Telephone Number Change Request** - Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 199 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.

## Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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### MSAG CURRENT MONTH NOTES:

A total of **96** MSAG transactions were processed in 9-1-1 Net during the month of April 2016. Twenty-five (**25**) 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 **955** customer ANI/ALI (telephone number/address) records updated as a direct result.

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

**71** 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 358 Open TN CR Transactions as of April 30, 2016.**
- **Refer to chart in the next section “TNCR Current Status”**

**358** 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 Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado'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 April 30, 2016.**
- **There is zero Open VoIP DR as of April 30, 2016.**

## Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – APRIL, 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 (Intrado) for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
OAHU CIVILIAN	358	13	221	124

STATUS
<b>TOTAL TNCRs SUBMITTED</b> - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.
<b>PENDING STATUS</b> - 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.
<b>REFERRED STATUS</b> - 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 (Intrado) Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<b>TOTAL UNOPENED TNCR RECORDS STATUS</b> - 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.

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 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 counter-clockwise 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 **April 30, 2016**:

MSAG COMMUNITY (In Order of Effort)	MSAG COMMUNITY AND STREET SEGMENT SWEEP -- PHASE VII				GIS UPDATES	
	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		11/14/14	11/21/14
Hauula	11/12/14	11/17/14	11/06/14			
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		02/19/15	02/25/15
Mokuleia	01/30/15	02/05/15	02/12/15			
Kalaniana'ole Hwy Project	02/09/15	03/04/15	02/19/15			
Makaha	03/05/15	03/12/15	02/17/15		03/20/15	04/02/15
Waianae	03/13/15	03/24/15	03/09/15			
Mali	03/25/15	04/02/15	03/17/15			
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	



# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## MSAG Community and Street Segment Sweep – Phase VII continued

MSAG COMMUNITY (In Order of Effort)	MSAG COMMUNITY AND STREET SEGMENT SWEEP -- PHASE VII				GIS UPDATES	
	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	01/14/16
PC PEN	01/27/16	02/02/16	01/19/16		01/08/16	
McGrew PT	02/03/16	02/04/16	01/20/16	ArcGIS License Issues at HPD on workstation	01/22/16	
Halawa	02/05/16	02/08/16	01/20/16			
Aliamanu	02/12/16	02/17/16	01/21/16			
Moanalua T	02/18/16	02/23/16	01/26/16			
Hale Moku	02/24/16	02/29/16	01/26/16			
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	ArcGIS License Item was resolved	02/19/16	02/23/16
Airport	03/11/16	03/25/16	02/12/16			
Catlin Pk	03/28/16	03/31/16	02/16/16			
Miller Pk	04/01/16	04/05/16	02/19/16			
Halsey T	04/06/16	04/11/16	02/22/16		03/04/16	03/15/16
Radford T	04/12/16	04/14/16	02/23/16			
Mapunapuna	04/15/16	04/20/16	03/03/16			
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	IN PROGRESS			
Nuuanu	06/22/16	07/07/16				
Punchbowl	07/08/16	07/20/16				
Downtown	07/21/16	08/02/16				
Kakaako	08/03/16	08/08/16				
Ala Moana	08/09/16	08/11/16				
Honolulu	08/12/16	08/29/16				
Makiki	08/30/16	09/07/16				
Manoa	09/08/16	09/27/16				

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – APRIL 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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points		04/29/16	
	4/28/2016		Deleted one (1) location name in Kalihi
	4/28/2016		Added seven (7) location names in Kalihi
	4/28/2016		Spatially corrected eighty-nine (89) address points in Kalihi
	4/27/2016		Added one (1) routing id in Kalihi
	4/27/2016		Corrected six (6) TMK in Kalihi
	4/27/2016		Added ten (10) location names in Kalihi
	4/27/2016		Corrected one (1) address in Kalihi
	4/27/2016		Added one (1) alias in Kalihi
	4/27/2016		Added eleven (11) address points in Kalihi
	4/27/2016		Deleted ten (10) address points in Kalihi
	4/27/2016		Spatially corrected one hundred thirty-one (131) address points in Kalihi
	4/25/2016		Corrected six (6) TMK in Kalihi
	4/25/2016		Added ten (10) location names in Kalihi
	4/25/2016		Added forty-four (44) address points in Kalihi
	4/25/2016		Added three (3) building numbers in Kalihi
	4/25/2016		Deleted two (2) location names in Kalihi
	4/25/2016		Deleted seventeen (17) address points in Kalihi
	4/25/2016		Corrected two (2) ESN in Kalihi
	4/25/2016		Added two (2) routing ids in Kalihi
	4/25/2016		Spatially corrected one hundred eighteen (118) address points in Kalihi
	4/22/2016		Spatially corrected eleven (11) address points in Kalihi
	4/21/2016		Corrected one (1) TMK in Kalihi
	4/21/2016		Added two (2) apartment numbers in Kalihi
	4/21/2016		Added two (2) address points in Kalihi
	4/21/2016		Added six (6) location names in Kalihi
	4/21/2016		Corrected one (1) address in Kalihi
	4/21/2016		Deleted two (2) location names in Kalihi
	4/21/2016		Spatially corrected three hundred eighty-one (381) address points in Kalihi
	4/19/2016		Deleted two (2) address points in Kalihi
	4/19/2016		Corrected three (3) TMK in Kalihi
	4/19/2016		Added eleven (11) location names in Kalihi
	4/19/2016		Corrected one (1) address in Kalihi
	4/19/2016		Added one (1) routing id in Kalihi

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 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.*

OAHU CIVILIAN			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/19/2016		Added three (3) address points in Kalihi
	4/19/2016		Spatially corrected six hundred eighty-seven (687) address points in Kalihi
		04/15/16	
	4/15/2016		Added two (2) location names in Kalihi
	4/15/2016		Corrected two (2) TMK in Kalihi
	4/15/2016		Deleted four (4) address points in Kalihi
	4/15/2016		Added one (1) floor number in Kalihi
	4/15/2016		Spatially corrected seven hundred eighty (780) address points in Kalihi
	4/14/2016		Added one (1) location name in Kalihi
	4/14/2016		Spatially corrected one hundred twenty-one (121) address points in Kalihi
	4/13/2016		Deleted two (2) address points in Kalihi
	4/13/2016		Corrected one (1) tmk in Kalihi
	4/13/2016		Spatially corrected five hundred fifteen (515) address points in Kalihi
	4/12/2016		Added three (3) address points in Kalihi
	4/12/2016		Added four (4) location names in Kalihi
	4/12/2016		Corrected five (5) TMK in Kalihi
	4/12/2016		Corrected one (1) address in Kalihi
	4/12/2016		Added one (1) building number in Kalihi
	4/12/2016		Deleted five (5) address points in Kalihi
	4/12/2016		Spatially corrected one thousand thirty-one (1031) address points in Kalihi
	4/11/2016		Deleted five (5) address points in Kalihi
	4/11/2016		Added two (2) location names in Kalihi
	4/11/2016		Added one hundred eleven (111) address points in Kalihi
	4/11/2016		Deleted one (1) location name in Kalihi
	4/11/2016		Spatially corrected six hundred ninety-two (692) address points in Kalihi
	4/8/2016		Added twelve (12) address points in Kalihi
	4/8/2016		Added one (1) building number in Kalihi
	4/8/2016		Deleted two (2) address points in Kalihi
	4/8/2016		Corrected two (2) TMK in Kalihi
	4/8/2016		Spatially corrected seventy-seven (77) address points in Kalihi
	4/8/2016		Added three (3) routing IDs in Aliamanu
	4/8/2016		Added one (1) building number in Aliamanu
	4/8/2016		Added three (3) address points in Aliamanu
	4/8/2016		Spatially corrected nine hundred fifty-four (954) address points in Aliamanu

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 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.*

OAHU CIVILIAN				
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks	
	Date Created/ Edits Performed			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Address Points	4/7/2016		Corrected one (1) house number in Kalihi	
	4/7/2016		Added seven (7) address points in Kalihi	
	4/7/2016		Added eight (8) location names in Kalihi	
	4/7/2016		Deleted four (4) location names in Kalihi	
	4/7/2016		Corrected one (1) TMK in Kalihi	
	4/7/2016		Spatially corrected four hundred forty-two (422) address points in Kalihi	
	4/6/2016		Added three (3) apartment numbers in Kalihi	
	4/6/2016		Added six (6) address points in Kalihi	
	4/6/2016		Corrected three (3) TMK in Kalihi	
	4/6/2016		Added three (3) location names in Kalihi	
	4/6/2016		Deleted one (1) address point in Kalihi	
	4/6/2016		Spatially corrected four hundred thirty-six (436) address points in Kalihi	
	4/5/2016		Deleted one (1) address point in Kalihi	
	4/5/2016		Corrected two (2) TMK in Kalihi	
	4/5/2016		Added two (2) location names in Kalihi	
	4/5/2016		Added eleven (11) address points in Kalihi	
	4/5/2016		Added one (1) apartment number in Kalihi	
	4/5/2016		Spatially corrected seven hundred seventy (770) address points in Kalihi	
	4/4/2016		Added thirty-three (33) address points in Kalihi	
	4/4/2016		Added five (5) building numbers in Kalihi	
	4/4/2016		Added ten (10) location names in Kalihi	
	4/4/2016		Added one (1) routing ID in Kalihi	
	4/4/2016		Corrected one (1) address in Kalihi	
	4/4/2016		Added one (1) apartment number in Kalihi	
	4/4/2016		Added seventy-six (76) location names in Makaha	
	4/4/2016		Added seventy-six (76) apartment numbers in Makaha	
		04/01/16		
	4/1/2016			Corrected one (1) location name in Waipahu
	4/1/2016			Spatially corrected one (1) address point in Waipahu
	4/1/2016			Corrected one (1) location name in Mililani
	4/1/2016			Added two (2) aliases in Punaluu

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 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.*

OAHU CIVILIAN			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places		04/29/16	
	4/28/2016		Spatially corrected five (5) locations in Kalihi
	4/27/2016		Spatially corrected twenty-five (25) locations in Kalihi
	4/25/2016		Spatially corrected thirty-four (34) locations in Kalihi
	4/22/2016		Spatially corrected eleven (11) locations in Kalihi
	4/21/2016		Spatially corrected thirty-seven (37) locations in Kalihi
	4/19/2016		Spatially corrected sixteen (16) locations in Kalihi
		04/15/16	
	4/15/2016		Spatially corrected one (1) location in Kalihi
	4/12/2016		Spatially corrected five (5) locations in Kalihi
	4/11/2016		Spatially corrected five (5) locations in Kalihi
	4/8/2016		Spatially corrected one (1) location in Kalihi
	4/8/2016		Spatially corrected two (2) locations in Aliamanu
	4/7/2016		Spatially corrected forty-one (41) locations in Kalihi
	4/6/2016		Spatially corrected fourteen (14) locations in Kalihi
	4/5/2016		Spatially corrected two (2) locations in Kalihi
	4/4/2016		Spatially corrected forty-two (42) locations in Kalihi
		04/01/16	
	4/1/2016		Corrected three (3) names in Mililani
	4/1/2016		Spatially corrected two (2) locations in Mililani
	4/1/2016		Corrected three (3) addresses in Mililani
	4/1/2016		Added five (5) new Common Places in Mililani
	4/1/2016		Corrected two (2) names in Waipahu
	4/1/2016		Spatially corrected two (2) locations in Waipahu
	4/1/2016		Corrected one (1) address in Waipio
	4/1/2016		Corrected forty-seven (47) names in Waipio
	4/1/2016		Deleted one (1) Common Place in Waipio

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 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			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Common Places	4/1/2016		Spatially corrected one (1) location in Waipio
	4/1/2016		Deleted one (1) Common Place in Waipahu
	4/1/2016		Added one (1) Common Place in Wahiawa
	4/1/2016		Added one (1) Common Place in Aiea
	4/1/2016		Added one (1) Common Place in Kaneohe
	4/1/2016		Spatially corrected seven (7) locations in Aiea
	4/1/2016		Deleted one (1) Common Place in Aiea
	4/1/2016		Corrected one (1) police sub beat in Mililani
	4/1/2016		Corrected one (1) tow boundary in Mililani
	4/1/2016		Corrected one (1) MSAG community in Mililani
	4/1/2016		Corrected one (1) ESN in Mililani
	4/1/2016		Corrected one (1) police in Mililani
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN		04/29/16	
	4/29/2016		Corrected one (1) ESN in Honolulu
	4/25/2016		Corrected boundaries for ESNs 122, 120, 125, 126, and 123
	4/21/2016		Corrected boundaries for ESNs 122 and 125
	4/20/2016		Corrected boundaries for ESNs 122 and 125
		04/15/16	
	4/15/2016		Corrected boundaries for ESNs 120, 126, 125
Fire Beats			
Fire Districts			
Fire Response Areas		04/29/16	
	4/25/2016		Corrected boundaries for STA4, STA6, STA25, STA1, and STA31
	4/21/2016		Corrected boundaries for STA4 and STA6
	4/20/2016		Corrected boundaries for STA4 and STA6
		04/15/16	
	4/15/2016		Corrected boundaries for STA6, STA31, STA1
Fire Stations			
Food & Beverage			
Gas Stations			

# Oahu Civilian E9-1-1 Status Report

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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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
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		04/29/16	
	4/25/2016		Corrected boundaries for Kalihi and Nuuanu
		04/15/16	
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
Points of Interest			
Police Beats		04/29/16	
	4/25/2016		Corrected Police Beat boundaries 560, 562, and 570
		04/15/16	
		04/01/16	
	4/1/2016		Corrected Police Beat 152 according to the HPD written policies and procedures, and began correcting 154, 156, and 157

# Oahu Civilian E9-1-1 Status Report

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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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines		04/29/16	
	4/29/2016		Spatially corrected one (1) street segment in Punchbowl
	4/29/2016		Spatially corrected five (5) street segments in Honolulu
	4/29/2016		Spatially corrected twenty-four (24) street segments in Downtown
	4/28/2016		Split three (3) street segments in Kalihi
	4/26/2016		Spatially corrected fifty-one (51) street segments in Kalihi
	4/26/2016		Deleted one (1) street segment in Kalihi
	4/22/2016		Spatially corrected sixty-two (62) street segments in Kalihi
	4/20/2016		Corrected one (1) street range in Manoa
	4/20/2016		Split one (1) street segment in Kalihi
	4/20/2016		Added one (1) street segment in Kalihi
	4/20/2016		Spatially corrected thirty-five (35) street segments in Kalihi
	4/19/2016		Flipped two (2) street segments in Kalihi
	4/18/2016		Corrected two (2) elevations in Moanalua V
	4/18/2016		Corrected one (1) elevation in Kalihi
	4/18/2016		Split one (1) street segment in Kalihi
	4/18/2016		Corrected two (2) police attributes in Kalihi
	4/18/2016		Spatially corrected thirty-six (36) street segments in Kalihi
		04/15/16	
	4/14/2016		Flipped one (1) street segment in Kalihi
	4/14/2016		Spatially corrected six (6) street segments in Kalihi
	4/13/2016		Spatially corrected thirty-three (33) street segments in Kalihi
	4/13/2016		Added one (1) street segment in Kalihi
	4/7/2016		Corrected two (2) street ranges in Kalihi
		04/01/16	
	4/1/2016		Added one (1) street segment in Downtown
	4/1/2016		Split one (1) street segment in Downtown
	4/1/2016		Spatially corrected fifteen (15) street segments in Downtown



# Oahu Civilian E9-1-1 Status Report

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## MAPPING LAYERS UPDATED (PART VIII)

*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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors		04/29/16	
	4/29/2016		Per VZW CRS
	4/28/2016		Per ATT CRS
	4/28/2016		Per VZW CRS
	4/26/2016		Per VZW CRS
	4/25/2016		Per VZW CRS
		04/18/16	
		04/15/16	
	4/14/2016		Per ATT CRS
		04/11/16	
		04/04/16	
		04/01/16	
WSP Cell Towers		04/29/16	
	4/29/2016		Per VZW CRS
	4/28/2016		Per ATT CRS
	4/28/2016		Per VZW CRS
	4/26/2016		Per VZW CRS
	4/25/2016		Per VZW CRS
		04/18/16	
		04/15/16	
	4/14/2016		Per ATT CRS
		04/11/16	
		04/04/16	
		04/01/16	

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVE

### GIS KEY ACTIVITIES/UPDATES

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

Date	Key Activities/Updates
4/29/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
4/29/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
4/29/2016	Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety
4/25/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
4/18/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
4/15/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
4/15/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
4/15/2016	Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety
4/11/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
4/4/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
4/1/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
4/1/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
4/1/2016	Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety

## Oahu Civilian E9-1-1 Status Report

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### 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 April 2016 and has corrected one (1) more Police Beats (152), and is in the process of correcting three (3) additional Police Beat boundaries (154, 156, and 157) according to the HPD written Policies and Procedures and performed routing maintenance on three (3) Police Beats (560, 562, and 570).

#### 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.

### MAPFLEX SYSTEM

During the month of April 2016, the MapFlex system performed without any issues and deliverables continued on schedule.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, Intrado, 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 April 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in April 2016
  - a. **Hawaii County** – April 12<sup>th</sup> and April 26<sup>th</sup>
  - b. **Maui County** – April 13<sup>th</sup> and April 27<sup>th</sup>
  - c. **Kauai County** – April 14<sup>th</sup> and April 28<sup>th</sup>
  - d. **Honolulu** – April 1<sup>st</sup>, April 15<sup>th</sup> and April 29<sup>th</sup>

# Oahu Civilian E9-1-1 Status Report

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## MAPFLEX ISSUE

During the Month of March 2016, the Honolulu Police Department identified an issue with the MapFlex responder bar. There was information that was missing in the responder bar, previously displayed.

1. On March 18, 2016, HPD contacted Akimeka, West (formerly known as Intrado), and HT to see if there was any identified issues.
2. Akimeka reviewed the issue and didn't recognize any changes in the GIS data, however prepared an out-of-schedule upload to trigger a system change in case there was data backlogged.
3. A few days later, HPD identified that the Responder Bar in the MapFlex began displaying the correct information again.
4. There were no further issues identified however the MapFlex will continue to be monitored.

## 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 March 25, 2016, and April 19, 2016.

Street Utility Check				
	First Report 06/01/13	3/25/2016	4/19/2016	Improvements/Corrections
Total Number of GIS Records	26,602	29,355	29,392	Increased by 37 records
Errors Identified				
Zero Errors	5,112	16	18	Increased by 2 errors
Low > High Errors	3	0	0	No Change
Mixed Parity Errors	1	0	0	No Change
Changed Parity Errors	105	0	0	No Change
Address Gap Errors	2,629	2	0	Decreased by 2 errors
Address Overlap Errors	423	0	0	No Change
Flipped Link Errors	1,030	590	592	Increased by 2 errors
Total Errors	9,303	608	612	Increased by 4 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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## WIRELESS ANNUAL AUDIT

During the month of February 2016, the wireless annual audit for Verizon was coordinated and completed as indicated in the Wireless Audit Chart. However during the audit process, it was identified that changes which had been sent through the CRS process for all WSPs were possibly not making their way back to the wireless FMCC database (responsible for information provided via the ALI).

1. On February 29, 2016, after completing the review of the Annual Audit for Verizon wireless Akimeka contacted West to discuss the reason why the annual audit synchronization has degraded in the match accuracy.
  - a. Note – The CRS process performed throughout the year for all WSPs deals with routine maintenance performed on the sites/sectors. The Annual Audit is intended to identify any possible gaps in that process and seeks reconciliation in an effort to re-synchronize the databases. If there are no missed CRSs throughout the year and the database match percentage decreases, then there are apparent issues.
2. On March 15, 2016, Akimeka and West held a conference call to discuss the matter. During the conversation it was identified that the changes sent back from Akimeka to West after accuracy validation, are processed into the FMCC. The issue that Akimeka is seeing when the Annual Audit is provided is resulting from a script West put in place in 2013 to output the CRSs into the approved format at that time.
  - a. The issue is that the format has changed over time due to new technology and more hexadecimal numbering of the wireless sectors. In order to accommodate those changes, Akimeka has developed a translation into an applicable format which the PSAPs are able to use. The format that West is providing each Annual Audit and CRS is overriding the changes within the FMCC, therefore give the appearance of not being synchronized in that process but are. This helps to explain why the wireless testing results are accurate, and the PSAPs are not experiencing a large number of discrepancies in the Mapping Systems when matched with the ALI.
3. Akimeka followed up with West on March 30, 2016, to see if West has re-scripted the format.
  - a. West replied that unfortunately it will require system development at West. Melissa Norton of West did mention that the particular system that needs to be changed is currently backlogged with a few large projects. She opened a Product Development Request at West but there is no ETA on the enhancement. In order to speed up the request, she is working to bundle the request with several other State's requests.
4. Akimeka will continue to follow up on the process to ensure the wireless databases are maintained accurately. With the big push by the WSPs for more LTE sites, which are having the impact on the hexadecimal numbering, Akimeka is hopeful that West can resolve this issue. The additional work involved to re-validate information takes a significant effort and allows for discrepancy. The Annual Audit is supposed to be a raw comparison to the condition of the data in both the FMCC and the GIS database provided in the Mapping Systems. Without both in its raw format, the comparison becomes unclear as to the real condition of the FMCC database.
5. Throughout the month of April 2016, Akimeka had been provided several TVWs by the WSPs for testing and most of the information was good for testing but there was an unusually high number of records that were either missing or were incorrect. Virtually all TVWs sent to Akimeka had some variety of discrepancy in them. This was only applicable to Verizon at the time and since the Annual Audit with Verizon had been completed, bringing the databases to 100% match rate, a reason for the mismatch in TVW information was perplexing. It certainly required more investigation into what was occurring.
6. On April 21, 2016, Akimeka was notified of yet another set of TVWs with issues and the WSP and West investigated their end and said everything was matching. Because the Annual Audit was completed, matching West and Akimeka databases, but yet the TVWs produced from the West database were not matching, something was highly unusual.
  - a. Later the same day, Akimeka provided an example of the discrepancy back to West detailing one of the records along a timeline. Information provided in the TVW matched with the record from 2015. Since that time, there were

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several updates, including the Annual Audit. This indicated that the TVWs being generated by West were not accurate and it also was indicating the Annual Audit sent back to West was not be uploaded. This is a major issue.

7. To confirm Akimeka's suspicion that the Annual Audit updates were not being uploaded by West into the FMCC, Akimeka followed up with implementation specialist at West, who the Audit was coordinated with.
  - a. West sent a reply on April 25, 2016, that the audit was not fully completed at West and they were in their final stages before sending changes to the database and on to Verizon. From West "there were a lot of changes that came from the audit which is where you may be seeing the discrepancies. Once Verizon has called in the hot cuts (changes), the data should match the audit sheet you sent".
  - b. This was confirmation that the audit was still not being processed fully by West after 2 months and that the issues with mismatched information in the TVWs were as a result of this.

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### REQUEST FOR 9-1-1 JURISDICTIONAL BOUNDARIES

On March 17, 2016, West had requested information for each of the PSAPs in the State of Hawaii, with the exception of the Honolulu Police Department and Regional Dispatch Center. Akimeka has followed up with West to see if the Honolulu Police Department PSAP was supposed to be included in this request.

1. On March 17, 2016, West requested that each PSAP fill out an attached questionnaire and to provide the PSAP Jurisdictional Boundaries (to include VoIP, Wireless, Text, and Alarms).
2. Akimeka prepared the boundaries of each of the PSAP Jurisdictional Boundaries which included all requested attribution. Given the geography of the Hawaiian Islands, and the operational responses of each PSAP which includes ocean responses, Akimeka included a buffer for each of the PSAP Boundaries that extend into the ocean. This reflects the true nature of the PSAP Jurisdictional Boundary response area and also covers the distance over water which can account for possible Lat/Longs provided during a Text-to-911 call to the PSAP. Since the system is intended to use the location information to determine routing, inclusion of the water area into the PSAP polygons was a more accurate approach.
3. On March 23, 2016, the Akimeka GIS Manager notified West that this information was ready and requested a secure method of transferring the data. Throughout the remainder of March 2016, there was no reply from West.
4. On April 19, 2016, West followed back up with the Akimeka GIS Manager. The West employee was unfamiliar with using an ftp site and was going to touch base with her supervisors to find a more secure manner of transferring the data. Throughout the remainder of April 2016, Akimeka did not hear back.

# Oahu Civilian E9-1-1 Status Report

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## 4. E9-1-1 DATABASE SYNCHRONIZATION

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

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

The database synchronization effort included comparing Oahu Civilian's 9-1-1 MSAG received from the 911 Database provider, Intrado on April 1, 2016, against the PSAP's 911 GIS Street Centerline data. A total number of **7,766** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on April 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.

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## AUDIT SUMMARY RESULTS – 2016

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of July 1, 2015		As of October 1, 2015		As of January 1, 2016		As of April 1, 2016	
		9-1-1 MSAG Dated 7-01-15		9-1-1 MSAG Dated 10-01-15		9-1-1 MSAG Dated 1-01-16		9-1-1 MSAG Dated 4-01-16	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		7,597		7,749		7,752		7,766	
Less: 9-1-1 MSAG Exception Records	(1)	40	0.5%	35	0.5%	30	0.4%	33	0.4%
Net 9-1-1 MSAG Records Eligible for Comparison		7,557		7,714		7,722		7,733	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		7,547	99.9%	7,694	99.7%	7,710	99.8%	7,719	99.8%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	6	0.1%	16	0.2%	11	0.1%	13	0.2%
9-1-1 MSAG Record With No Matching GIS Record	(3)	4	0.1%	4	0.1%	1	0.0%	1	0.0%
Total 9-1-1 MSAG Records No Match		10	0.1%	20	0.3%	12	0.2%	14	0.2%

**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 January 2016 with a 99.8% Match Rate to a 99.8% Match Rate as of April 2016

### NOTES:

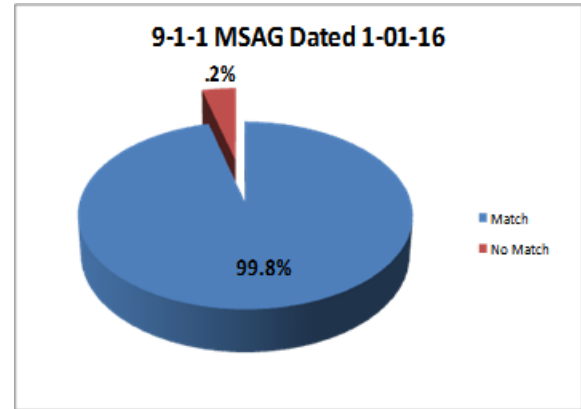
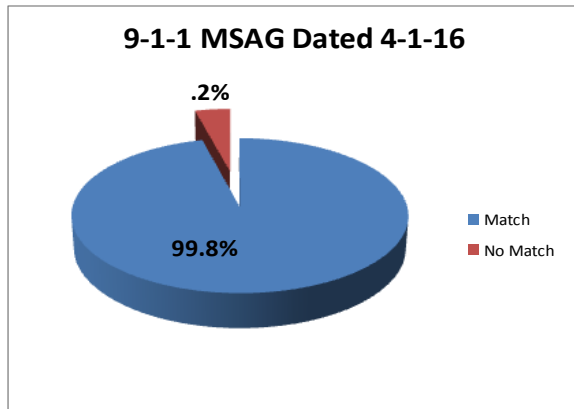
- An MSAG Record that will not have a corresponding GIS Street Centerline Record but is required for the routing of E9-1-1 calls (i.e., Emergency Call Box, Foreign Exchange Records, Wireless Shell Records, etc.). No further action is required.
- An MSAG Record that requires minor MSAG attention in 9-1-1Net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



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## AUDIT SUMMARY RESULTS – APRIL 1, 2016 MSAG VS. JANUARY 1, 2016 MSAG



**Oahu Civilian’s level of accuracy or 9-1-1 Match percentage remained consistent with a 99.8% as of April 1, 2016 compared to 99.8% as of January 1, 2016.**

**The majority of the remaining MSAG and GIS discrepancies are in the Honolulu MSAG Community.**

- ❖ As agreed between HPD PMT and Akimeka, Akimeka would initially focus on the existing MSAG 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 new MSAG 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” increased (11 to 13) from January 2016 to April 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.

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## AUDIT SUMMARY RESULTS – APRIL 1, 2016 MSAG VS. JANUARY 1, 2016 MSAG CONTIUNED

- ❖ “MSAG Record with No GIS Record” remained the same (1 to 1) from January 2016 to April 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. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the July 2016 re-analysis.
- ❖ “GIS MSAG Records with No Matching E9-1-1 MSAG Record” increased (2 to 4) from January 2016 to April 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. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the July 2016 re-analysis.
- ❖ “GIS –Minor Corrections” decreased (14 to 8) from January 2016 to April 2016. Low and high address ranges, street suffixes, and MSAG Community were adjusted in the GIS database to correspond with the MSAG record. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the July 2016 re-analysis.
- ❖ 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.

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 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:

OAHU CIVILIAN	Invalid MSAG Records			
	9-1-1 MSAG Dated 01-01-16		9-1-1 MSAG Dated 04-01-16	
	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records
ESN 199	122	1.5%	114	1.4%

These invalid MSAG records represent **1.4%** of the Total MSAG records for the City & County of Honolulu as of the April 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.

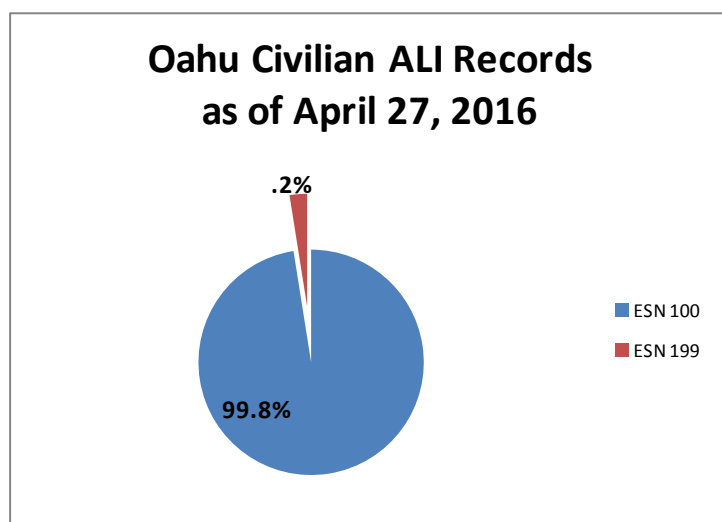
# Oahu Civilian E9-1-1 Status Report

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## AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT

As part of Akimeka's ongoing database synchronization efforts, Akimeka reviewed and summarized the ALI discrepancies by community in 9-1-1Net for the City & County of Honolulu (Oahu Civilian). As of April 1, 2016, there are **752** ALI records with an assigned ESN of 199, representing **.2%** 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 **5.3%** (794 to 752) from January 2016 to April 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".

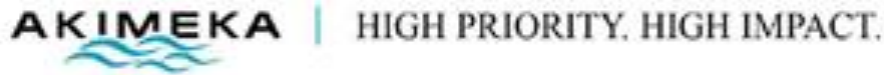
# Hawaii County E9-1-1 Status Report

*April 1, 2016 – April 30, 2016*



# Hawaii County E9-1-1 Status Report

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# Hawaii County E9-1-1 Status Report

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## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME HAWAII COUNTY PSAPS – APRIL 2016

(Source: West Safety Services (Intrado) Viper system)

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

9-1-1 Call Volume																	
HAWAII 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
APR	17,112	3,074	17.96%	12,026	70.28%	46.50%	53.50%	707	4.13%	21	0.12%	0	0.00%	1,284	7.50%	0	0.00%

### CALL VOLUME HAWAII COUNTY PSAP NOTES:

\*The percentage of Wireless Phase 2 calls (53.50%) has increased from the number of Wireless Phase 1 calls (46.50%) in April 2016.

\*911 Calls with no Ali = 0.12% - Statewide average = 0.18% Year 2015

### 9-1-1 CALL VOLUME – CALENDAR YEAR 2016

9-1-1 Call Volume																	
HAWAII 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%	91	0.49%
APR	17,112	3,074	17.96%	12,026	70.28%	46.50%	53.50%	707	4.13%	21	0.12%	0	0.00%	1,284	7.50%	0	0.00%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	70,796	13,170		48,888				3,048		78		0		5,612		91	
MON AVG	17,699	3,293	18.58%	12,222	69.09%	47.50%	52.50%	762	4.30%	20	0.11%	0	0.00%	1,403	7.92%	23	0.12%

## Hawaii County E9-1-1 Status Report

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### 9-1-1 CALL VOLUME BY AGENCY – APRIL 2016

2016	9-1-1 Call Volume by Agency									
	Hawaii Police Department					Hawaii Fire Department				
	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
April	13,624	79.62%	0	1,243	0	2,204	12.88%	0	41	0

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

2016	9-1-1 Call Volume by Agency									
	Hawaii Police Department					Hawaii Fire Department				
	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
May										
June										
July										
August										
September										
October										
November										
December										
YTD	56,987		0	5,462	0	9,718		0	150	0
MON AVG	14,247	80.40%	0	1,366	0	2,430	13.71%	0	38	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 E9-1-1 Status Report

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## TEXT TO 911 – CURRENT MONTH – APRIL 2016

### NOTE:

- Hawaii County deployed a soft launch of Text to 911 on February 1, 2016.
- Sprint PCS conducted a Text to 911 test with the Hawaii Police 911 PSAP on February 1, 2016. During the test, the location received at the PSAP from the 911 texting device was a “Coarse Location” (centroid of a sector coverage area) plot, several miles away from the texter’s actual location.  
911 Text message was transferred to the Hawaii Fire Department successfully as part of the test agenda. Additional Text to 911 tests were also performed internally with personal telephones of the other Wireless Service Providers. The results showed that T-Mobile’s location of the Texter was similar to Sprint’s “Coarse Location”. The AT&T and Verizon tests revealed that the location of the texter sent to the PSAP was utilizing a Location Based Service (LBS) that plotted within 50 meters of the texter’s location.
- 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.

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		
June		
July		
August		
September		
October		
November		
December		
YTD	118	35
Monthly Avg.	29.5	8.75

### NOTE:

- 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.

## Hawaii County E9-1-1 Status Report

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### WIRELESS PSAP TESTING – APRIL 2016

HAWAII COUNTY - APRIL 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
04/14/16	Verizon	1	7	Hawaii PSAP	Pass	
04/14/16	Verizon	11	17	Hawaii PSAP	12 pass/5 fail	2 Field Testers
04/19/16	Verizon	2	9	Hawaii PSAP	Pass	
04/22/16	Verizon	8	18	Hawaii PSAP	Pass	2 Field Testers

#### NOTES:

- There were four (4) scheduled Wireless 911 Tests for the month of April 2016.

# Hawaii County E9-1-1 Status Report

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## 2. MSAG (MASTER STREET ADDRESS GUIDE)

### MSAG TRANSACTIONS CURRENT MONTH/YEAR – APRIL 2016

HAWAII COUNTY	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
MSAG (A)		TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR		
2016									
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									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	1,135	219	898	16	2				1,954
AVG PER MONTH	284	55	225	4	1				489

### Definitions

- (A) **Master Street Address Guide** - Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (B) **Telephone Number Change Request** - Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 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 9-1-1 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.

# Hawaii County E9-1-1 Status Report

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## MSAG CURRENT MONTH NOTES:

A total of **336** MSAG transactions were processed in 9-1-1 Net during the month of April 2016. **129** 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 **945** customer ANI/ALI (telephone number/address) records updated as a direct result.

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

**201** Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 299 clean-up effort. ESN 299 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record. Six (**6**) ALI DR was submitted as the result of 9-1-1 calls from residences in Pahoa and Kealahou, and businesses in Hilo and Volcano. 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 1,965 Open TN CR Transactions as of April 30, 2016.**
- **Refer to chart in the next section “TNCR Current Status”**

**1,892** Open TN CR transactions are a direct result of the ESN 299 clean-up and are awaiting approval from Hawaiian Telcom, Inc. **73** 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 Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado's internal process requires calling each telephone customer individually for approval to update an address in the 9-1-1 database.

- **There are two (2) Open ALI-DRs as of April 30, 2016**

One Open ALI-DR was submitted for correction in 9-1-1 Net in August 2014. This discrepancy has been referred to the telco since that time. Akimeka requested a status update from West Safety Services (Intrado) in February 2016 and is awaiting further information. The other Open ALI DR was submitted in April 2016 for a business in Hilo. The TN was ported to PLNI and West Safety Services (Intrado) has emailed PLNI with the address update. This ALI DR will remain in Referred status until PLNI confirms the update is complete.

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### TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – APRIL 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 (Intrado) for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
HAWAII	1,965	175	71	1719

STATUS
<b>TOTAL TNCRs SUBMITTED</b> - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.
<b>PENDING STATUS</b> - 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.
<b>REFERRED STATUS</b> - 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 (Intrado) Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<b>TOTAL UNOPENED TNCR RECORDS STATUS</b> - 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 – APRIL 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 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. Seventy-five (75) Telephone Number Change Requests (TN CR) transactions were processed as a result of the Dispatchable Location Project. These transactions have not been updated in 9-1-1 Net pending research by Hawaiian Tel and West Safety Services (Intrado) for providing an additional 60 character field in the ALI data stream to accommodate Dispatchable Location information as an alternative to using the “Driving Directions” field. Until this field is created, no further Dispatchable Location transactions will be submitted. No further developments as of April 2016.

Dispatchable Location				
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Submitted	Number of Transactions Processed**
KINGS SHOPS	CARRY OVER	2015	75	0
		Jan	0	0
		Feb	0	0
		Mar	0	0
		Apr	0	2
		<b>Total</b>	<b>75</b>	<b>2</b>

\*project currently on hold by West Safety Services (Intrado)/Hawaiian Telcom.

Definition
<b>Dispatchable Location</b> 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.
<b>TNCR*</b> Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location in the Exact field on the ALI Screen.
<b>Processed**</b> may include inactive telephone numbers that were removed from the ALI Database.



# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – APRIL 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/28/2016		Deleted thirty-four (34) address points in Captain Cook.
	4/28/2016		Deleted one (1) address point (15 Hawaii Belt Rd) in Hakalau.
	4/28/2016		Deleted twelve (12) address points in Hawi.
	4/28/2016		Deleted fifty-five (55) address points in Hilo.
	4/28/2016		Deleted nine (9) address points in Holualoa.
	4/28/2016		Deleted five (5) address points in Honaunau.
	4/28/2016		Deleted nineteen (19) address points in Honokaa.
	4/28/2016		Deleted six (6) address points in Honomu.
	4/28/2016		Deleted thirty (30) address points in HVNP.
	4/28/2016		Deleted sixty-two (62) address points in Kailua Kona.
	4/28/2016		Deleted sixty-four (64) address points in Kamuela.
	4/28/2016		Deleted seventeen (17) address points in Kapaa.
	4/28/2016		Deleted nine (9) address points in Keaa.
	4/28/2016		Deleted three (3) address points (11, 12 and 13 Mamalahoa Hwy) in Kealahou.
	4/28/2016		Deleted thirteen (13) address points in Keauhou.
	4/28/2016		Deleted five (5) address points in Kurtistown.
	4/28/2016		Deleted five (5) address points in Laupahoehoe.
	4/28/2016		Deleted six (6) address points in Mountain View.
	4/28/2016		Deleted nineteen (19) address points in Naalehu.
	4/28/2016		Deleted two (2) address points (16 and 17 Hawaii Belt Rd) in Ninole.
	4/28/2016		Deleted nine (9) address points in Ocean View.
	4/28/2016		Deleted four (4) address points in Ooka.
	4/28/2016		Deleted two (2) address points (41 and 42 Hawaii Belt Rd) in Paauhau.
	4/28/2016		Deleted thirty-two (32) address points in Paauilo.
	4/28/2016		Deleted fifteen (15) address points in Pahala.
	4/28/2016		Deleted thirty-six (36) address points in Pahoa.
	4/28/2016		Deleted four (4) address points in Papaaloa.
	4/28/2016		Deleted two (2) address points (7 and 8 Hawaii Belt Rd) in Papaikou.
	4/28/2016		Deleted four (4) address points in Pepeekeo.
	4/28/2016		Deleted fifteen (15) address points in Volcano.
	4/28/2016		Deleted twenty (20) address points in Waikoloa.
			04/26/16
	4/26/2016		Added one (1) address point (734353 Hawaii Belt Rd) in Kailua Kona.

# Hawaii County E9-1-1 Status Report

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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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/25/2016		Completed monthly update on address points.
	4/25/2016		Added seven (7) address points in Kailua Kona.
	4/25/2016		Added two (2) address points (50 and 51 Daniel K Inouye Hwy) in Kamuela.
	4/25/2016		Added one (1) address point (42 Daniel K Inouye Hwy) in Paauilo.
	4/22/2016		Added six (6) address points in Captain Cook.
	4/22/2016		Added four (4) address points in Hawi.
	4/22/2016		Added six (6) address points in Hilo.
	4/22/2016		Added one (1) address point (763755 Duarte Rd) in Holualoa.
	4/22/2016		Added one (1) address point (464005 Old Mamalahoa Hwy) in Honokaa.
	4/22/2016		Added twenty-six (26) address points in Kailua Kona.
	4/22/2016		Added four (4) address points in Kamuela.
	4/22/2016		Added one (1) address point (530272 Kapania Rd) in Kapaau.
	4/22/2016		Added eighteen (18) address points in Keaau.
	4/22/2016		Added two (2) address points (816455 and 816469 Onouli Uka Rd) in Kealahou.
	4/22/2016		Added twelve (12) address points in Kurtistown.
	4/22/2016		Added two (2) address points (361725 and 361771 Kamalani Rd) in Laupahoehoe.
	4/22/2016		Added twenty-three (23) address points in Mountain View.
	4/22/2016		Added two (2) address points (941472 Kaulua Cir and 946291 Poko St) in Naalehu.
	4/22/2016		Added ten (10) address points in Ocean View.
	4/22/2016		Added one (1) address point (440228 Hoolauae St) in Paauhau.
	4/22/2016		Added thirteen (13) address points in Pahoa.
	4/22/2016		Added twelve (12) address points in Volcano.
	4/22/2016		Added three (3) address points in Waikoloa.
	4/22/2016		Corrected address to one (1) address point in Captain Cook.
	4/21/2016		Corrected address to one (1) address point (105 Makalea Pl) in Hilo.
	4/20/2016		Aliased seven hundred thirty-eight (738) address points in Captain Cook.
	4/20/2016		Aliased eight (8) address points in Hakalau.
	4/20/2016		Aliased eighty-four (84) address points in Hawi.
	4/20/2016		Aliased two thousand seventy-seven (2077) address points in Hilo.
	4/20/2016		Aliased sixty (60) address points in Holualoa.
	4/20/2016		Aliased sixty-one (61) address points in Honaunau.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/20/2016		Aliased four hundred eighty-eight (488) address points in Honokaa.
	4/20/2016		Aliased eighty-five (85) address points in Honomu.
	4/20/2016		Aliased two (2) address points (127 Mauna Loa Rd and 28 Volcano Rd) in HVNP.
	4/20/2016		Aliased two hundred seventy-one (271) address points in Kailua Kona.
	4/20/2016		Aliased six hundred thirty-three (633) address points in Kamuela.
	4/20/2016		Aliased ninety-seven (97) address points in Kapaa.
	4/20/2016		Aliased five thousand two hundred twenty-seven (5227) address points in Keaau.
	4/20/2016		Aliased one hundred thirty-three (133) address points in Kealahou.
	4/20/2016		Aliased two hundred sixty-eight (268) address points in Keauhou.
	4/20/2016		Aliased four hundred eighty-seven (487) address points in Kurtistown.
	4/20/2016		Aliased two hundred fifty-eight (258) address points in Laupahoehoe.
	4/20/2016		Aliased one thousand six hundred ninety-two (1692) address points in Mountain View.
	4/20/2016		Aliased two hundred thirty-five (235) address points in Naalehu.
	4/20/2016		Aliased four hundred fifty-three (453) address points in Ocean View.
	4/20/2016		Aliased forty (40) address points in Paauhau.
	4/20/2016		Aliased two hundred eighty (280) address points in Paauilo.
	4/20/2016		Aliased one thousand nine hundred fifty-four (1954) address points in Pahoa.
	4/20/2016		Aliased fifty-two (52) address points in Papaaloa.
	4/20/2016		Aliased one hundred seventy-eight (178) address points in Papaikou.
	4/20/2016		Aliased thirty-nine (39) address points in Pepeekeo.
	4/20/2016		Aliased one thousand two hundred thirty-five (1235) address points in Volcano.
	4/20/2016		Aliased seventy-seven (77) address points in Waikoloa.
	4/20/2016		Corrected address to two (2) address points (145009 Laimana Ave and 145009 Laimana Ave A) in Pahoa.
	4/20/2016		Corrected address to one (1) address point (170929 Kukui Heights Rd) in Mountain View.
	4/15/2016		Spatially corrected one hundred ten (110) address points in Mountain View.
	4/14/2016		Corrected address to four (4) address points in Laupahoehoe.
	4/13/2016		Added nine (9) address points in Keaau.
	4/13/2016		Added thirty (30) address points in Hilo.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/13/2016		Corrected address to one (1) address point (160725 Keaau Pahoa Rd A) in Keaau.
	4/13/2016		Spatially corrected one (1) address point (160725 Keaau Pahoa Rd A) in Keaau.
	4/13/2016		Spatially corrected nine (9) address points in Hilo.
	4/13/2016		Corrected location name to three (3) address points (145 Kamana St A, 1370 Ululani St A and 155 W Kawili St A) in Hilo.
	4/13/2016		Corrected address to three (3) address points (145 Kamana St A, 1370 Ululani St A and 155 W Kawili St A) in Hilo.
		04/12/16	
	4/12/2016		Spatially corrected one hundred twenty (120) address points in Pahoa.
	4/7/2016		Added seven (7) address points in Pahoa.
	4/7/2016		Corrected address to one (1) address point (153047 Kauhale St A) in Pahoa.
	4/7/2016		Spatially corrected eighty-seven (87) address points in Pahoa.
	4/6/2016		Spatially corrected one hundred forty-five (145) address points in Pahoa.
	4/5/2016		Added one (1) address point (622619 Kohala Mountain Rd) in Kamuela.
	4/5/2016		Spatially corrected twenty-nine (29) address points in Hilo.
	4/5/2016		Corrected location name to four (4) address points in Hilo.
4/4/2016		Spatially corrected eight (8) address points in Hilo.	
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN			
Fire Beats			

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Fire Districts			
Fire Response Areas			
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	4/28/2016		Deleted three (3) milepost markers in Hilo.
	4/28/2016		Deleted three (3) milepost markers in HVNP.
	4/28/2016		Deleted three (3) milepost markers in Kamuela.
	4/28/2016		Deleted three (3) milepost markers in Kapaau.
	4/28/2016		Deleted three (3) milepost markers in Mountain View.
	4/28/2016		Deleted three (3) milepost markers in Pahoa.
	4/28/2016		Deleted three (3) milepost markers in Pepeekeo.
	4/28/2016		Deleted six (6) milepost markers in Waikoloa.
	4/28/2016		Corrected route name to thirty (30) milepost markers in Hilo.
	4/28/2016		Corrected route name to seven (7) milepost markers in Kailua Kona.
	4/28/2016		Corrected route name to two (2) milepost markers in Kamuela.
	4/28/2016		Corrected route name to eighteen (18) milepost markers in Paauilo.
	4/28/2016		Aliased thirty (30) milepost markers in Hilo.
	4/28/2016		Aliased seventeen (17) milepost markers in Paauilo.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Milepost Markers		04/26/16	
	4/25/2016		Added seven (7) milepost markers in Kailua Kona.
	4/25/2016		Added two (2) milepost markers (MM 200-50 and MM 200-51) in Kamuela.
	4/25/2016		Added one (1) milepost marker (MM 200-42) in Paauilo.
MSAG Communities			
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
Points of Interest	4/28/2016		Added thirty-four (34) points of interest in Captain Cook.
	4/28/2016		Added one (1) point of interest (MM 19-15) in Hakalau.
	4/28/2016		Added twelve (12) points of interest in Hawi.
	4/28/2016		Added fifty-six (56) points of interest in Hilo.
	4/28/2016		Added twelve (12) points of interest in Holualoa.
	4/28/2016		Added five (5) points of interest in Honaunau.
	4/28/2016		Added eighteen (18) points of interest in Honokaa.
	4/28/2016		Added six (6) points of interest in Honomu.
	4/28/2016		Added thirty (30) points of interest in HVNP.
	4/28/2016		Added sixty-two (62) points of interest in Kailua Kona.
	4/28/2016		Added sixty-three (63) points of interest in Kamuela.
	4/28/2016		Added nineteen (19) points of interest is Kapaau.
	4/28/2016		Added eight (8) points of interest in Keaau.
	4/28/2016		Added three (3) points of interest (MM 11-111, MM 11-112 and MM 11-113) in Kealahou.
	4/28/2016		Added ten (10) points of interest in Keauhou.
	4/28/2016		Added six (6) points of interest in Kurtistown.
	4/28/2016		Added five (5) points of interest in Laupahoehoe.
	4/28/2016		Added six (6) points of interest in Mountain View.
	4/28/2016		Added nineteen (19) points of interest in Naalehu.
	4/28/2016		Added two (2) points of interest (MM 19-16 and MM 19-17) in Ninole.
	4/28/2016		Added nine (9) points of interest in Ocean View.
	4/28/2016		Added four (4) points of interest in Ookala.

# Hawaii County E9-1-1 Status Report

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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 Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Points of Interest	4/28/2016		Added two (2) points of interest (MM 19-41 and MM 19-42) in Paauhau.
	4/28/2016		Added thirty-one (31) points of interest in Paauilo.
	4/28/2016		Added fifteen (15) points of interest in Pahala.
	4/28/2016		Added thirty-six (36) points of interest in Pahoa.
	4/28/2016		Added four (4) points of interest in Papaaloa.
	4/28/2016		Added two (2) points of interest (MM 19-7 and MM 19-8) in Papaikou.
	4/28/2016		Added four (4) points of interest in Pepeekeo.
	4/28/2016		Added fifteen (15) points of interest in Volcano.
	4/28/2016		Added twenty (20) points of interest in Waikoloa.
		04/26/16	
	4/26/2016		Added one (1) point of interest (Matsuyama Food Mart) in Kailua Kona.
		04/12/16	
	4/5/2016		Spatially corrected twenty-two (22) points of interest in Hilo.
	4/5/2016		Spatially corrected one (1) point of interest (Panda Express Makala Blvd) in Kailua Kona.
	4/5/2016		Corrected address to one (1) point of interest (Panda Express Makala Blvd) in Kailua Kona.
	4/5/2016		Deleted three (3) points of interest (Leungs Chop Suey House, McDonalds Restaurant Hilo, and New Star Restaurant) in Hilo.
	4/4/2016		Spatially corrected twenty-three (23) points of interest in Hilo.
Police Beats			
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines	4/27/2016		Added two (2) street segments of Waikoloa Rd in Waikoloa.
	4/27/2016		Split one (1) segment of Waikoloa Rd in Waikoloa.
	4/27/2016		Added twelve (12) street segments in Kamuela.
	4/27/2016		Split four (4) streets in Kamuela.
		04/26/16	
	4/26/2016		Spatially corrected eighteen (18) street segments in Kailua Kona.
	4/25/2016		Completed monthly update on street centerlines.
	4/25/2016		Spatially corrected six (6) street centerlines in Kailua Kona.
4/22/2016		Corrected range to three (3) street segments (one segment of Eleele PI and two segments of Laakea Way) in Waikoloa.	

# Hawaii County E9-1-1 Status Report

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## MAPPING LAYERS UPDATED (PART VIII)

*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 Delivered	Other/Remarks	
	Date Created/ Edits Performed			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Street Centerlines	4/21/2016		Corrected range to two (2) streets segments (Halolani St and Waiha Loop) in Kailua Kona.	
	4/21/2016		Added one (1) street segment of Waiha Loop in Kailua Kona.	
	4/21/2016		Added one (1) street segment of Mamaki Ln in Volcano.	
	4/21/2016		Split one (1) segment of Kilauea Rd in Volcano.	
	4/14/2016		Merged six (6) street segments in Captain Cook.	
	4/14/2016		Corrected range to one (1) segment of E Honalo Rd in Holualoa.	
	4/14/2016		Spatially corrected one (1) segment of E Honalo Rd in Holualoa.	
	4/14/2016		Split one (1) segment of Kuakini Hwy in Holualoa.	
	4/14/2016		Split one (1) segment of Kuakini Hwy in Keauhou.	
	4/14/2016		Corrected range to eleven (11) street segments in Honokaa.	
	4/14/2016		Spatially corrected five (5) street segments in Honokaa.	
	4/14/2016		Corrected range to two (2) segments of Old Mamalahoa Hwy in Honomu.	
	4/14/2016		Added one (1) street (Kamalani Rd) in Laupahoehoe.	
	4/14/2016		Split one (1) segment of Manowaiopae Homestead Rd in Laupahoehoe.	
	4/14/2016		Corrected range to two (2) segments of Milo St in Ookala.	
	4/14/2016		Spatially corrected five (5) street segments in Ookala.	
	4/14/2016		Deleted one (1) segment of D Rd in Captain Cook.	
	4/14/2016		Deleted one (1) segment of E Honalo Rd in Holualoa.	
		04/12/16		
		4/11/2016		Spatially corrected thirty-two (32) streets in Kailua Kona.
		4/11/2016		Spatially corrected twenty-five (25) streets in Waikoloa.
		4/8/2016		Spatially corrected forty-one (41) street segments in Waikoloa.
Subdivisions				
Tow Jurisdictions				
Tsunami Evacuation Zones				
Tsunami Heights				
Waste Water Plants				
WSP Cell Sectors	4/29/2016		Per VZW CRS	
	4/28/2016		Per ATT CRS	
		04/26/16		
	4/25/2016		Per VZW CRS	
	4/21/2016		Per VZW CRS	
	4/20/2016		Per VZW CRS	
	4/14/2016		Per ATT CRS	
		04/12/16		



# Hawaii County E9-1-1 Status Report

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## MAPPING LAYERS UPDATED (PART IX)

*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 Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
WSP Cell Towers	4/29/2016		Per VZW CRS
	4/28/2016		Per ATT CRS
		04/26/16	
	4/25/2016		Per VZW CRS
	4/21/2016		Per VZW CRS
	4/20/2016		Per VZW CRS
	4/14/2016		Per ATT CRS
		04/12/16	

## 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
4/29/2016	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Common Places, Street Centerlines and Milepost Markers.
4/26/2016	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Common Places, Street Centerlines and Milepost Markers.
4/12/2016	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Common Places and Street Centerlines.

## Hawaii County E9-1-1 Status Report

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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 **April 25, 2016**. Results are as follows:

HAWAII COUNTY	Address Points Layer	Street Centerlines Layer
New Addresses Added	147	
Addresses Removed	0	
Address Street Name Changes	1	
Address Street Number Changes	1	
New Street Segments Added		2
Street Segments Removed		0
Street Segment Range Changes		2
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.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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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.

1. 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.
  - a. 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.
  - d. 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 17<sup>th</sup>.
  - e. 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.
  - f. During the month of April 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.

# Hawaii County E9-1-1 Status Report

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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. Akimeka is currently awaiting the final NDA to be completed with Akimeka, Spillman Technologies, and the Hawaii Police Department. Once completed, there will be coordination for dates to meet with Spillman Technologies and Akimeka to begin GIS data configuration for the new CAD system.

## FIRE RESPONSE AREA REVIEW

Beginning in late February 2016 and continuing in March 2016, Akimeka reviewed the Hawaii County Fire Response Areas as part of an annual update as well as for preparation for the CAD system deployment. The Fire Response Areas layer contains information not contained within the Fire Beats and Fire Districts in regards to station run order as well as a higher level of boundary divisions, making it a highly robust layer that will play an integral role in the CAD system and routing of first responders.

1. To ensure that Hawaii County's new CAD system operates with full potential and with the most robust data possible, Akimeka reviewed the Fire Response Areas layer and made all necessary corrections to make it as accurate as possible.
  - a. During February and March 2016, Akimeka reviewed the Hawaii County Fire Response Areas. The boundaries to all fifty-two fire response areas were edited for greater accuracy to ensure that a high level of efficiency occurs in regards to the proper personnel being called upon as first responders for the various location and asset based situations.
  - b. During the month of March 2016, Akimeka corrected the boundaries to the GIS layers that are associated with the Fire Response Areas so that proper alignment would occur between the associated layers. This process also included correcting the street segments that were affected by the boundary updates so that potential confusion and discrepancies would be nonexistent.
  - c. During the month of April 2016, no activity took place with the Fire Response Areas layer.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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## MILE MARKER PROJECT

In March 2016, Hawaii County Fire Department requested Akimeka to furnish mile markers for the new section of Daniel K Inouye Highway (Route 200). Akimeka proceeded by performing the research necessary for obtaining precise coordinates of all new mile markers.

1. On March 16, 2016, Hawaii County Fire Department requested Akimeka to furnish mile markers for the new section of Daniel K Inouye Highway (Route 200), opened to the public since September 2013, so that mile markers would be both visible and query able to the dispatchers for both the new and old sections of the Highway.
  - a. Akimeka immediately began researching for any available updates to the mile markers and it was discovered that there was no current data available via Hawaii Department of Transportation's website or any other reputable organization's website.
  - b. On March 21, 2016, Akimeka contacted Hawaii Department of Transportation via email to inquire if there were any new mile markers in place for the new stretch of Route 200, and if so if we could acquire the necessary data from them to include in our current mile marker spatial dataset that we provide to the PSAPs. We also inquired if the mile markers for the old section of Route 200 were still in place, and if so if the old stretch of Route 200 had a different route number now, so that confusion would not arise between the mile markers of the new and old routes. In order to clarify and expedite our request for information, Akimeka created a map illustrating the new and old sections of Route 200 for Hawaii Department of Transportation's perusal.
  - c. As of March 28, 2016, Akimeka still had not heard back from Hawaii Department of Transportation regarding the request for updated mile marker information, so we proceeded to phone the organization to check on the status of our request. They informed us that they are processing the request and will get back to us with the information as soon as possible.
  - d. On April 21, 2016, Akimeka received a map from Hawaii Department of Transportation, detailing the location of the ten mile markers for the new section of Route 200. The new mile markers were then digitized into the necessary file format and incorporated into the Milepost Markers layer. This updated layer was delivered to MapFlex and made available to the dispatchers on April 26<sup>th</sup>.
  - e. On April 28, 2016, Akimeka received a request from Hawaii County Fire Department for the mile markers to be query able to the dispatchers in the same manner as the common places.
  - f. On April 28, 2016, Akimeka promptly proceeded with this request by first modifying the naming of fifty-seven of the mile markers in order to differentiate the mile markers of the new section of Route 200 from the mile markers of the old section of Route 200. Then forty-seven of the mile markers were assigned aliases to help ensure they would be located by dispatchers when queried since the name of those particular mile markers might be confused with their historical name. The five hundred nineteen mile markers were then incorporated into the Common Places layer to ensure that dispatchers would be able to correctly and efficiently query them from the spatial dataset.
  - g. On April 29, 2016, Akimeka performed an additional MapFlex deliverable, which included the Common Places and the Milepost Markers layers, thereby making the mile markers query able to the dispatchers. Detailed instructions were also given to the PSAPs on how to query the mile markers correctly so that time would not be wasted trying to figure it out during an emergency situation.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## WIRELESS ANNUAL AUDIT

During the month of February 2016, the wireless annual audit for Verizon was coordinated and completed as indicated in the Wireless Audit Chart. However during the audit process, it was identified that changes which had been sent through the CRS process for all WSPs were possibly not making their way back to the wireless FMCC database (responsible for information provided via the ALI).

1. On February 29, 2016, after completing the review of the Annual Audit for Verizon wireless Akimeka contacted West to discuss the reason why the annual audit synchronization has degraded in the match accuracy.
  - a. Note – The CRS process performed throughout the year for all WSPs deals with routine maintenance performed on the sites/sectors. The Annual Audit is intended to identify any possible gaps in that process and seeks reconciliation in an effort to re-synchronize the databases. If there are no missed CRSs throughout the year and the database match percentage decreases, then there are apparent issues.
2. On March 15, 2016, Akimeka and West held a conference call to discuss the matter. During the conversation it was identified that the changes sent back from Akimeka to West after accuracy validation, are processed into the FMCC. The issue that Akimeka is seeing when the Annual Audit is provided is resulting from a script West put in place in 2013 to output the CRSs into the approved format at that time.
  - a. The issue is that the format has changed over time due to new technology and more hexadecimal numbering of the wireless sectors. In order to accommodate those changes, Akimeka has developed a translation into an applicable format which the PSAPs are able to use. The format that West is providing each Annual Audit and CRS is overriding the changes within the FMCC, therefore give the appearance of not being synchronized in that process but are. This helps to explain why the wireless testing results are accurate, and the PSAPs are not experiencing a large number of discrepancies in the Mapping Systems when matched with the ALI.
3. Akimeka followed up with West on March 30, 2016, to see if West has re-scripted the format.
  - a. West replied that unfortunately it will require system development at West. Melissa Norton of West did mention that the particular system that needs to be changed is currently backlogged with a few large projects. She opened a Product Development Request at West but there is no ETA on the enhancement. In order to speed up the request, she is working to bundle the request with several other State's requests.
4. Akimeka will continue to follow up on the process to ensure the wireless databases are maintained accurately. With the big push by the WSPs for more LTE sites, which are having the impact on the hexadecimal numbering, Akimeka is hopeful that West can resolve this issue. The additional work involved to re-validate information takes a significant effort and allows for discrepancy. The Annual Audit is supposed to be a raw comparison to the condition of the data in both the FMCC and the GIS database provided in the Mapping Systems. Without both in its raw format, the comparison becomes unclear as to the real condition of the FMCC database.
5. Throughout the month of April 2016, Akimeka had been provided several TVWs by the WSPs for testing and most of the information was good for testing but there was an unusually high number of records that were either missing or were incorrect. Virtually all TVWs sent to Akimeka had some variety of discrepancy in them. This was only applicable to Verizon at the time and since the Annual Audit with Verizon had been completed, bringing the databases to 100% match rate, a reason for the mismatch in TVW information was perplexing. It certainly required more investigation into what was occurring.
6. On April 21, 2016, Akimeka was notified of yet another set of TVWs with issues and the WSP and West investigated their end and said everything was matching. Because the Annual Audit was completed, matching West and Akimeka databases, but yet the TVWs produced from the West database were not matching, something was highly unusual.
  - a. Later the same day, Akimeka provided an example of the discrepancy back to West detailing one of the records along a timeline. Information provided in the TVW matched with the record from 2015. Since that time, there were

## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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several updates, including the Annual Audit. This indicated that the TVWs being generated by West were not accurate and it also was indicating the Annual Audit sent back to West was not be uploaded. This is a major issue.

7. To confirm Akimeka's suspicion that the Annual Audit updates were not being uploaded by West into the FMCC, Akimeka followed up with implementation specialist at West, who the Audit was coordinated with.
  - a. West sent a reply on April 25, 2016, that the audit was not fully completed at West and they were in their final stages before sending changes to the database and on to Verizon. From West "there were a lot of changes that came from the audit which is where you may be seeing the discrepancies. Once Verizon has called in the hot cuts (changes), the data should match the audit sheet you sent".
  - b. This was confirmation that the audit was still not being processed fully by West after 2 months and that the issues with mismatched information in the TVWs were as a result of this.

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### REQUEST FOR 9-1-1 JURISDICTIONAL BOUNDARIES

On March 17, 2016, West had requested information for each of the PSAPs in the State of Hawaii, with the exception of the Honolulu Police Department and Regional Dispatch Center. Akimeka has followed up with West to see if the Honolulu Police Department PSAP was supposed to be included in this request.

1. On March 17, 2016, West requested that each PSAP fill out an attached questionnaire and to provide the PSAP Jurisdictional Boundaries (to include VoIP, Wireless, Text, and Alarms).
2. Akimeka prepared the boundaries of each of the PSAP Jurisdictional Boundaries which included all requested attribution. Given the geography of the Hawaiian Islands, and the operational responses of each PSAP which includes ocean responses, Akimeka included a buffer for each of the PSAP Boundaries that extend into the ocean. This reflects the true nature of the PSAP Jurisdictional Boundary response area and also covers the distance over water which can account for possible Lat/Longs provided during a Text-to-911 call to the PSAP. Since the system is intended to use the location information to determine routing, inclusion of the water area into the PSAP polygons was a more accurate approach.
3. On March 23, 2016, the Akimeka GIS Manager notified West that this information was ready and requested a secure method of transferring the data. Throughout the remainder of March 2016, there was no reply from West.
4. On April 19, 2016, West followed back up with the Akimeka GIS Manager. The West employee was unfamiliar with using an ftp site and was going to touch base with her supervisors to find a more secure manner of transferring the data. Throughout the remainder of April 2016, Akimeka did not hear back.

## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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### MAPFLEX SYSTEM

During the month of April 2016, the MapFlex system performed without any issues and deliverables continued on schedule.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, Intrado, 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 April 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in April 2016
  - a. **Hawaii County** – April 12<sup>th</sup> and April 26<sup>th</sup>
  - b. **Maui County** – April 13<sup>th</sup> and April 27<sup>th</sup>
  - c. **Kauai County** – April 14<sup>th</sup> and April 28<sup>th</sup>
  - d. **Honolulu** – April 1<sup>st</sup>, April 15<sup>th</sup> and April 29<sup>th</sup>



## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

### 4. SERVICE REQUESTS TRANSACTIONS

#### OPEN SERVICE REQUESTS – APRIL 2016

#	Date	Ticket #	Description	PSAP	Urgency	Comments
1	08/19/14	716	Updated Address	FIRE	Normal	TN has been referred to telco via email by West Safety Services (Intrado). RMS
2	04/28/16	844	Updated Address	FIRE	Normal	TN has been referred to telco via email by West Safety Services (Intrado). RMS

Note\* There are two (2) opened service request pending for April 2016.

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

HAWAII COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2016	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		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
May									
June									
July									
August									
September									
October									
November									
December									
<b>TOTAL</b>	<b>18</b>	<b>19</b>	<b>2</b>	<b>16</b>	<b>15</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>

**Note:**

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

<b>Definitions:</b>	Category	Description
	Wireline	Telephone Number (ALI) Discrepancies from land line phones that have been submitted to West Safety Services (Intrado) 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

## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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### 5. E9-1-1 DATABASE SYNCHRONIZATION

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

## Next Scheduled Database Synchronization is May 2016

AUDIT SUMMARY RESULTS – MAY 2016 -- TBA

AUDIT SUMMARY RESULTS – CONTINUED

AUDIT SUMMARY RESULTS COMPARISON – MAY 1, 2016 VS FEBRUARY 1, 2016 -- TBA

AUDIT SUMMARY RESULTS -- TBA

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

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA

# Maui County E9-1-1 Status Report

*April 1, 2016 – April 30, 2016*



**AKIMEKA** | HIGH PRIORITY. HIGH IMPACT.

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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# Maui County E9-1-1 Status Report

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## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME MAUI PSAP – APRIL 2016

(Source: West Safety Services (Intrado) Viper system)

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

9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
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%

### CALL VOLUME MAUI PSAP NOTES:

\*Calls with no Ali 0.17% - Statewide average = 0.18% Year 2015

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

# Maui County E9-1-1 Status Report

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9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	11,627	2,130	18.32%	7,796	67.05%	60.31%	39.69%	334	2.87%	19	0.16%	0	0.00%	1,348	11.59%	0	0.00%
FEB	9,968	1,941	19.47%	6,639	66.60%	56.64%	43.36%	263	2.64%	7	0.07%	0	0.00%	1,118	11.22%	0	0.00%
MAR	11,240	2,216	19.72%	7,452	66.30%	57.11%	42.89%	262	2.33%	12	0.11%	0	0.00%	1,298	11.55%	0	0.00%
APR	11,162	2,180	19.53%	7,376	66.08%	57.57%	42.43%	249	2.23%	19	0.17%	0	0.00%	1,338	11.99%	0	0.00%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	43,997	8,467		29,263				1,108		57		0		5,102		0	
MON AVG	10,999	2,117	19.26%	7,316	66.51%	57.91%	42.09%	277	2.52%	14	0.13%	0	0.00%	1,276	11.59%	0.00	0.00%

## 9-1-1 CALL VOLUME MOLOKAI PSAP – APRIL 2016

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
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%

## CALL VOLUME MOLOKAI PSAP NOTES:

\*Calls with no Ali 0.46% - Statewide average = 0.18% Year 2015

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

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	371	109	29.38%	210	56.60%	58.57%	41.43%	6	1.62%	2	0.54%	0	0.00%	44	11.86%	0	0.00%
FEB	337	126	37.39%	178	52.82%	54.49%	45.51%	3	0.89%	2	0.59%	0	0.00%	28	8.31%	0	0.00%
MAR	355	106	29.86%	205	57.75%	45.85%	54.15%	3	0.85%	2	0.56%	0	0.00%	39	10.99%	0	0.00%
APR	435	153	35.17%	232	53.33%	51.29%	48.71%	1	0.23%	2	0.46%	0	0.00%	47	10.80%	0	0.00%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	1,498	494		825				13		8		0		158		0	
MON AVG	375	124	32.95%	206	55.13%	52.55%	47.45%	3.25	0.90%	2	0.54%	0	0.00%	39.5	10.49%	0	0.00%

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

9-1-1 Call Volume																	
MAUI COUNTY PSAPS		Wireline		Wireless				VOIP Calls		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
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%

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



# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	11,998	2,239	18.66%	8,006	66.73%	60.27%	39.73%	340	2.83%	21	0.18%	0	0.00%	1,392	11.60%	0	0.00%
FEB	10,305	2,067	20.06%	6,817	66.15%	56.58%	43.42%	266	2.58%	9	0.09%	0	0.00%	1,146	11.12%	0	0.00%
MAR	11,595	2,322	20.03%	7,657	66.04%	56.81%	43.19%	265	2.29%	14	0.12%	0	0.00%	1,337	11.53%	0	0.00%
APR	11,597	2,333	20.12%	7,608	65.60%	57.37%	42.63%	250	2.16%	21	0.18%	0	0.00%	1,385	11.94%	0	0.00%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	45,495	8,961		30,088				1,121		65		0		5,260		0	
MON AVG	11,374	2,240	19.72%	7,522	66.13%	57.76%	42.24%	280	2.46%	16	0.14%	0.00	0.00%	1,315	11.55%	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 911 calls made from the Viper System.

## TEXT TO 911 – CURRENT MONTH – APRIL 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.

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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		
June		
July		
August		
September		
October		
November		
December		
YTD	51	7
Monthly Avg.	12.75	1.8

### WIRELESS PSAP TESTING – APRIL 2016

MAUI COUNTY - APRIL 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
4/12/2016	Verizon	1	1	Molokai PSAP	Pass	Molokai LTE

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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### NOTES:

- There was one (1) scheduled Wireless test conducted in April, 2016 for the Maui and Molokai PSAPs.

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – APRIL 2016

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
2016		MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	
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									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	535	60	474	0	1				1,396
AVG PER MONTH	134	8	167	0	1				173

### Definitions

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

MSAG CURRENT MONTH NOTES:

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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A total of **132** MSAG transactions were processed in 9-1-1 Net during the month of April 2016. Twenty-five (**25**) 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 **895** customer ANI/ALI (telephone number/address) records updated as a direct result.

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

**107** 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 Intrado on the TN CRs that have been submitted for correction. In April 2016, there were 248 TN CRs completed and as a result, four (4) ESN 399 street records were deleted from the MSAG database.

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### OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are 1,795 Open TN CR Transactions as of April 30, 2016.**
- **Refer to chart in the next section “TNCR Current Status”**

**1,732** Open TN CR transactions are a direct result of the ESN 399 clean-up and are awaiting approval from Hawaiian Telcom, Inc. **63** 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 Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado'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 April 30, 2016**
- **There are no VoIP DRs Open as of April 30, 2016**

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

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 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 (Intrado) for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
County	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
MAUI	1,395	107	79	1,209
MOLOKAI	400	17	11	372
TOTAL	1,795	124	90	1,581

STATUS
<b><u>TOTAL TNCRS SUBMITTED</u></b> - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.
<b><u>PENDING STATUS</u></b> - 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.
<b><u>REFERRED STATUS</u></b> - 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 (Intrado) Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<b><u>TOTAL UNOPENED TNCR RECORDS STATUS</u></b> - The request is submitted by Akimeka on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.

DISPATCHABLE LOCATION – STATUS AS OF – APRIL 2016 - PENDING

### NARRATIVE:

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

During the August 2015 State of Hawaii 911 Board meeting, Akimeka provided a “State of Hawaii PSAPs Proposed ALI Compliance 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. In September, the Dispatchable Location transactions have been temporarily stopped. Transactions have not been updated in 9-1-1 Net pending research by Hawaiian Tel and West Safety Services (Intrado) for providing an additional 60 character field in the ALI data stream to accommodate Dispatchable Location information as an alternative to using the “Driving Directions” field. Until this field is created, no further Dispatchable Location transactions will be submitted. There are currently 498 transactions prepared for submission. No further developments as of April 2016.

Dispatchable Location					
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Prepared	Number of TNCR* Transactions Submitted	Number of Transactions Processed**
Queen Kaahumanu Center	Carryover from 2015	2015		368	299
		Jan		0	0
		Feb		0	0
Lahaina Outlets	900 Front St, Lahaina	Mar	155	0	6
Maui Mall	70 E Kaahumanu Ave, Kahului		88	0	
Shops at Wailea	3750 Wailea Alanui Dr, Wailea	Apr	255	0	0
		Total	498	368	305

\*project currently on hold by West Safety Services (Intrado)/Hawaiian Telcom.

Definition
<b>Dispatchable Location</b> 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.
<b>TNCR*</b> Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location in the Exact field on the ALI Screen.
<b>Processed**</b> may include inactive telephone numbers that were removed from the ALI Database.

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – APRIL 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 E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY				
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks	
	Date Created/ Edits Performed			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Address Points		04/27/16		
	4/26/2016		Changed Location Name of one (1) address in Kihei	
	4/26/2016		Added one (1) address in Kula	
	4/26/2016		Added two (2) addresses in Wailuku	
	4/26/2016		Spatially corrected five (5) address points in Wailuku	
	4/21/2016		Added four (4) addresses in Lahaina	
	4/21/2016		Added one (1) address in Kualapuu	
	4/20/2016		Spatially corrected ninety-three (93) address points in Wailea	
	4/19/2016		Added three (3) addresses in Hana	
	4/19/2016		Spatially corrected three (3) address points in Hana	
	4/19/2016		Added two (2) addresses in Pukoo	
	4/19/2016		Spatially corrected one (1) address point in Pukoo	
	4/18/2016		Spatially corrected two (2) address points in Kihei	
	4/15/2016		Added one (1) address in Wailuku	
	4/15/2016		Spatially corrected one hundred eighty-five (185) address points in Wailuku	
		04/13/16		
		4/13/2016		Changed Street Name for one (1) Mile Marker address in Kahului
		4/12/2016		Added one (1) address in Hana
		4/12/2016		Added two (2) addresses in Kahului
		4/12/2016		Added one (1) address in Makawao
		4/12/2016		Spatially corrected four (4) address points in Makawao
		4/11/2016		Corrected Location Name for one (1) address in Haiku
		4/11/2016		Corrected Location Name for one (1) address in Kaanapali
		4/11/2016		Corrected Location Name for two (2) addresses in Kahului
		4/11/2016		Corrected Location Name for three (3) addresses in Kaunakakai
		4/11/2016		Corrected Location Name for one (1) address in Kihei
		4/11/2016		Corrected Location Name for one (1) address in Kula
		4/11/2016		Corrected Location Name for three (3) addresses in Lanai
		4/11/2016		Spatially corrected one (1) address point in Lanai
		4/11/2016		Spatially corrected four (4) address points in Kahului
		4/11/2016		Spatially corrected one (1) address point in Kihei
		4/11/2016		Corrected Location Name for one (1) address in Maalaea
		4/11/2016		Corrected Location Name for six (6) addresses in Haiku
		4/8/2016		Changed one (1) address in Lahaina

## MAPPING LAYERS UPDATED (PART II)

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



# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/8/2016		Added two (1) addresses in Kaunakakai
	4/8/2016		Spatially corrected twenty-three (23) address points in Kihei
	4/7/2016		Added one (1) address in Kapalua
	4/7/2016		Added one (1) address in Kaunakakai
	4/7/2016		Added one (1) address in Kihei
	4/7/2016		Corrected Location Name for one (1) address in Lahaina
	4/7/2016		Changed one (1) address in Spreckelsville
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN			
Fire Beats			
Fire Districts			
Fire Response Areas			
Fire Stations			
Food & Beverage			
Gas Stations			
Gate Codes			
Government Buildings			
Harbors			
Helipads			
Hiking Trails			
Hospitals			
Hydrants			
Hyrdology Layers			

## MAPPING LAYERS UPDATED (PART III)

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

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Incident Response Areas			
Lodging			
Major Roads			
Medic Beats			
Medic Districts			
Medic Response Areas			
Medic Stations			
Medical Facilities			
Milepost Markers			
MSAG Communities			
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
Points of Interest		04/27/16	
	4/26/2016		Updated two (2) POI addresses in Lahaina
	4/26/2016		Added twenty-eight (28) POI in Lahaina
	4/26/2016		Spatially corrected one (1) POI in Lahaina
		04/13/16	
Police Beats			
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines		04/27/16	
	4/26/2016		Modified one (1) street centerline range segment in Wailuku
	4/22/2016		Spatially corrected twelve (12) street centerline segments in Wailea
	4/21/2016		Modified range for one (1) street centerline segment in Kualapuu
	4/21/2016		Spatially corrected seven (7) street centerline segments in Wailea
	4/20/2016		Spatially corrected seventeen (17) street centerline segments in Wailea
	4/19/2016		Spatially corrected eighteen (18) street centerline segments in Kihei

## MAPPING LAYERS UPDATED (PART IV)

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

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Street Centerlines	4/18/2016		Spatially corrected thirteen (13) street centerline segments in Kihei
		04/13/16	
	4/12/2016		Modified one (1) street centerline range in Kahului
	4/12/2016		Spatially corrected sixteen (16) street centerline segments in Kihei
	4/11/2016		Spatially corrected thirty (30) street centerline segments in Kihei
	4/8/2016		Spatially corrected nine (9) street centerline segments in Kihei
	4/7/2016		Spatially corrected three (3) street centerline segments in Kihei
	4/7/2016		Modified one (1) street centerline range segment in Lanai
	4/7/2016		Modified two (2) street centerline range segments in Spreckelsville
	4/7/2016		Per Maui Dispatch removed Alias Name from four (4) street centerline segments in Wailuku
	4/4/2016		Changed one (1) street name in Kahului
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors	4/29/2016		Per VZW CRS
		04/27/16	
	4/25/2016		Per VZW CRS
	4/14/2016		Per ATT CRS
		04/13/16	
WSP Cell Towers	4/29/2016		Per VZW CRS
	4/25/2016		Per VZW CRS
	4/14/2016		Per ATT CRS
		04/13/16	

## 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

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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

Date	Key Activities/Updates
4/27/2016	Delivered the following data for an Intergraph CAD map update: Maui Cell Coverage .csv, .str, .rte and .map which included updated Address Points, Common Places Lookup Table, Points of Interest, Rescue Tubes, Street Centerlines and WSP Cell Towers
4/26/2016	Prepared Address Points, Street Centerlines, Points of Interest, Rescue Tubes, WSP Cell Towers, Common Places Look Up table for Intergraph deliverable. Rescue Tubes is a new layer so additional work had to be done. Also deleted duplicate street labels and moved street labels that overlapped other features. This is an ongoing process.
4/13/2016	Prepared and Delivered the following data for an Intergraph CAD map update: Maui Cell Coverage .csv, .str, .rte and .map which included updated Address Points, Common Lookup Table, Street Centerlines and WSP Cell Towers
4/13/2016	Prepared and Delivered the following data for a MapFlex update: Address Points, Street Centerlines, WSP Cell Sectors and WSP Cell Towers

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INTERGRAPH CAD UPGRADE

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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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 April 13, 2016, the following data was delivered for an Intergraph CAD Map update:
  - a. Address Points, Common Places Lookup Table, Street Centerlines and WSP Cell Towers.
  - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
2. Akimeka delivered an updated Intergraph CAD map on April 27, 2016 which included:
  - a. Address Points, Common Places Lookup Table, Rescue Tubes, Street Centerlines and WSP Cell Towers.
  - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
3. Throughout April, Street Centerline labels were added for new centerlines and overlapping and duplicate street labels were deleted. This is an ongoing process.
4. A Rescue Tubes layer was added to the Intergraph CAD map as requested by Maui Dispatch. These tubes are in the Lahaina/Kaanapali area. Additional setup work was done including labeling and symbology.

During May 2016, the Intergraph CAD map will continue to be delivered on a bi-monthly basis, which has been coordinated with all mapping system updates and synchronizations with other 911 databases.

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### MAPFLEX SYSTEM

During the month of April 2016, the MapFlex system performed without any issues and deliverables continued on schedule.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, Intrado, 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 April 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in April 2016
  - a. **Hawaii County** – April 12<sup>th</sup> and April 26<sup>th</sup>
  - b. **Maui County** – April 13<sup>th</sup> and April 27<sup>th</sup>
  - c. **Kauai County** – April 14<sup>th</sup> and April 28<sup>th</sup>
  - d. **Honolulu** – April 1<sup>st</sup>, April 15<sup>th</sup> and April 29<sup>th</sup>

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### WIRELESS ANNUAL AUDIT

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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During the month of February 2016, the wireless annual audit for Verizon was coordinated and completed as indicated in the Wireless Audit Chart. However during the audit process, it was identified that changes which had been sent through the CRS process for all WSPs were possibly not making their way back to the wireless FMCC database (responsible for information provided via the ALI).

1. On February 29, 2016, after completing the review of the Annual Audit for Verizon wireless Akimeka contacted West to discuss the reason why the annual audit synchronization has degraded in the match accuracy.
  - a. Note – The CRS process performed throughout the year for all WSPs deals with routine maintenance performed on the sites/sectors. The Annual Audit is intended to identify any possible gaps in that process and seeks reconciliation in an effort to re-synchronize the databases. If there are no missed CRSs throughout the year and the database match percentage decreases, then there are apparent issues.
2. On March 15, 2016, Akimeka and West held a conference call to discuss the matter. During the conversation it was identified that the changes sent back from Akimeka to West after accuracy validation, are processed into the FMCC. The issue that Akimeka is seeing when the Annual Audit is provided is resulting from a script West put in place in 2013 to output the CRSs into the approved format at that time.
  - a. The issue is that the format has changed over time due to new technology and more hexadecimal numbering of the wireless sectors. In order to accommodate those changes, Akimeka has developed a translation into an applicable format which the PSAPs are able to use. The format that West is providing each Annual Audit and CRS is overriding the changes within the FMCC, therefore give the appearance of not being synchronized in that process but are. This helps to explain why the wireless testing results are accurate, and the PSAPs are not experiencing a large number of discrepancies in the Mapping Systems when matched with the ALI.
3. Akimeka followed up with West on March 30, 2016, to see if West has re-scripted the format.
  - a. West replied that unfortunately it will require system development at West. Melissa Norton of West did mention that the particular system that needs to be changed is currently backlogged with a few large projects. She opened a Product Development Request at West but there is no ETA on the enhancement. In order to speed up the request, she is working to bundle the request with several other State's requests.
4. Akimeka will continue to follow up on the process to ensure the wireless databases are maintained accurately. With the big push by the WSPs for more LTE sites, which are having the impact on the hexadecimal numbering, Akimeka is hopeful that West can resolve this issue. The additional work involved to re-validate information takes a significant effort and allows for discrepancy. The Annual Audit is supposed to be a raw comparison to the condition of the data in both the FMCC and the GIS database provided in the Mapping Systems. Without both in its raw format, the comparison becomes unclear as to the real condition of the FMCC database.
5. Throughout the month of April 2016, Akimeka had been provided several TVWs by the WSPs for testing and most of the information was good for testing but there was an unusually high number of records that were either missing or were incorrect. Virtually all TVWs sent to Akimeka had some variety of discrepancy in them. This was only applicable to Verizon at the time and since the Annual Audit with Verizon had been completed, bringing the databases to 100% match rate, a reason for the mismatch in TVW information was perplexing. It certainly required more investigation into what was occurring.
6. On April 21, 2016, Akimeka was notified of yet another set of TVWs with issues and the WSP and West investigated their end and said everything was matching. Because the Annual Audit was completed, matching West and Akimeka databases, but yet the TVWs produced from the West database were not matching, something was highly unusual.
  - a. Later the same day, Akimeka provided an example of the discrepancy back to West detailing one of the records along a timeline. Information provided in the TVW matched with the record from 2015. Since that time, there were several updates, including the Annual Audit. This indicated that the TVWs being generated by West were not accurate and it also was indicating the Annual Audit sent back to West was not be uploaded. This is a major issue.

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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7. To confirm Akimeka's suspicion that the Annual Audit updates were not being uploaded by West into the FMCC, Akimeka followed up with implementation specialist at West, who the Audit was coordinated with.
  - a. West sent a reply on April 25, 2016, that the audit was not fully completed at West and they were in their final stages before sending changes to the database and on to Verizon. From West "there were a lot of changes that came from the audit which is where you may be seeing the discrepancies. Once Verizon has called in the hot cuts (changes), the data should match the audit sheet you sent".
  - b. This was confirmation that the audit was still not being processed fully by West after 2 months and that the issues with mismatched information in the TVWs were as a result of this.

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### REQUEST FOR 9-1-1 JURISDICTIONAL BOUNDARIES

On March 17, 2016, West had requested information for each of the PSAPs in the State of Hawaii, with the exception of the Honolulu Police Department and Regional Dispatch Center. Akimeka has followed up with West to see if the Honolulu Police Department PSAP was supposed to be included in this request.

1. On March 17, 2016, West requested that each PSAP fill out an attached questionnaire and to provide the PSAP Jurisdictional Boundaries (to include VoIP, Wireless, Text, and Alarms).
2. Akimeka prepared the boundaries of each of the PSAP Jurisdictional Boundaries which included all requested attribution. Given the geography of the Hawaiian Islands, and the operational responses of each PSAP which includes ocean responses, Akimeka included a buffer for each of the PSAP Boundaries that extend into the ocean. This reflects the true nature of the PSAP Jurisdictional Boundary response area and also covers the distance over water which can account for possible Lat/Longs provided during a Text-to-911 call to the PSAP. Since the system is intended to use the location information to determine routing, inclusion of the water area into the PSAP polygons was a more accurate approach.
3. On March 23, 2016, the Akimeka GIS Manager notified West that this information was ready and requested a secure method of transferring the data. Throughout the remainder of March 2016, there was no reply from West.
4. On April 19, 2016, West followed back up with the Akimeka GIS Manager. The West employee was unfamiliar with using an ftp site and was going to touch base with her supervisors to find a more secure manner of transferring the data. Throughout the remainder of April 2016, Akimeka did not hear back.

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### MAPFLEX SYSTEM ISSUE

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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During the month of March 2016, there were some identified addresses not present within the MapFlex system. Throughout the month of March, Akimeka and MPD worked closely to identify what data is the most current in the system and when the updated GIS data will be available in the MapFlex. Akimeka coordinated several times with West (formerly Intrado) to correct the issue.

1. On April 6<sup>th</sup>, 2016, Akimeka was contacted by West. West identified that there was a blockage from the deliverable sent because the delivery file had an extra space in the name. However, after the system was cleared, a blockage acquired again because the delivery file was incorrectly named.
2. On April 19<sup>th</sup>, Akimeka sent new addresses that were part of the April 13<sup>th</sup> delivery for Maui Dispatch to test. As of this report, Maui Dispatch has not responded.

As a result of the continued coordination with West through April with no resolution to date, Akimeka escalated the situation and MPD is expecting for the discrepancy to be resolved early on in May 2016. Akimeka will continue to upload on an out of schedule basis as needed in order to ensure MPD is receiving GIS updates into the MapFlex system.

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### RESCUE TUBES

On April 18<sup>th</sup>, 2016 Akimeka created a Rescue Tubes layer as requested by the Maui Police Dispatch Center. The data was provided by Kaanapali Operations Association. The data provided included Rescue Tube number, latitude and longitude and a physical location for each tube. There are twenty-seven rescue tube locations in the Lahaina and Kaanapali area. This layer was included in the Intergraph CAD map with the April 27<sup>th</sup>, 2016 deliverable.

## 4. SERVICE REQUESTS TRANSACTIONS



# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - APRIL 2016

MAUI COUNTY						
#	Date	Ticket #	Description	PSAP	Urgency	Comments
			NONE			

### NOTE:

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

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

MAUI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2016	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2015 Carryover*			0						
January	1	1	0	0	0	0	0	1	1
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	1	1	0	1	1	0	0	0	0
May									
June									
July									
August									
September									
October									
November									
December									
<b>TOTAL</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

### Note:

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

Definitions:	Category	Description
	Wireline	Telephone Number (ALI) Discrepancies from land line phones that have been submitted to West Safety Services (Intrado) 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

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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

### Next Scheduled Database Synchronization is June 2016

AUDIT SUMMARY RESULTS – 2015-2016 -- TBA

MSAG AUDIT SUMMARY RESULTS – JUNE 1, 2016 - MARCH 1, 2016 -- TBA

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

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA

# Kauai County E9-1-1 Status Report

*April 1, 2016 – April 30, 2016*



**AKIMEKA** | HIGH PRIORITY, HIGH IMPACT.

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME – APRIL 2016

(Source: West Safety Services (Intrado) Viper system)

9-1-1 Call Volume																	
KAUAI 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
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%

### 9-1-1 CALL VOLUME – CALENDAR YEAR 2016

9-1-1 Call Volume																	
KAUAI 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																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	17,456	2,661		11,436				533		53		0		2,773		0	
MON AVG	4,364	665	15.23%	2,859	65.53%	46.52%	53.48%	133	3.06%	13	0.30%	0	0.00%	693	15.88%	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 0.27% - Statewide average = 0.18% Year 2015

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### TEXT TO 911 – CURRENT MONTH – APRIL 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.

TEXT TO 911 Kauai County	
Month	Total received
January	23
February	11
March	22
April	4
May	
June	
July	
August	
September	
October	
November	
December	
YTD	60
Monthly Avg.	15.0

### WIRELESS PSAP TESTING – APRIL 2016

KAUAI COUNTY - APRIL 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
4/12/2016	Verizon	2	6	Kauai PSAP	5 pass/1 fail	LTE/AWS technology
4/13/16	Verizon	4	8	Kauai PSAP	Pass	LTE/AWS technology

#### NOTES:

- There were two (2) scheduled Wireless 911 tests for the month of April, 2106.

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

### MSAG TRANSACTIONS CURRENT MONTH/YEAR – APRIL 2016

KAUAI COUNTY	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
MSAG (A)		TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR		
2016									
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									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	152	96	56	0	0				158
AVG PER MONTH	38	24	14	0	0				40

### Definitions

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

(B) **Telephone Number Change Request** - Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 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.



## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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### MSAG CURRENT MONTH NOTES:

A total of twenty-five (25) MSAG transactions were processed in 9-1-1 Net during the month of April 2016. Twenty-one (21) 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 19 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 Intrado on the TN CRs that have been submitted for correction. In April 2016, there were 2 TN CRs completed, however no ESN 499 street records were deleted from the MSAG database.

### OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are 234 Open TN CR Transactions as of April 30, 2016.**
- **Please refer to “TNCR Current Status” chart in the next section.**

172 Open TN CR transactions are a direct result of the ESN 499 clean-up and are awaiting approval from Hawaiian Telcom, Inc. 62 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 Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado'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 April 30, 2016**
- **There are no Open VoIP DRs as of April 30, 2016**

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – APRIL, 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 (Intrado) for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
KAUAI	234	31	53	150

STATUS
<b><u>TOTAL TNCRs SUBMITTED</u></b> - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.
<b><u>PENDING STATUS</u></b> - 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.
<b><u>REFERRED STATUS</u></b> - 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 (Intrado) Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<b><u>TOTAL UNOPENED TNCR RECORDS STATUS</u></b> - 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.

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## DISPATCHABLE LOCATION – STATUS AS OF – APRIL 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. Sixty two (62) Telephone Number Change Requests (TN CR) transactions were processed as a result of the Dispatchable Location Project. These transactions have not been updated in 9-1-1 Net pending research by Hawaiian Tel and West Safety Services (Intrado) for providing an additional 60 character field in the ALI data stream to accommodate Dispatchable Location information as an alternative to using the “Driving Directions” field. Until this field is created, no further Dispatchable Location transactions will be submitted. During the months of November, December, and January 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 830 telephone records are complete and ready for submittal, however there were no further developments as of April 2016 to proceed.

Dispatchable Location					
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Prepared	Number of TNCR* Transactions Submitted	Number of Transactions Processed**
	2015 Carryover	2015	286	62	0
Ching Young Shopping Center	505190 Kuhio Hwy, Hanalei	Jan	84		
Eleele Shopping Center	4469 Waialo Rd, Port Allen		77		
Hanalei Center	505161 Kuhio Hwy, Hanalei		46		
Princeville Center	504280 Kuhio Hwy, Princeville	Feb	181		
Alii Kai Resort	3830 Edward Rd, Princeville	Mar	37		
Sealodge	3700 Kamehameha Rd, Princeville		48		
Nihi Kai Villas	1870 Hoone Rd, Poipu		71		
		Apr	0		
		Total	830	62	0

\*project currently on hold by West Safety Services (Intrado)/Hawaiian Telcom.

Definition
<b>Dispatchable Location</b> 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.
<b>TNCR*</b> Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location in the Exact field on the ALI Screen.
<b>Processed**</b> may include inactive telephone numbers that were removed from the ALI Database.

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – APRIL 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
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points		04/28/16	
	4/27/2016		Added two (2) addresses in Mana
	4/27/2016		Spatially corrected fifty-two (52) address points in Mana
	4/27/2016		Updated fifty-two (52) addresses in Mana
	4/25/2016		Added one (1) address in Kalihiwai
	4/25/2016		Added five (5) address points in Mana
	4/25/2016		Updated twenty-two (22) addresses in Mana
	4/25/2016		Spatially corrected twenty-two (22) address points in Mana
	4/25/2016		Added fifty-one (51) addresses in Poipu
		04/13/16	
	4/6/2016		Added five (5) addresses in Mana
	4/6/2016		Updated sixty-nine (69) addresses in Mana
	4/6/2016		Spatially corrected sixty-six (66) address points in Mana
	4/5/2016		Added fifteen (15) addresses in Mana
	4/5/2016		Spatially corrected thirty-six (36) address points in Mana
	4/5/2016		Updated thirty-six (36) addresses in Mana
	4/4/2016		Added eight (8) addresses in Mana
	4/4/2016		Spatially corrected two (2) address points in Mana
	4/4/2016		Updated two (2) addresses in Mana
	4/1/2016		Added one (1) address in Mana using data from NEMAP
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN			
Fire Beats			

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Fire Districts			
Fire Response Areas			
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			
Points of Interest			
Police Beats			
Police Districts			
Police Response Areas			

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Police Stations			
Post Offices			
Schools			
Street Centerlines		04/28/16	
	4/27/2016		Spatially corrected six (6) street centerline segments in Mana
	4/27/2016		Updated Name of one (1) street centerline segment in Mana
	4/25/2016		Added three (3) street centerline segments in Mana
	4/25/2016		Modified four (4) street centerline range segments in Mana
		04/13/16	
	4/6/2016		Modified eight (8) street centerline segment ranges in Mana
	4/6/2016		Changed the Name of one (1) street centerline segment in Mana
	4/5/2016		Modified eight (8) street centerline segment ranges in Mana
	4/5/2016		Added one (1) street centerline in Mana
	4/5/2016		Changed Street Name for nine (9) street centerline segments in Mana
	4/5/2016		Spatially corrected one (1) street centerline segment in Mana
	4/4/2016		Spatially corrected four (4) street centerline segments in Mana
	4/4/2016		Added one (1) street centerline segment in Mana
	4/4/2016		Modified range for two (2) street centerline segment ranges in Mana
	4/4/2016		Changed one (1) street centerline segment name in Mana
	4/1/2016		Updated nine (9) addresses in Mana using data from NEMAP
	4/1/2016		Modified one (1) street centerline range in Mana
	4/1/2016		Changed one (1) street centerline segment name in Mana
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors	4/29/2016		Per VZW CRS
		04/28/16	
	4/28/2016		Per VZW CRS
		04/13/16	
WSP Cell Towers	4/29/2016		Per VZW CRS
		04/28/16	
	4/28/2016		Per VZW CRS
		04/13/16	

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### NOTE:

- 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
4/28/2016	Prepared and delivered Address Points, Street Centerlines, WSP Cell Sectors and WSP Cell Towers for a MapFlex update
4/28/2016	Prepared and delivered Address Points, Street Centerlines, WSP Cell Sectors, WSP Cell Towers and GEO.xml file for a GeoComm update
4/13/2016	Prepared and delivered updated Address Points, Street Centerlines, WSP Cell Sectors and WSP Cell Towers for MapFlex
4/13/2016	Prepared and delivered updated Address Points, Street Centerlines, WSP Cell Sectors, WSP Cell Towers and GEO xml for GeoComm

#### GPS DATA COLLECTION AND SITE VERIFICATION

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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During the month of April 2016, there were no scheduled GPS data collection and site verifications required. Data capture will continue to be coordinated on an as needed basis.

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### MAPFLEX SYSTEM

During the month of April 2016, the MapFlex system performed without any issues and deliverables continued on schedule.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, Intrado, 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 April 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in April 2016
  - a. **Hawaii County** – April 12<sup>th</sup> and April 26<sup>th</sup>
  - b. **Maui County** – April 13<sup>th</sup> and April 27<sup>th</sup>
  - c. **Kauai County** – April 14<sup>th</sup> and April 28<sup>th</sup>
  - d. **Honolulu** – April 1<sup>st</sup>, April 15<sup>th</sup> and April 29<sup>th</sup>

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### PMRF PROJECT

Beginning on April 1, 2016, Akimeka will be kicking off a project to incorporate new data provided by the Navy from the Navy Emergency Management Addressing Project (NEMAP) on the Pacific Missile Range Facility (PMRF). These changes to the PMRF in Mana will include Address Points and Street Centerline range changes that will be translated into a more accurate application for the Kauai Police Department.

The PMRF updates will be tracked and recorded in April's MSR as this will be an ongoing project until all updates are incorporated. In addition, any subsequent changes to the MSAG database will also be coordinate by Akimeka's MSAG Coordinators.

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### WIRELESS ANNUAL AUDIT



# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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During the month of February 2016, the wireless annual audit for Verizon was coordinated and completed as indicated in the Wireless Audit Chart. However during the audit process, it was identified that changes which had been sent through the CRS process for all WSPs were possibly not making their way back to the wireless FMCC database (responsible for information provided via the ALI).

1. On February 29, 2016, after completing the review of the Annual Audit for Verizon wireless Akimeka contacted West to discuss the reason why the annual audit synchronization has degraded in the match accuracy.
  - a. Note – The CRS process performed throughout the year for all WSPs deals with routine maintenance performed on the sites/sectors. The Annual Audit is intended to identify any possible gaps in that process and seeks reconciliation in an effort to re-synchronize the databases. If there are no missed CRSs throughout the year and the database match percentage decreases, then there are apparent issues.
2. On March 15, 2016, Akimeka and West held a conference call to discuss the matter. During the conversation it was identified that the changes sent back from Akimeka to West after accuracy validation, are processed into the FMCC. The issue that Akimeka is seeing when the Annual Audit is provided is resulting from a script West put in place in 2013 to output the CRSs into the approved format at that time.
  - a. The issue is that the format has changed over time due to new technology and more hexadecimal numbering of the wireless sectors. In order to accommodate those changes, Akimeka has developed a translation into an applicable format which the PSAPs are able to use. The format that West is providing each Annual Audit and CRS is overriding the changes within the FMCC, therefore give the appearance of not being synchronized in that process but are. This helps to explain why the wireless testing results are accurate, and the PSAPs are not experiencing a large number of discrepancies in the Mapping Systems when matched with the ALI.
3. Akimeka followed up with West on March 30, 2016, to see if West has re-scripted the format.
  - a. West replied that unfortunately it will require system development at West. Melissa Norton of West did mention that the particular system that needs to be changed is currently backlogged with a few large projects. She opened a Product Development Request at West but there is no ETA on the enhancement. In order to speed up the request, she is working to bundle the request with several other State's requests.
4. Akimeka will continue to follow up on the process to ensure the wireless databases are maintained accurately. With the big push by the WSPs for more LTE sites, which are having the impact on the hexadecimal numbering, Akimeka is hopeful that West can resolve this issue. The additional work involved to re-validate information takes a significant effort and allows for discrepancy. The Annual Audit is supposed to be a raw comparison to the condition of the data in both the FMCC and the GIS database provided in the Mapping Systems. Without both in its raw format, the comparison becomes unclear as to the real condition of the FMCC database.
5. Throughout the month of April 2016, Akimeka had been provided several TVWs by the WSPs for testing and most of the information was good for testing but there was an unusually high number of records that were either missing or were incorrect. Virtually all TVWs sent to Akimeka had some variety of discrepancy in them. This was only applicable to Verizon at the time and since the Annual Audit with Verizon had been completed, bringing the databases to 100% match rate, a reason for the mismatch in TVW information was perplexing. It certainly required more investigation into what was occurring.
6. On April 21, 2016, Akimeka was notified of yet another set of TVWs with issues and the WSP and West investigated their end and said everything was matching. Because the Annual Audit was completed, matching West and Akimeka databases, but yet the TVWs produced from the West database were not matching, something was highly unusual.
  - a. Later the same day, Akimeka provided an example of the discrepancy back to West detailing one of the records along a timeline. Information provided in the TVW matched with the record from 2015. Since that time, there were several updates, including the Annual Audit. This indicated that the TVWs being generated by West were not accurate and it also was indicating the Annual Audit sent back to West was not be uploaded. This is a major issue.

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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7. To confirm Akimeka's suspicion that the Annual Audit updates were not being uploaded by West into the FMCC, Akimeka followed up with implementation specialist at West, who the Audit was coordinated with.
  - a. West sent a reply on April 25, 2016, that the audit was not fully completed at West and they were in their final stages before sending changes to the database and on to Verizon. From West "there were a lot of changes that came from the audit which is where you may be seeing the discrepancies. Once Verizon has called in the hot cuts (changes), the data should match the audit sheet you sent".
  - b. This was confirmation that the audit was still not being processed fully by West after 2 months and that the issues with mismatched information in the TVWs were as a result of this.

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### REQUEST FOR 9-1-1 JURISDICTIONAL BOUNDARIES

On March 17, 2016, West had requested information for each of the PSAPs in the State of Hawaii, with the exception of the Honolulu Police Department and Regional Dispatch Center. Akimeka has followed up with West to see if the Honolulu Police Department PSAP was supposed to be included in this request.

1. On March 17, 2016, West requested that each PSAP fill out an attached questionnaire and to provide the PSAP Jurisdictional Boundaries (to include VoIP, Wireless, Text, and Alarms).
2. Akimeka prepared the boundaries of each of the PSAP Jurisdictional Boundaries which included all requested attribution. Given the geography of the Hawaiian Islands, and the operational responses of each PSAP which includes ocean responses, Akimeka included a buffer for each of the PSAP Boundaries that extend into the ocean. This reflects the true nature of the PSAP Jurisdictional Boundary response area and also covers the distance over water which can account for possible Lat/Longs provided during a Text-to-911 call to the PSAP. Since the system is intended to use the location information to determine routing, inclusion of the water area into the PSAP polygons was a more accurate approach.
3. On March 23, 2016, the Akimeka GIS Manager notified West that this information was ready and requested a secure method of transferring the data. Throughout the remainder of March 2016, there was no reply from West.
4. On April 19, 2016, West followed back up with the Akimeka GIS Manager. The West employee was unfamiliar with using an ftp site and was going to touch base with her supervisors to find a more secure manner of transferring the data. Throughout the remainder of April 2016, Akimeka did not hear back.

### 4. SERVICE REQUESTS TRANSACTIONS

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### OPEN SERVICE REQUESTS – APRIL 2016

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

#### NOTE:

There are no open service requests for April 2016.

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

KAUAI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2016	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		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									
June									
July									
August									
September									
October									
November									
December									
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### Note:

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

Definitions:	Category	Description
	Wireline	Telephone Number (ALI) Discrepancies from land line phones that have been submitted to West Safety Services (Intrado) 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

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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

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

The database synchronization effort included comparing Kauai County's 9-1-1 MSAG received from the 911 Database provider, Intrado on April 1, 2016, against its 9-1-1 GIS Street Centerline data. A total number of **1,331** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on April 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%.

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.

### AUDIT SUMMARY RESULTS – 2016

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of July 1 , 2015		As of October 1 , 2015		As of January 1 , 2016		As of April 1 , 2016	
		9-1-1 MSAG Dated 7-01-15		9-1-1 MSAG Dated 10-01-15		9-1-1 MSAG Dated 1-01-15		9-1-1 MSAG Dated 4-01-16	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		1,290		1,297		1,300		1,331	
Less: 9-1-1 MSAG Exception Records	(1)	67	5.2%	66	5.1%	72	5.5%	77	5.8%
Net 9-1-1 MSAG Records Eligible for Comparison		1,223		1,231		1,228		1,254	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		1,223	100.0%	1,231	100.0%	1,223	99.6%	1,249	99.6%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	0	0.0%	0	0.0%	5	0.4%	4	0.3%
9-1-1 MSAG Record With No GIS Record	(3)	0	0.0%	0	0.0%	0	0.0%	1	0.1%
Total 9-1-1 MSAG Records No Match		0	0.0%	0	0.0%	5	0.4%	5	0.4%

**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 January 2016 with a 99.6% Match Rate to a 99.6% Match Rate as of April 2016.

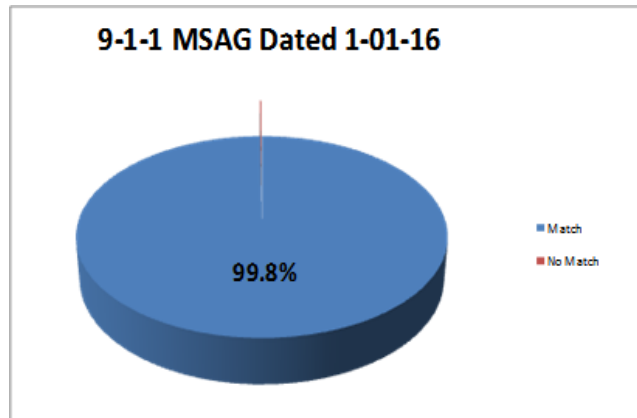
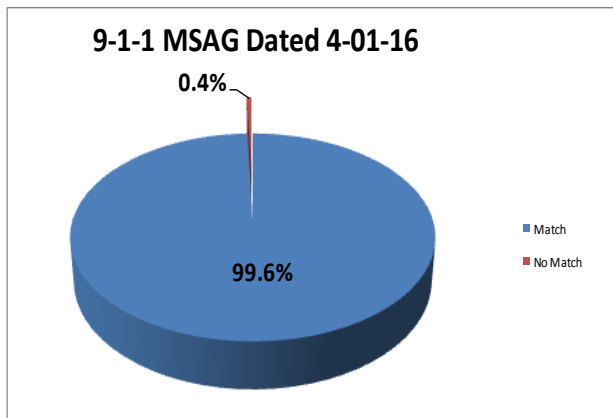
## NOTES:

- 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.

AUDIT SUMMARY RESULTS – APRIL 1, 2016 MSAG VS. JANUARY 1, 2016 MSAG

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016



**Kauai County level of accuracy for 9-1-1 Match percentage remained consistent with a 99.6% as of April 1, 2016 compared to 99.8% as of January 1, 2016**

*The NENA recommended minimum match rate of 98% has been met consistently in 2013 and continues in 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” increased (0 to 4) from January 2016 to April 2016. This is a result in which MSAG records submitted in 9-1-1 Net were not completed prior to the end of the month.
- ❖ “MSAG record with no GIS record” increased (0 to 1) from January 2016 to April 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. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the July 2016 re-analysis.
- ❖ “MSAG Records Corrections Required” decreased (5 to 3) from January 2016 to April 2016 respectively. MSAG records have been combined, split, and high/low ranges have been changed, to match the Street Centerlines, and will be reflected in the July 2016 re-analysis.
- ❖ 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.

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

## Kauai County E9-1-1 Status Report

**April 1, 2016 - April 30, 2016**

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:

KAUAI	Invalid MSAG Records			
	9-1-1 MSAG Dated 1-01-16		9-1-1 MSAG Dated 04-01-16	
	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records
<b>ESN 499</b>	<b>43</b>	<b>3.2%</b>	<b>38</b>	<b>2.8%</b>

These invalid MSAG records represent **2.8%** of the Total MSAG records for Kauai County as of the April 1, 2016 MSAG as compared to **3.2%** as of the January 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 Intrado for approval.

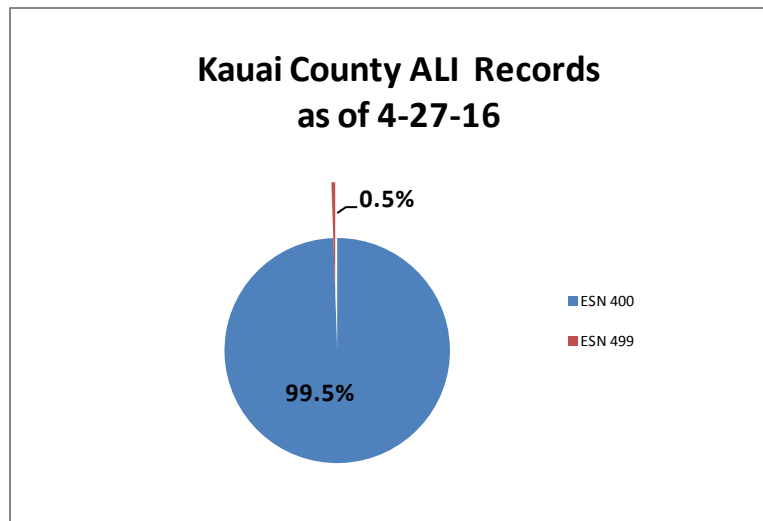
**AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT**

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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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 April 27, 2016, there are **135** ESN 499 ALI records, representing **0.5%** of Kauai County's Total ALI records. The number of ESN 499 ALI records was further reduced by **4.3%** (141 to 135) from January 28, 2016 to April 27, 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".



**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

<b>Budget Analysis</b>						
<b>FY 2015-16</b>	<b>Actuals</b>		<b>Annual Budget</b>	<b>% of Budget Expended</b>	<b>Forecast</b>	<b>\$ Better/(Worse) Budget</b>
	<b>APRIL</b>	<b>FY-T-D</b>				
<b>Receipts:</b>						
Enhanced 911 Surcharge Collection	836,211	7,999,038	9,252,500	86%	9,600,000	347,500
Interest Income	3,838	16,289	2,500	652%	23,000	20,500
<b>Receipts</b>	<b>840,049</b>	<b>8,015,327</b>	<b>9,255,000</b>	<b>87%</b>	<b>9,623,000</b>	<b>368,000</b>
<b>Disbursements:</b>						
New & Emerging Tech. Training	(25,884)	(78,049)	(246,650)	32%	(179,249)	67,401
Non-Recurring Expenses	(2,300,000)	(2,303,374)	(2,722,515)	85%	(2,663,489)	59,026
Recurring Expenses:						-
Administration	(18,333)	(561,399)	(1,129,700)	50%	(922,975)	206,725
Maintenance	(187,569)	(1,228,745)	(2,474,524)	50%	(2,410,546)	63,978
Telecommunications	(156,609)	(1,359,155)	(2,146,289)	63%	(2,058,840)	87,449
Other		(7,200)	(7,600)	95%	(7,200)	400
			-			
<b>Disbursements</b>	<b>(2,688,394)</b>	<b>(5,537,922)</b>	<b>(8,727,278)</b>	<b>63%</b>	<b>(8,242,299)</b>	<b>484,979</b>
<b>Net Receipts/(Disbursements)</b>	<b>(1,848,345)</b>	<b>2,477,406</b>	<b>527,722</b>		<b>1,380,701</b>	<b>852,979</b>
<b>Cash Flow Analysis</b>						
<b>Net Receipts/(Disbursements)</b>	<b>(1,848,345)</b>	<b>2,477,406</b>				
<b>Encumbrance Paydowns:</b>				<b>Encumb. Bal.</b>		
FY 2011 (Kauai)		(274,185)		144,814		
FY 2012 (HFD/EDS/HPD)		(56,040)		695,392		
FY 2014		(138,288)		1,383,317		
FY 2015		(2,196,307)		2,334,302		
FY 2016	2,300,000	2,300,000		2,300,000		
Accounts Receivable (Offset)		2,952	see note 1			
<b>Net Encumbrance Adds/(Paydown)</b>	<b>2,300,000</b>	<b>(361,869)</b>				
<b>Net Cash Inflow/(Outflow)</b>	<b>451,655</b>	<b>2,115,536</b>				
<b>Bank Balance Analysis:</b>						
<b>ADD: July 1, 2015 Beginning Balance</b>		<b>16,789,216</b>				
<b>Net Bank Balance</b>		<b>18,904,752</b>				
<b>Outstanding Ecumb/Accruals</b>		<b>(6,857,824)</b>				
<b>Unencumbered Cash Balance</b>		<b>12,046,928</b>				
<b>Note 1- Balance paid e911 fund for non payment due to Chapter 11 filing.</b>						

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

<b>MONTH OF APRIL 2016</b>		<b>Hawaii PSAP</b>	<b>Kauai PSAP</b>	<b>Maui PSAP</b>	<b>Oahu PSAP</b>	<b>ADMIN</b>	<b>TOTAL</b>
<b>Total RECEIPTS:</b>		-	-	-	-	840,049	840,049
<b>DISBURSEMENTS:</b>							
6200 New & Emerg. Tech Train.							
	6201 911 Goes to WashDC	-	-	8,892	-	2,832	11,724
	6204 APCO Conference	-	-	-	-	3,051	3,051
	6210 IWCE	-	-	-	-	2,162	2,162
	6214 Nena Conference	-	-	-	-	2,216	2,216
	6222 TriTech CAD Users						
	6222.01 EMS Users	-	-	-	5,272	-	5,272
	6222.02 HFD Users	-	-	-	-	1,458	1,458
	<b>Total 6222 TriTech CAD Users</b>	-	-	-	5,272	1,458	6,730
	<b>Total 6200 New &amp; Emerg. Tech Train.</b>	-	-	8,892	5,272	11,719	25,884
6300 Non-RECURRING							
	6301 CAD Replac/Upgrade						
	6301.05 Kauai Police Dept	-	2,300,000	-	-	-	2,300,000
	<b>Total 6301 CAD Replac/Upgrade</b>	-	2,300,000	-	-	-	2,300,000
	<b>Total 6300 Non-RECURRING</b>	-	2,300,000	-	-	-	2,300,000
6400 RECURRING EXPENSES							
	6401 ADMINISTRATION						
	6401.01 Exec Dir. Services	-	-	-	-	14,980	14,980
	6401.08 Board Member Travel	-	-	-	-	2,873	2,873
	6402.21 Cell Phone Charges	-	-	-	-	197	197
	6402.22 Office Supplies	-	-	-	-	283	283
	<b>Total 6401 ADMINISTRATION</b>	-	-	-	-	18,333	18,333
	6402 MAINTENANCE						
	6402.07 0011 9-1-1MSAG Maint.	41,348	-	-	48,137	-	89,484
	6402.08 CAD Maintenance	98,085	-	-	-	-	98,085
	<b>Total 6402 MAINTENANCE</b>	139,432	-	-	48,137	-	187,569
	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
	6403.0114 SD Viper (OSL) (3)	-	-	-	3,350	-	3,350
	<b>Total 6403.01 Telcom Charges</b>	51,115	-	23,237	82,257	-	156,609
	<b>Total 6403 Other RECURRING</b>	51,115	-	23,237	82,257	-	156,609
	<b>Total 6400 RECURRING EXPENSES</b>	190,547	-	23,237	130,393	18,333	362,510
	<b>Total DISBURSEMENTS:</b>	190,547	2,300,000	32,129	135,665	30,052	2,688,394

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
**For month ending April 30, 2016**

	Hawaii PSAP	Kauai PSAP	Maui PSAP	Molokai PSAP	Oahu PSAP	ADMIN	TOTAL		
<b>FY-T0-DATE April 2016 (10 mos)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>ANNUAL Budget</b>	<b>\$ Over/(under) Budget</b>
<b>Total RECEPTS:</b>	-	-	-	-	-	8,015,327	8,015,327	9,255,000	(1,239,673)
<b>DISBURSEMENTS:</b>									
6200 New & Emerg. Tech Train.									
6201 911 Goes to WashDC	-	-	8,399	-	-	17,287	25,686	46,500	(20,814)
6203 APCO New Tech Conference	-	-	-	-	-	2,207	2,207	11,200	(8,993)
6204 APCO Conference	-	-	7,238	-	13,123	7,243	27,604	31,560	(3,956)
6210 IWCE	-	-	-	-	-	2,162	2,162	2,500	(338)
6212 NASNA Conference	-	-	-	-	-	2,148	2,148	2,150	(2)
6214 Nena Conference	(2,588)	2,090	18	-	(1,070)	2,348	799	34,800	(34,001)
6215 NENA Tech Dev. Conf	-	-	2,821	-	-	-	2,821	2,830	(9)
6216 Smart911	-	-	-	-	-	-	-	-	-
6222 TriTech CAD Users									
6222.01 EMS Users	-	-	-	-	5,272	-	5,272	6,000	(728)
6222.02 HFD Users	-	-	-	-	1,458	-	1,458	6,000	(4,542)
<b>Total 6222 TriTech CAD Users</b>	-	-	-	-	6,730	-	6,730	12,000	(5,270)
6228 HxGN Live Hexagon Conf	-	-	(1,005)	-	-	-	(1,005)	18,875	(19,880)
6230 Other Training									
6230.01 HPD (O/T)	-	-	-	-	8,897	-	8,897	8,900	(3)
<b>Total 6230 Other Training</b>	-	-	-	-	8,897	-	8,897	8,900	(3)
6200 New & Emerg. Tech Train. - Other	-	-	-	-	-	-	-	70,135	(70,135)
<b>Total 6200 New &amp; Emerg. Tech Train.</b>	(2,588)	2,090	17,471	-	27,680	33,395	78,049	241,450	(163,401)
6300 Non-RECURRING									
6301 CAD Replac/Upgrade									
6301.05 Kauai Police Dept	-	2,300,000	-	-	-	-	2,300,000	2,300,000	-
6301.06 Maui PD	-	-	-	-	-	-	-	82,000	(82,000)
6301.07 So. Maui Buildout	-	-	-	-	-	-	-	200,000	(200,000)
6301.08 CAD Related Expenses	-	-	-	-	3,374	-	3,374	-	3,374
<b>Total 6301 CAD Replac/Upgrade</b>	-	2,300,000	-	-	3,374	-	2,303,374	2,582,000	(278,626)
6303 Computers									
6303.13 UPS Battery-HPD	-	-	-	-	-	-	-	3,115	(3,115)
6303.23 HPD SMART911 S/W	-	-	-	-	-	-	-	62,400	(62,400)
6303.24 PRI Install	-	-	-	-	-	-	-	10,000	(10,000)
6303.25 Workstation	-	-	-	-	-	-	-	65,000	(65,000)
<b>Total 6303 Computers</b>	-	-	-	-	-	-	-	140,515	(140,515)
<b>Total 6300 Non-RECURRING</b>	-	2,300,000	-	-	3,374	-	2,303,374	2,722,515	(419,141)

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
**For month ending April 30, 2016**

	Hawaii PSAP	Kauai PSAP	Maui PSAP	Molokai PSAP	Oahu PSAP	ADMIN	TOTAL		
<b>FY-T0-DATE April 2016 (10 mos)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>ANNUAL Budget</b>	<b>\$ Over/(under) Budget</b>
<b>6400 RECURRING EXPENSES</b>									
<b>6401 ADMINISTRATION</b>									
6401.01 Exec Dir. Services	-	-	-	-	-	106,542	106,542	198,000	(91,458)
6401.02 ElectronSignatur	-	-	-	-	-	-	-	250	(250)
6401.05 Audit Expense	-	-	-	-	-	13,000	13,000	13,025	(25)
6401.06 Bank Charge	-	-	-	-	-	-	-	50	(50)
6401.08 Board Member Travel	-	-	-	-	-	24,454	24,454	25,000	(546)
6401.09 DB&F Assessments									
6401.0101 DB&F Admin. Assess	-	-	-	-	-	45,578	45,578	155,000	(109,422)
6401.0102 DB&F Rev Assessment	-	-	-	-	-	319,652	319,652	462,625	(142,973)
<b>Total 6401.09 DB&amp;F Assessments</b>	-	-	-	-	-	365,230	365,230	617,625	(252,395)
6401.11 Miscellaneous Expense	-	-	-	-	-	(0)	(0)	-	(0)
6401.12 NASNA Dues	-	-	-	-	-	150	150	150	-
6401.13 Parking Permits	-	-	-	-	-	400	400	400	-
6401.15 WSP Cost Recovery									
6401.0101 Sprint/Nextel	-	-	-	-	-	4,253	4,253	-	4,253
6401.15 WSP Cost Recovery - Other	-	-	-	-	-	39,120	39,120	70,000	(30,880)
<b>Total 6401.15 WSP Cost Recovery</b>	-	-	-	-	-	43,372	43,372	70,000	(26,628)
6401.17 ADA Compliance	-	-	-	-	-	-	-	200	(200)
6401.18 AG Legal Fees	-	-	-	-	-	-	-	25,000	(25,000)
6401.19 Public Education	-	-	-	-	-	8,721	8,721	30,000	(21,279)
6401.20 RCUH Contract	-	-	-	-	-	(5,881)	(5,881)	-	(5,881)
6402.21 Cell Phone Charges	-	-	-	-	-	897	897	-	897
6402.22 Office Supplies	-	-	-	-	-	4,513	4,513	5,000	(487)
6402.23 NG911 Transition Plan	-	-	-	-	-	-	-	145,000	(145,000)
<b>Total 6401 ADMINISTRATION</b>	-	-	-	-	-	561,399	561,399	1,129,700	(568,301)
<b>6402 MAINTENANCE</b>									
6402.02 Imagery Lic Agree	-	-	0	-	-	-	0	447,015	(447,015)
6402.05 Logging RecordMaint	-	-	-	-	-	-	-	60,775	(60,775)
6402.07 0011 9-1-1MSAG Maint.	165,390	33,349	155,673	-	433,228	-	787,640	1,323,378	(535,738)
6402.08 CAD Maintenance	98,084	-	170,000	-	173,021	-	441,105	638,752	(197,647)
6402.13 Software Maintenance									
6402.131 Integraph DB S/W Maint	-	-	-	-	-	-	-	4,604	(4,604)
<b>Total 6402.13 Software Maintenance</b>	-	-	-	-	-	-	-	4,604	(4,604)
<b>Total 6402 MAINTENANCE</b>	263,474	33,349	325,673	-	606,249	-	1,228,745	2,474,524	(1,245,779)
<b>6403 Other RECURRING</b>									
6403.01 Telcom Charges									
6403.0102 Long Distance	227	84	119	(35)	-	-	395	2,103	(1,708)
6403.0109 Telcom Trunk	204,230	55,699	208,900	-	789,068	-	1,257,896	1,687,134	(429,238)
6403.0111 WiringAltDispatch	-	673	-	-	-	-	673	237,736	(237,063)
6403.0112 HPD CML Viper-Kapolei	-	-	-	-	70,486	-	70,486	140,916	(70,430)
6403.0113 HPDCMLViper-Alapai	-	-	-	-	5,706	-	5,706	-	5,706
6403.0114 SD Viper (OSL) (3)	-	-	-	-	23,829	-	23,829	54,000	(30,171)
6403.0115 Text-to-911 Service	-	-	-	-	-	-	-	24,100	(24,100)
6403.0116 Alt PSAP Call Route	-	-	-	-	-	-	-	300	(300)
6403.0117 Telecom Chgs-Other	-	171	-	-	-	-	171	-	171
<b>Total 6403.01 Telcom Charges</b>	204,456	56,627	209,019	(35)	889,088	-	1,359,155	2,146,289	(787,134)
6403.02 EMS Tower Lease	-	-	-	-	7,200	-	7,200	7,600	(400)
<b>Total 6403 Other RECURRING</b>	204,456	56,627	209,019	(35)	896,288	-	1,366,355	2,153,889	(787,534)
<b>Total 6400 RECURRING EXPENSES</b>	467,931	89,976	534,692	(35)	1,502,537	561,399	3,156,499	5,758,113	(2,601,614)
<b>Total DISBURSEMENTS</b>	465,343	2,392,066	552,163	(35)	1,532,133	596,252	5,537,922	8,727,278	(3,189,356)

# HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS

## For month ending April 30, 2016

FY 2016 STRATEGIC BUDGET PLAN	HAWAII PSAP	OAHU PSAP	MAUI PSAP	Molokai PSAP	KAUAI PSAP	ADMIN	New & Emerging Technology Training	TOTAL	Board Approval Date
Approved FY 2016 Strategic Budget Plan	992,547	2,577,329	946,873	65,335	3,065,729	1,103,700	246,650	8,998,163	6/9/2015
NASNA						2,650	(2,650)		
Board Approved Changes:									
Executive Director (1) - APCO						3,000	(3,000)		6/9/2015
Board member (1) - APCO						3,000	(3,000)		6/9/2015
Oahu DIT (1) - APCO		3,000					(3,000)		6/9/2015
HPD (2+1 Board member) - APCO		10,500					(10,500)		7/15/2015
MPD (2) - APCO			7,240				(7,240)		7/15/2015
KPD (2) - APCO					7,000		(7,000)		7/15/2015
HawPD (2) - APCO	7,000						(7,000)		7/15/2015
HawPD (2) - APCO (retracted)	(7,000)						7,000		7/15/2015
HFD (1) - APCO		3,000					(3,000)		7/15/2015
HawPD Imagery Adjustment	(300,000)							(300,000)	7/15/2015
MPD (1) - NENA Development Conf -Oct4-8			2,830				(2,830)		8/13/2015
Board member (1) - APCO New Emerging Tech						2,500	(2,500)		9/10/2015
MPD - PowerPhone EMD digital S/W			3,115					3,115	10/8/2015
HFD (2)TriCon2016 Conference, San Diego, Feb28 to March 2, 2016		6,000					(6,000)		11/12/2015
EMS (2)TriCon2016 Conference, San Diego, Feb28 to March 2, 2016		6,000					(6,000)		11/12/2015
Boardmembers (3) 911 GTW Conf., Feb 21-24, 2016						9,500	(9,500)		11/12/2015
HFD (1) 911 GTW Conf., Feb 21-24, 2016		3,000					(3,000)		11/12/2015
HiPD(2) 911 GTW Conf., Feb 21-24, 2016	7,000						(7,000)		11/12/2015
HPD (3) 911 GTW Conf., Feb 21-24, 2016		10,500					(10,500)		11/12/2015
HawTelcom (1) 911 GTW Conf., Feb 21-24, 2016						3,000	(3,000)		11/12/2015
KPD (3) - APCO Western Regional Conf., March 3-10-2016					8,700		(8,700)		11/12/2015
Admin- Office Supplies						1,000		1,000	11/12/2015
MPD (3) 911 GTW, Feb 21-24, 2016			10,500				(10,500)		11/12/2015
Board member - IWCE Conference, Las Vegas, NV; March 21-25,2016.						2,500	(2,500)		12/10/2015
MPD (6)2016 HeXagon (Intergraph) Conference, Anaheim, June 13-17. 2016			18,875				(18,875)		1/12/2016
IWCE (1) - March 21-25,2016						2,500	(2,500)		2/11/2016
IWCE (1) - March 21-25,2017 (R. Freitas)						(2,500)	2,500		
HPD (2) - Smart911 Summit and Training; Boston, MA, May 9-12, 2016		5,200					-		2/11/2016
Exec Dir (1) - NENA/NASNA Conference 6/10/2016						(3,300)	(3,300)		3/10/2016
HPD (2) - NENA Conference 6/11/16 - 6/16/2016		7,000					(7,000)		3/10/2016
MPD (2) - NENA Conference 6/11/2016 - 6/16/2016			7,000				(7,000)		3/10/2016
KPD (3) - NENA Conference 6/11/2016 - 6/16/2016					10,500		(10,500)		3/10/2016
HiPD (2) - NENA Conference 6/11/2016-6/16/2016	7,000						(7,000)		3/10/2016
ADMIN - Spiegel & McDiarmid LLP						25,000		25,000	4/14/2016
							-		
Totals	706,547	2,631,529	996,433	65,335	3,091,929	1,152,550	81,555	8,727,278	

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
**For month ending April 30, 2016**

ENCUMBRANCES							FY 2015	PAYDOWN	Apr.30, 2016
<i>FY 2011 Encumbrances:</i>	Oahu	Maui	Molokai	Kauai	Hawaii	Admin	Total		
CAD Upgrade:				419,000			419,000		144,814
<i>FY 2012 Encumbrances:</i>							-		
CAD Upgrades:									
EMS/FIRE	56,040						56,040		
HPD	695,392						695,392		695,392
Total FY 2012 Encumbrances	751,432	-		-	-	-	751,432		695,392
<i>FY 2014 Accruals</i>									
CAD Upgrade					1,500,000		1,500,000		1,366,315
AG Legal Expenses for IRC						21,605	21,605		17,002
Total FY 2014 Encumbrances	-	-	-	-	1,500,000	21,605	1,521,605		1,383,317
FY 2015 Encumbrances									
CAD Upgrade					2,300,000		2,300,000		2,300,000
HPD Smart911 S/W	76,400						76,400		29,819
Imagery License					926,400		926,400		4,383
Kauai ADC				307,000			307,000		100
							-		-
Board Travel						6,000	6,000		-
NENA	9,999	10,500		9,900	10,500	4,086	44,985		-
NASNA						650	650		-
911 Goes to WA		7,000					7,000		-
HxGN Live Hexagon Conf		6,600					6,600		-
WSP Cost Recovery -SprintNextel						35,000	35,000		-
MSAG	46,614	37,590		73,291	39,885		197,380		-
CAD Maint					66,307		66,307		-
HT Telcom Trunk		23,207		27,849	51,057		102,113		-
HPD CML Viper-Kapolei/Alapai	41,650						41,650		-
CML Viper (OSL)	2,973						2,973		-
Imagery Lic Agree		387,892					387,892		-
Office Supplies						110	110		-
RCUH Contract						14,570	14,570		-
HT Long Distance		139	35	145	60		379		-
Microwave Antenna Lease	7,200						7,200		-
							-		-
Total Encumbrances/Accruals	184,836	472,928	35	418,185	3,394,209	60,416	4,530,609		2,334,302
FY2016 Encumbrance				2,300,000					2,300,000
Total	936,268	472,928	35	3,137,185	4,894,209	82,021	7,222,646	-	6,857,824

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

FY-T0-DATE April 2016 (10 mos)	Hawaii PSAP		
	10 (mos.)	ANNUAL Budget	\$ Over/(under) Budget
<b>Total RECEIPTS:</b>	-	-	-
<b>DISBURSEMENTS:</b>			
6200 New & Emerg. Tech Train.			
6201 911 Goes to WashDC	-	7,000	(7,000)
6203 APCO New Tech Conference	-	-	-
6204 APCO Conference	-	-	-
6210 IWCE	-	-	-
6212 NASNA Conference	-	-	-
6214 Nena Conference	(2,588)	7,000	(9,588)
6215 NENA Tech Dev. Conf	-	-	-
6216 Smart911	-	-	-
6222 TriTech CAD Users	-	-	-
6222.01 EMS Users	-	-	-
6222.02 HFD Users	-	-	-
Total 6222 TriTech CAD Users	-	-	-
6228 HxGN Live Hexagon Conf	-	-	-
6230 Other Training	-	-	-
6230.01 HPD (O/T)	-	-	-
Total 6230 Other Training	-	-	-
6200 New & Emerg. Tech Train. - Other	-	-	-
Total 6200 New & Emerg. Tech Train.	(2,588)	14,000	(16,588)
6300 Non-RECURRING			
6301 CAD Replac/Upgrade			
6301.05 Kauai Police Dept	-	-	-
6301.06 Maui PD	-	-	-
6301.07 So. Maui Buildout	-	-	-
6301.08 CAD Related Expenses	-	-	-
Total 6301 CAD Replac/Upgrade	-	-	-
6303 Computers			
6303.13 UPS Battery-HPD	-	-	-
6303.23 HPD SMART911 S/W	-	-	-
6303.24 PRI Install	-	-	-
6303.25 Workstation	-	-	-
Total 6303 Computers	-	-	-
Total 6300 Non-RECURRING	-	-	-
6400 RECURRING EXPENSES			
6402 MAINTENANCE			
6402.02 Imagery Lic Agree	-	-	-
6402.05 Logging Record Maint	-	-	-
6402.07 0011 9-1-1MSAG Maint.	165,390	307,647	(142,257)
6402.08 CAD Maintenance	98,084	68,752	29,332
6402.13 Software Maintenance	-	-	-
6402.131 Integraph DB S/W Maint	-	4,604	(4,604)
Total 6402.13 Software Maintenance	-	4,604	(4,604)
Total 6402 MAINTENANCE	263,474	381,003	(117,529)
6403 Other RECURRING			
6403.01 Telecom Charges			
6403.0102 Long Distance	227	1,200	(973)
6403.0109 Telecom Trunk	204,230	306,344	(102,114)
6403.0111 Wiring Alt Dispatch	-	-	-
6403.0112 HPD CML Viper-Kapolei	-	-	-
6403.0113 HPD CML Viper-Alapala	-	-	-
6403.0114 SD Viper (OSL) (3)	-	-	-
6403.0115 Text-to-911 Service	-	4,000	(4,000)
6403.0116 Alt PSAP Call Route	-	-	-
6403.0117 Telecom Chgs-Other	-	-	-
Total 6403.01 Telecom Charges	204,456	311,544	(107,088)
6403.02 EMS Tower Lease	-	-	-
Total 6403 Other RECURRING	204,456	311,544	(107,088)
Total 6400 RECURRING EXPENSES	467,931	692,547	(224,616)
<b>Total DISBURSEMENTS</b>	<b>465,343</b>	<b>706,547</b>	<b>(241,204)</b>

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

					Kauai PSAP		
FY-T0-DATE April 2016 (10 mos)					10 (mos.)	ANNUAL Budget	\$ Over/(under) Budget
<b>Total RECEIPTS:</b>					-	-	-
<b>DISBURSEMENTS:</b>							
6200 New & Emerg. Tech Train.							
6201 911 Goes to WashDC					-	-	-
6203 APCO New Tech Conference					-	8,700	(8,700)
6204 APCO Conference					-	7,000	(7,000)
6210 IWCE					-	-	-
6212 NASNA Conference					-	-	-
6214 Nena Conference					2,090	10,500	(8,410)
6215 NENA Tech Dev. Conf					-	-	-
6216 Smart911					-	-	-
6222 TriTech CAD Users							
6222.01 EMS Users					-	-	-
6222.02 HFD Users					-	-	-
Total 6222 TriTech CAD Users					-	-	-
6228 HxGN Live Hexagon Conf					-	-	-
6230 Other Training							
6230.01 HPD (O/T)					-	-	-
Total 6230 Other Training					-	-	-
6200 New & Emerg. Tech Train. - Other					-	-	-
Total 6200 New & Emerg. Tech Train.					2,090	26,200	(24,110)
6300 Non-RECURRING							
6301 CAD Replac/Upgrade							
6301.05 Kauai Police Dept					2,300,000	2,300,000	-
6301.06 Maui PD					-	-	-
6301.07 So. Maui Buildout					-	-	-
6301.08 CAD Related Expenses					-	-	-
Total 6301 CAD Replac/Upgrade					2,300,000	2,300,000	-
6303 Computers							
6303.13 UPS Battery-HPD					-	-	-
6303.23 HPD SMART911 S/W					-	-	-
6303.24 PRI Install					-	10,000	(10,000)
6303.25 Workstation					-	-	-
Total 6303 Computers					-	10,000	(10,000)
Total 6300 Non-RECURRING					2,300,000	2,310,000	(10,000)
6400 RECURRING EXPENSES							
6402 MAINTENANCE							
6402.02 Imagery Lic Agree					-	197,015	(197,015)
6402.05 Logging Record Maint					-	-	-
6402.07 0011 9-1-1MSAG Maint.					33,349	204,700	(171,351)
6402.08 CAD Maintenance					-	-	-
6402.13 Software Maintenance							
6402.131 Integrgraph DB S/W Maint					-	-	-
Total 6402.13 Software Maintenance					-	-	-
Total 6402 MAINTENANCE					33,349	401,715	(368,366)
6403 Other RECURRING							
6403.01 Telcom Charges							
6403.0102 Long Distance					84	480	(396)
6403.0109 Telcom Trunk					55,699	111,398	(55,699)
6403.0111 Wiring Alt Dispatch					673	237,736	(237,063)
6403.0112 HPD CML Viper-Kapolei					-	-	-
6403.0113 HPDCML Viper-Alapai					-	-	-
6403.0114 SD Viper (OSL) (3)					-	-	-
6403.0115 Text-to-911 Service					-	4,100	(4,100)
6403.0116 Alt PSAP Call Route					-	300	(300)
6403.0117 Telecom Chgs-Other					171	-	171
Total 6403.01 Telcom Charges					56,627	354,014	(297,387)
6403.02 EMS Tower Lease					-	-	-
Total 6403 Other RECURRING					56,627	354,014	(297,387)
Total 6400 RECURRING EXPENSES					89,976	755,729	(665,753)
Total DISBURSEMENTS					2,392,066	3,091,929	(699,863)



**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

FY-T0-DATE April 2016 (10 mos)	Maui PSAP		
	10 (mos.)	ANNUAL Budget	\$ Over/(under) Budget
<b>Total RECEIPTS:</b>	-	-	-
<b>DISBURSEMENTS:</b>			
6200 New & Emerg. Tech Train.			
6201 911 Goes to WashDC	8,399	10,500	(2,101)
6203 APCO New Tech Conference	-	-	-
6204 APCO Conference	7,238	7,240	(2)
6210 IWCE	-	-	-
6212 NASNA Conference	-	-	-
6214 Nena Conference	18	7,000	(6,982)
6215 NENA Tech Dev. Conf	2,821	2,830	(9)
6216 Smart911	-	-	-
6222 TriTech CAD Users			
6222.01 EMS Users	-	-	-
6222.02 HFD Users	-	-	-
Total 6222 TriTech CAD Users	-	-	-
6228 HxGN Live Hexagon Conf	(1,005)	18,875	(19,880)
6230 Other Training			
6230.01 HPD (O/T)	-	-	-
Total 6230 Other Training	-	-	-
6200 New & Emerg. Tech Train. - Other	-	-	-
Total 6200 New & Emerg. Tech Train.	17,471	46,445	(28,974)
6300 Non-RECURRING			
6301 CAD Replac/Upgrade			
6301.05 Kauai Police Dept	-	-	-
6301.06 Maui PD	-	82,000	(82,000)
6301.07 So. Maui Buildout	-	200,000	(200,000)
6301.08 CAD Related Expenses	-	-	-
Total 6301 CAD Replac/Upgrade	-	282,000	(282,000)
6303 Computers			
6303.13 UPS Battery-HPD	-	3,115	(3,115)
6303.23 HPD SMART911 S/W	-	-	-
6303.24 PRI Install	-	-	-
6303.25 Workstation	-	-	-
Total 6303 Computers	-	3,115	(3,115)
Total 6300 Non-RECURRING	-	285,115	(285,115)
6400 RECURRING EXPENSES			
6402 MAINTENANCE			
6402.02 Imagery Lic Agree	0	-	0
6402.05 Logging Record Maint	-	-	-
6402.07 0011 9-1-1MSAG Maint.	155,673	233,393	(77,720)
6402.08 CAD Maintenance	170,000	170,000	-
6402.13 Software Maintenance			
6402.131 Integraph DB S/W Maint	-	-	-
Total 6402.13 Software Maintenance	-	-	-
Total 6402 MAINTENANCE	325,673	403,393	(77,720)
6403 Other RECURRING			
6403.01 Telcom Charges			
6403.0102 Long Distance	119	366	(247)
6403.0109 Telcom Trunk	208,900	257,914	(49,014)
6403.0111 Wiring Alt Dispatch	-	-	-
6403.0112 HPD CML Viper-Kapolei	-	-	-
6403.0113 HPD CML Viper-Alapai	-	-	-
6403.0114 SD Viper (OSL) (3)	-	-	-
6403.0115 Text-to-911 Service	-	3,200	(3,200)
6403.0116 Alt PSAP Call Route	-	-	-
6403.0117 Telecom Chgs-Other	-	-	-
Total 6403.01 Telcom Charges	209,019	261,480	(52,461)
6403.02 EMS Tower Lease	-	-	-
Total 6403 Other RECURRING	209,019	261,480	(52,461)
Total 6400 RECURRING EXPENSES	534,692	664,873	(130,181)
<b>Total DISBURSEMENTS</b>	<b>552,163</b>	<b>996,433</b>	<b>(444,270)</b>

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

	Molokai PSAP		
<b>FY-TO-DATE April 2016 (10 mos)</b>	<b>10 (mos.)</b>	<b>ANNUAL Budget</b>	<b>\$ Over/(under) Budget</b>
<b>Total RECEIPTS:</b>	-	-	-
<b>DISBURSEMENTS:</b>			
6200 New & Emerg. Tech Train.			
6201 911 Goes to WashDC	-	-	-
6203 APCO New Tech Conference	-	-	-
6204 APCO Conference	-	-	-
6210 IWCE	-	-	-
6212 NASNA Conference	-	-	-
6214 Nena Conference	-	-	-
6215 NENA Tech Dev. Conf	-	-	-
6216 Smart911	-	-	-
6222 TriTech CAD Users			
6222.01 EMS Users	-	-	-
6222.02 HFD Users	-	-	-
Total 6222 TriTech CAD Users	-	-	-
6228 HxGN Live Hexagon Conf	-	-	-
6230 Other Training			
6230.01 HPD (O/T)	-	-	-
Total 6230 Other Training	-	-	-
6200 New & Emerg. Tech Train. - Other	-	-	-
Total 6200 New & Emerg. Tech Train.	-	-	-
6300 Non-RECURRING			
6301 CAD Replac/Upgrade			
6301.05 Kauai Police Dept	-	-	-
6301.06 Maui PD	-	-	-
6301.07 So. Maui Buildout	-	-	-
6301.08 CAD Related Expenses	-	-	-
Total 6301 CAD Replac/Upgrade	-	-	-
6303 Computers			
6303.13 UPS Battery-HPD	-	-	-
6303.23 HPD SMART911 S/W	-	-	-
6303.24 PRI Install	-	-	-
6303.25 Workstation	-	-	-
Total 6303 Computers	-	-	-
Total 6300 Non-RECURRING	-	-	-
6400 RECURRING EXPENSES			
6402 MAINTENANCE			
6402.02 Imagery Lic Agree	-	-	-
6402.05 Logging Record Maint	-	-	-
6402.07 0011 9-1-1MSAG Maint.	-	-	-
6402.08 CAD Maintenance	-	-	-
6402.13 Software Maintenance			
6402.131 Integraph DB S/W Maint	-	-	-
Total 6402.13 Software Maintenance	-	-	-
Total 6402 MAINTENANCE	-	-	-
6403 Other RECURRING			
6403.01 Telecom Charges			
6403.0102 Long Distance	(35)	57	(92)
6403.0109 Telecom Trunk	-	64,478	(64,478)
6403.0111 Wiring Ait Dispatch	-	-	-
6403.0112 HPD CML Viper-Kapolei	-	-	-
6403.0113 HPDCML Viper-Alapai	-	-	-
6403.0114 SD Viper (OSL) (3)	-	-	-
6403.0115 Text-to-911 Service	-	800	(800)
6403.0116 Ait PSAP Call Route	-	-	-
6403.0117 Telecom Chgs-Other	-	-	-
Total 6403.01 Telecom Charges	(35)	65,335	(65,370)
6403.02 EMS Tower Lease	-	-	-
Total 6403 Other RECURRING	(35)	65,335	(65,370)
Total 6400 RECURRING EXPENSES	(35)	65,335	(65,370)
Total DISBURSEMENTS	(35)	65,335	(65,370)

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

					Oahu PSAP		
FY-T0-DATE April 2016 (10 mos)					10 (mos.)	ANNUAL Budget	\$ Over/(under) Budget
<b>Total RECEIPTS:</b>					-	-	-
<b>DISBURSEMENTS:</b>							
6200 New&Emerg. Tech Train.							
6201 911 Goes to WashDC					-	13,500	(13,500)
6203 APCO New Tech Conference					-	-	-
6204 APCO Conference					13,123	13,125	(2)
6210 IWCE					-	-	-
6212 NASNA Conference					-	-	-
6214 Nena Conference					(1,070)	7,000	(8,070)
6215 NENA Tech Dev. Conf					-	-	-
6216 Smart911					-	-	-
6222 TriTech CAD Users							
6222.01 EMS Users					5,272	6,000	(728)
6222.02 HFD Users					1,458	6,000	(4,542)
<b>Total 6222 TriTech CAD Users</b>					<b>6,730</b>	<b>12,000</b>	<b>(5,270)</b>
6228 HxGN Live Hexagon Conf					-	-	-
6230 Other Training							
6230.01 HPD (O/T)					8,897	8,900	(3)
<b>Total 6230 Other Training</b>					<b>8,897</b>	<b>8,900</b>	<b>(3)</b>
6200 New&Emerg. Tech Train. - Other					-	-	-
<b>Total 6200 New&amp;Emerg. Tech Train.</b>					<b>27,680</b>	<b>54,525</b>	<b>(26,845)</b>
6300 Non-RECURRING							
6301 CAD Replac/Upgrade							
6301.05 Kauai Police Dept					-	-	-
6301.06 Maui PD					-	-	-
6301.07 So. Maui Buildout					-	-	-
6301.08 CAD Related Expenses					3,374	-	3,374
<b>Total 6301 CAD Replac/Upgrade</b>					<b>3,374</b>	<b>-</b>	<b>3,374</b>
6303 Computers							
6303.13 UPS Battery-HPD					-	-	-
6303.23 HPD SMART911 S/W					-	62,400	(62,400)
6303.24 PRI Install					-	-	-
6303.25 Workstation					-	65,000	(65,000)
<b>Total 6303 Computers</b>					<b>-</b>	<b>127,400</b>	<b>(127,400)</b>
<b>Total 6300 Non-RECURRING</b>					<b>3,374</b>	<b>127,400</b>	<b>(124,026)</b>
6400 RECURRING EXPENSES							
6402 MAINTENANCE							
6402.02 Imagery Lic Agree					-	250,000	(250,000)
6402.05 Logging RecordMaint					-	60,775	(60,775)
6402.07 0011 9-1-1MSAG Maint.					433,228	577,638	(144,410)
6402.08 CAD Maintenance					173,021	400,000	(226,979)
6402.13 Software Maintenance							
6402.131 Integraph DB S/W Maint					-	-	-
<b>Total 6402.13 Software Maintenance</b>					<b>-</b>	<b>-</b>	<b>-</b>
<b>Total 6402 MAINTENANCE</b>					<b>606,249</b>	<b>1,288,413</b>	<b>(682,164)</b>
6403 Other RECURRING							
6403.01 Telcom Charges							
6403.0102 Long Distance					-	-	-
6403.0109 Telcom Trunk					789,068	947,000	(157,932)
6403.0111 WiringAltDispatch					-	-	-
6403.0112 HPD CML Viper-Kapolei					70,486	140,916	(70,430)
6403.0113 HPDCMLViper-Alapai					5,706	-	5,706
6403.0114 SD Viper (OSL) (3)					23,829	54,000	(30,171)
6403.0115 Text-to-911 Service					-	12,000	(12,000)
6403.0116 Alt PSAP Call Route					-	-	-
6403.0117 Telecom Chgs-Other					-	-	-
<b>Total 6403.01 Telcom Charges</b>					<b>889,088</b>	<b>1,153,916</b>	<b>(264,828)</b>
6403.02 EMS Tower Lease					7,200	7,600	(400)
<b>Total 6403 Other RECURRING</b>					<b>896,288</b>	<b>1,161,516</b>	<b>(265,228)</b>
<b>Total 6400 RECURRING EXPENSES</b>					<b>1,502,537</b>	<b>2,449,929</b>	<b>(947,392)</b>
<b>Total DISBURSEMENTS</b>					<b>1,533,591</b>	<b>2,631,854</b>	<b>(1,098,263)</b>

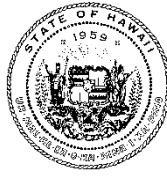
**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

					ADMIN		
FY-T0-DATE April 2016 (10 mos)					10 (mos.)	ANNUAL Budget	\$ Over/(under) Budget
Total RECEIPTS:					8,015,327	-	8,015,327
DISBURSEMENTS:							
6200 New &Emerg. Tech Train.							
6201 911 Goes to WashDC					17,287	15,500	1,787
6203 APCO New Tech Conference					2,207	2,500	(293)
6204 APCO Conference					7,243	4,195	3,048
6210 IWCE					2,162	2,500	(338)
6212 NASNA Conference					2,148	2,150	(2)
6214 Nena Conference					2,348	3,300	(952)
6215 NENA Tech Dev. Conf					-	-	-
6216 Smart911					-	-	-
6222 TriTech CAD Users							
6222.01 EMS Users					-	-	-
6222.02 HFD Users					-	-	-
Total 6222 TriTech CAD Users					-	-	-
6228 HxGN Live Hexagon Conf					-	-	-
6230 Other Training							
6230.01 HPD (O/T)					-	-	-
Total 6230 Other Training					-	-	-
6200 New &Emerg. Tech Train. - Other					-	70,135	(70,135)
Total 6200 New &Emerg. Tech Train.					33,395	100,280	(66,885)
6300 Non-RECURRING							
6400 RECURRING EXPENSES							
6401 ADMINISTRATION							
6401.01 Exec Dir. Services					106,542	198,000	(91,458)
6401.02 Electron Signatur					-	250	(250)
6401.05 Audit Expense					13,000	13,025	(25)
6401.06 Bank Charge					-	50	(50)
6401.08 Board Member Travel					24,454	25,000	(546)
6401.09 DB&F Assessments							
6401.0101 DB&F Admin. Assess					45,578	155,000	(109,422)
6401.0102 DB&F Rev Assessment					319,652	462,625	(142,973)
Total 6401.09 DB&F Assessments					365,230	617,625	(252,395)
6401.11 Miscellaneous Expense					(0)	-	(0)
6401.12 NASNA Dues					150	150	-
6401.13 Parking Permits					400	400	-
6401.15 WSP Cost Recovery							
6401.0101 Sprint/Nextel					4,253	-	4,253
6401.15 WSP Cost Recovery - Other					39,120	70,000	(30,880)
Total 6401.15 WSP Cost Recovery					43,372	70,000	(26,628)
6401.17 ADA Compliance					-	200	(200)
6401.18 AG Legal Fees						25,000	(25,000)
6401.19 Public Education					8,721	30,000	(21,279)
6401.20 RCUH Contract					(5,881)	-	(5,881)
6402.21 Cell Phone Charges					897	-	897
6402.22 Office Supplies					4,513	5,000	(487)
6402.23 NG911 Transition Plan					-	145,000	(145,000)
Total 6401 ADMINISTRATION					561,399	1,129,700	(568,301)
Total 6403 Other RECURRING					-	-	-
Total 6400 RECURRING EXPENSES					561,399	1,129,700	(568,301)
Total DISBURSEMENTS					594,793	1,229,980	(635,187)

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
**For month ending April 30, 2016**

**Checks that were paid with only one signatory**

Month	Check #	PAYEE	Amount	Reason			
Jan-16	2203	Director of Finance, State of Hawaii	\$ 925.55	pCard expenditure for office supplies			
Jan-16	2215	Director of Finance, State of Hawaii	\$ 7,291.52	Payroll			
Feb-16	2221	Director of Finance, State of Hawaii	\$ 6,979.30	Payroll			
Feb-16	2226	Director of Finance, State of Hawaii	\$ 293.77	pCard expenditure for office supplies			
Feb-16	2230	Director of Finance, State of Hawaii	\$ 7,068.63	Payroll			
Mar-16	2243	Director of Finance, State of Hawaii	\$ 7,098.52	Payroll			
Mar-16	2245	Director of Finance, State of Hawaii	\$ 583.88	pCard expenditure for office supplies			
Mar-16	2255	Director of Finance, State of Hawaii	\$ 7,394.14	Payroll			
Apr-16	2270	Director of Finance, State of Hawaii	\$ 283.36	pCard expenditure for office supplies			
Apr-16	2273	Director of Finance, State of Hawaii	\$ 7,585.52	Payroll			
<b>Total</b>			<b>\$45,504.19</b>				



STATE OF HAWAII

**Communications, Technical and Finance Meeting  
(Combined Meeting)**

**Kalanimoku Bldg., Room 322B**

**1151 Punchbowl St., Honolulu**

**Tuesday, April 12, 2016**

**10:00 am – 12:00 pm**

**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. IWCE Infrastructure Forum recap
  - ii. APCO Western Region recap
  - iii. 2016 Legislative Investigative Committee update – Paul Ferreira
  - iv. Others
- b. Technical Committee – Thalia Burns
  - i. Investigative Regulatory Committee update – Davlynn Racadio
  - ii. FCC update
  - iii. Text-to-911 update
  - iv. Request for Approval:
    - 1. KPD (3) – APCO Conference, August 14-17, 2016, Orlando, FL - \$10,500.
  - v. Others.
- c. Finance Committee – Kiman Wong
  - i. Review of Monthly Cash Flow & Budget Financial Reports.
  - ii. Request for funding approval:
    - 1. Two-year extension of the Spiegel & McDiarmid LLP legal services contract beginning July 2016 for \$25,000.
    - 2. APCO Conference, August 14-17, 2016, Orlando, FL.
      - a. KPD (3) - \$10,500.
  - iii. Others.

## **VI. PSAP Status Updates**

- a. Kauai – Mark Begley
- 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, May 12, 2016 (Combined meeting)
  - ii. Thursday, June 9, 2016 (Combined meeting)
  - iii. Thursday, July, 14, 2016 (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**

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

<b>Budget Analysis</b>						
<b>FY 2015-16</b>	<b>Actuals</b>		<b>Annual Budget</b>	<b>% of Budget Expended</b>	<b>Forecast</b>	<b>\$ Better/(Worse) Budget</b>
	<b>APRIL</b>	<b>FY-T-D</b>				
<b>Receipts:</b>						
Enhanced 911 Surcharge Collection	836,211	7,999,038	9,252,500	86%	9,600,000	347,500
Interest Income	3,838	16,289	2,500	652%	23,000	20,500
<b>Receipts</b>	<b>840,049</b>	<b>8,015,327</b>	<b>9,255,000</b>	<b>87%</b>	<b>9,623,000</b>	<b>368,000</b>
<b>Disbursements:</b>						
New & Emerging Tech. Training	(25,884)	(78,049)	(246,650)	32%	(179,249)	67,401
Non-Recurring Expenses	(2,300,000)	(2,303,374)	(2,722,515)	85%	(2,663,489)	59,026
Recurring Expenses:						-
Administration	(18,333)	(561,399)	(1,129,700)	50%	(922,975)	206,725
Maintenance	(187,569)	(1,228,745)	(2,474,524)	50%	(2,410,546)	63,978
Telecommunications	(156,609)	(1,359,155)	(2,146,289)	63%	(2,058,840)	87,449
Other		(7,200)	(7,600)	95%	(7,200)	400
			-			
<b>Disbursements</b>	<b>(2,688,394)</b>	<b>(5,537,922)</b>	<b>(8,727,278)</b>	<b>63%</b>	<b>(8,242,299)</b>	<b>484,979</b>
<b>Net Receipts/(Disbursements)</b>	<b>(1,848,345)</b>	<b>2,477,406</b>	<b>527,722</b>		<b>1,380,701</b>	<b>852,979</b>
<b>Cash Flow Analysis</b>						
<b>Net Receipts/(Disbursements)</b>	<b>(1,848,345)</b>	<b>2,477,406</b>				
<b>Encumbrance Paydowns:</b>				<b>Encumb. Bal.</b>		
FY 2011 (Kauai)		(274,185)		144,814		
FY 2012 (HFD/EDS/HPD)		(56,040)		695,392		
FY 2014		(138,288)		1,383,317		
FY 2015		(2,196,307)		2,334,302		
FY 2016	2,300,000	2,300,000		2,300,000		
Accounts Receivable (Offset)		2,952	see note 1			
<b>Net Encumbrance Adds/(Paydown)</b>	<b>2,300,000</b>	<b>(361,869)</b>				
<b>Net Cash Inflow/(Outflow)</b>	<b>451,655</b>	<b>2,115,536</b>				
<b>Bank Balance Analysis:</b>						
<b>ADD: July 1, 2015 Beginning Balance</b>		<b>16,789,216</b>				
<b>Net Bank Balance</b>		<b>18,904,752</b>				
<b>Outstanding Ecumb/Accruals</b>		<b>(6,857,824)</b>				
<b>Unencumbered Cash Balance</b>		<b>12,046,928</b>				
<b>Note 1- Balance paid e911 fund for non payment due to Chapter 11 filing.</b>						



**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

<b>MONTH OF APRIL 2016</b>		<b>Hawaii PSAP</b>	<b>Kauai PSAP</b>	<b>Maui PSAP</b>	<b>Oahu PSAP</b>	<b>ADMIN</b>	<b>TOTAL</b>
	<b>Total RECEIPTS:</b>	-	-	-	-	840,049	840,049
	<b>DISBURSEMENTS:</b>						
	6200 New & Emerg. Tech Train.						
	6201 911 Goes to WashDC	-	-	8,892	-	2,832	11,724
	6204 APCO Conference	-	-	-	-	3,051	3,051
	6210 IWCE	-	-	-	-	2,162	2,162
	6214 Nena Conference	-	-	-	-	2,216	2,216
	6222 TriTech CAD Users						
	6222.01 EMS Users	-	-	-	5,272	-	5,272
	6222.02 HFD Users	-	-	-	-	1,458	1,458
	<b>Total 6222 TriTech CAD Users</b>	-	-	-	5,272	1,458	6,730
	<b>Total 6200 New &amp; Emerg. Tech Train.</b>	-	-	8,892	5,272	11,719	25,884
	6300 Non-RECURRING						
	6301 CAD Replac/Upgrade						
	6301.05 Kauai Police Dept	-	2,300,000	-	-	-	2,300,000
	<b>Total 6301 CAD Replac/Upgrade</b>	-	2,300,000	-	-	-	2,300,000
	<b>Total 6300 Non-RECURRING</b>	-	2,300,000	-	-	-	2,300,000
	6400 RECURRING EXPENSES						
	6401 ADMINISTRATION						
	6401.01 Exec Dir. Services	-	-	-	-	14,980	14,980
	6401.08 Board Member Travel	-	-	-	-	2,873	2,873
	6402.21 Cell Phone Charges	-	-	-	-	197	197
	6402.22 Office Supplies	-	-	-	-	283	283
	<b>Total 6401 ADMINISTRATION</b>	-	-	-	-	18,333	18,333
	6402 MAINTENANCE						
	6402.07 0011 9-1-1MSAG Maint.	41,348	-	-	48,137	-	89,484
	6402.08 CAD Maintenance	98,085	-	-	-	-	98,085
	<b>Total 6402 MAINTENANCE</b>	139,432	-	-	48,137	-	187,569
	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
	6403.0114 SD Viper (OSL) (3)	-	-	-	3,350	-	3,350
	<b>Total 6403.01 Telcom Charges</b>	51,115	-	23,237	82,257	-	156,609
	<b>Total 6403 Other RECURRING</b>	51,115	-	23,237	82,257	-	156,609
	<b>Total 6400 RECURRING EXPENSES</b>	190,547	-	23,237	130,393	18,333	362,510
	<b>Total DISBURSEMENTS:</b>	190,547	2,300,000	32,129	135,665	30,052	2,688,394

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
**For month ending April 30, 2016**

	Hawaii PSAP	Kauai PSAP	Maui PSAP	Molokai PSAP	Oahu PSAP	ADMIN	TOTAL		
<b>FY-T0-DATE April 2016 (10 mos)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>ANNUAL Budget</b>	<b>\$ Over/(under) Budget</b>
<b>Total RECEPTS:</b>	-	-	-	-	-	8,015,327	8,015,327	9,255,000	(1,239,673)
<b>DISBURSEMENTS:</b>									
6200 New & Emerg. Tech Train.									
6201 911 Goes to WashDC	-	-	8,399	-	-	17,287	25,686	46,500	(20,814)
6203 APCO New Tech Conference	-	-	-	-	-	2,207	2,207	11,200	(8,993)
6204 APCO Conference	-	-	7,238	-	13,123	7,243	27,604	31,560	(3,956)
6210 IWCE	-	-	-	-	-	2,162	2,162	2,500	(338)
6212 NASNA Conference	-	-	-	-	-	2,148	2,148	2,150	(2)
6214 Nena Conference	(2,588)	2,090	18	-	(1,070)	2,348	799	34,800	(34,001)
6215 NENA Tech Dev. Conf	-	-	2,821	-	-	-	2,821	2,830	(9)
6216 Smart911	-	-	-	-	-	-	-	-	-
6222 TriTech CAD Users									
6222.01 EMS Users	-	-	-	-	5,272	-	5,272	6,000	(728)
6222.02 HFD Users	-	-	-	-	1,458	-	1,458	6,000	(4,542)
<b>Total 6222 TriTech CAD Users</b>	-	-	-	-	6,730	-	6,730	12,000	(5,270)
6228 HxGN Live Hexagon Conf	-	-	(1,005)	-	-	-	(1,005)	18,875	(19,880)
6230 Other Training									
6230.01 HPD (O/T)	-	-	-	-	8,897	-	8,897	8,900	(3)
<b>Total 6230 Other Training</b>	-	-	-	-	8,897	-	8,897	8,900	(3)
6200 New & Emerg. Tech Train. - Other	-	-	-	-	-	-	-	70,135	(70,135)
<b>Total 6200 New &amp; Emerg. Tech Train.</b>	(2,588)	2,090	17,471	-	27,680	33,395	78,049	241,450	(163,401)
6300 Non-RECURRING									
6301 CAD Replac/Upgrade									
6301.05 Kauai Police Dept	-	2,300,000	-	-	-	-	2,300,000	2,300,000	-
6301.06 Maui PD	-	-	-	-	-	-	-	82,000	(82,000)
6301.07 So. Maui Buildout	-	-	-	-	-	-	-	200,000	(200,000)
6301.08 CAD Related Expenses	-	-	-	-	3,374	-	3,374	-	3,374
<b>Total 6301 CAD Replac/Upgrade</b>	-	2,300,000	-	-	3,374	-	2,303,374	2,582,000	(278,626)
6303 Computers									
6303.13 UPS Battery-HPD	-	-	-	-	-	-	-	3,115	(3,115)
6303.23 HPD SMART911 S/W	-	-	-	-	-	-	-	62,400	(62,400)
6303.24 PRI Install	-	-	-	-	-	-	-	10,000	(10,000)
6303.25 Workstation	-	-	-	-	-	-	-	65,000	(65,000)
<b>Total 6303 Computers</b>	-	-	-	-	-	-	-	140,515	(140,515)
<b>Total 6300 Non-RECURRING</b>	-	2,300,000	-	-	3,374	-	2,303,374	2,722,515	(419,141)

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

	Hawaii PSAP	Kauai PSAP	Maui PSAP	Molokai PSAP	Oahu PSAP	ADMIN	TOTAL		
<b>FY-T0-DATE April 2016 (10 mos)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>10 (mos.)</b>	<b>ANNUAL Budget</b>	<b>\$ Over/(under) Budget</b>
<b>6400 RECURRING EXPENSES</b>									
<b>6401 ADMINISTRATION</b>									
6401.01 Exec Dir. Services	-	-	-	-	-	106,542	106,542	198,000	(91,458)
6401.02 ElectronSignatur	-	-	-	-	-	-	-	250	(250)
6401.05 Audit Expense	-	-	-	-	-	13,000	13,000	13,025	(25)
6401.06 Bank Charge	-	-	-	-	-	-	-	50	(50)
6401.08 Board Member Travel	-	-	-	-	-	24,454	24,454	25,000	(546)
6401.09 DB&F Assessments									
6401.0101 DB&F Admin. Assess	-	-	-	-	-	45,578	45,578	155,000	(109,422)
6401.0102 DB&F Rev Assessment	-	-	-	-	-	319,652	319,652	462,625	(142,973)
<b>Total 6401.09 DB&amp;F Assessments</b>	-	-	-	-	-	365,230	365,230	617,625	(252,395)
6401.11 Miscellaneous Expense	-	-	-	-	-	(0)	(0)	-	(0)
6401.12 NASNA Dues	-	-	-	-	-	150	150	150	-
6401.13 Parking Permits	-	-	-	-	-	400	400	400	-
6401.15 WSP Cost Recovery									
6401.0101 Sprint/Nextel	-	-	-	-	-	4,253	4,253	-	4,253
6401.15 WSP Cost Recovery - Other	-	-	-	-	-	39,120	39,120	70,000	(30,880)
<b>Total 6401.15 WSP Cost Recovery</b>	-	-	-	-	-	43,372	43,372	70,000	(26,628)
6401.17 ADA Compliance	-	-	-	-	-	-	-	200	(200)
6401.18 AG Legal Fees	-	-	-	-	-	-	-	25,000	(25,000)
6401.19 Public Education	-	-	-	-	-	8,721	8,721	30,000	(21,279)
6401.20 RCUH Contract	-	-	-	-	-	(5,881)	(5,881)	-	(5,881)
6402.21 Cell Phone Charges	-	-	-	-	-	897	897	-	897
6402.22 Office Supplies	-	-	-	-	-	4,513	4,513	5,000	(487)
6402.23 NG911 Transition Plan	-	-	-	-	-	-	-	145,000	(145,000)
<b>Total 6401 ADMINISTRATION</b>	-	-	-	-	-	561,399	561,399	1,129,700	(568,301)
<b>6402 MAINTENANCE</b>									
6402.02 Imagery Lic Agree	-	-	0	-	-	-	0	447,015	(447,015)
6402.05 Logging RecordMaint	-	-	-	-	-	-	-	60,775	(60,775)
6402.07 0011 9-1-1MSAG Maint.	165,390	33,349	155,673	-	433,228	-	787,640	1,323,378	(535,738)
6402.08 CAD Maintenance	98,084	-	170,000	-	173,021	-	441,105	638,752	(197,647)
6402.13 Software Maintenance									
6402.131 Integraph DB S/W Maint	-	-	-	-	-	-	-	4,604	(4,604)
<b>Total 6402.13 Software Maintenance</b>	-	-	-	-	-	-	-	4,604	(4,604)
<b>Total 6402 MAINTENANCE</b>	263,474	33,349	325,673	-	606,249	-	1,228,745	2,474,524	(1,245,779)
<b>6403 Other RECURRING</b>									
6403.01 Telcom Charges									
6403.0102 Long Distance	227	84	119	(35)	-	-	395	2,103	(1,708)
6403.0109 Telcom Trunk	204,230	55,699	208,900	-	789,068	-	1,257,896	1,687,134	(429,238)
6403.0111 WiringAltDispatch	-	673	-	-	-	-	673	237,736	(237,063)
6403.0112 HPD CML Viper-Kapolei	-	-	-	-	70,486	-	70,486	140,916	(70,430)
6403.0113 HPDCMLViper-Alapai	-	-	-	-	5,706	-	5,706	-	5,706
6403.0114 SD Viper (OSL) (3)	-	-	-	-	23,829	-	23,829	54,000	(30,171)
6403.0115 Text-to-911 Service	-	-	-	-	-	-	-	24,100	(24,100)
6403.0116 Alt PSAP Call Route	-	-	-	-	-	-	-	300	(300)
6403.0117 Telecom Chgs-Other	-	171	-	-	-	-	171	-	171
<b>Total 6403.01 Telcom Charges</b>	204,456	56,627	209,019	(35)	889,088	-	1,359,155	2,146,289	(787,134)
6403.02 EMS Tower Lease	-	-	-	-	7,200	-	7,200	7,600	(400)
<b>Total 6403 Other RECURRING</b>	204,456	56,627	209,019	(35)	896,288	-	1,366,355	2,153,889	(787,534)
<b>Total 6400 RECURRING EXPENSES</b>	467,931	89,976	534,692	(35)	1,502,537	561,399	3,156,499	5,758,113	(2,601,614)
<b>Total DISBURSEMENTS</b>	465,343	2,392,066	552,163	(35)	1,532,133	596,252	5,537,922	8,727,278	(3,189,356)

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
**For month ending April 30, 2016**

FY 2016 STRATEGIC BUDGET PLAN	HAWAII PSAP	OAHU PSAP	MAUI PSAP	Molokai PSAP	KAUAI PSAP	ADMIN	New & Emerging Technology Training	TOTAL	Board Approval Date
Approved FY 2016 Strategic Budget Plan	992,547	2,577,329	946,873	65,335	3,065,729	1,103,700	246,650	8,998,163	6/9/2015
NASNA						2,650	(2,650)		
Board Approved Changes:									
Executive Director (1) - APCO						3,000	(3,000)		6/9/2015
Board member (1) - APCO						3,000	(3,000)		6/9/2015
Oahu DIT (1) - APCO		3,000					(3,000)		6/9/2015
HPD (2+1 Board member) - APCO		10,500					(10,500)		7/15/2015
MPD (2) - APCO			7,240				(7,240)		7/15/2015
KPD (2) - APCO					7,000		(7,000)		7/15/2015
HawPD (2) - APCO	7,000						(7,000)		7/15/2015
HawPD (2) - APCO (retracted)	(7,000)						7,000		7/15/2015
HFD (1) - APCO		3,000					(3,000)		7/15/2015
HawPD Imagery Adjustment	(300,000)							(300,000)	7/15/2015
MPD (1) - NENA Development Conf -Oct4-8			2,830				(2,830)		8/13/2015
Board member (1) - APCO New Emerging Tech						2,500	(2,500)		9/10/2015
MPD - PowerPhone EMD digital S/W			3,115					3,115	10/8/2015
HFD (2)TriCon2016 Conference, San Diego, Feb28 to March 2, 2016		6,000					(6,000)		11/12/2015
EMS (2)TriCon2016 Conference, San Diego, Feb28 to March 2, 2016		6,000					(6,000)		11/12/2015
Boardmembers (3) 911 GTW Conf., Feb 21-24, 2016						9,500	(9,500)		11/12/2015
HFD (1) 911 GTW Conf., Feb 21-24, 2016		3,000					(3,000)		11/12/2015
HiPD(2) 911 GTW Conf., Feb 21-24, 2016	7,000						(7,000)		11/12/2015
HPD (3) 911 GTW Conf., Feb 21-24, 2016		10,500					(10,500)		11/12/2015
HawTelcom (1) 911 GTW Conf., Feb 21-24, 2016						3,000	(3,000)		11/12/2015
KPD (3) - APCO Western Regional Conf., March 3-10-2016					8,700		(8,700)		11/12/2015
Admin- Office Supplies						1,000		1,000	11/12/2015
MPD (3) 911 GTW, Feb 21-24, 2016			10,500				(10,500)		11/12/2015
Board member - IWCE Conference, Las Vegas, NV; March 21-25,2016.						2,500	(2,500)		12/10/2015
MPD (6)2016 HeXagon (Intergraph) Conference, Anaheim, June 13-17. 2016			18,875				(18,875)		1/12/2016
IWCE (1) - March 21-25,2016						2,500	(2,500)		2/11/2016
IWCE (1) - March 21-25,2017 (R. Freitas)						(2,500)	2,500		
HPD (2) - Smart911 Summit and Training; Boston, MA, May 9-12, 2016		5,200					-		2/11/2016
Exec Dir (1) - NENA/NASNA Conference 6/10/2016						(3,300)	(3,300)		3/10/2016
HPD (2) - NENA Conference 6/11/16 - 6/16/2016		7,000					(7,000)		3/10/2016
MPD (2) - NENA Conference 6/11/2016 - 6/16/2016			7,000				(7,000)		3/10/2016
KPD (3) - NENA Conference 6/11/2016 - 6/16/2016					10,500		(10,500)		3/10/2016
HiPD (2) - NENA Conference 6/11/2016-6/16/2016	7,000						(7,000)		3/10/2016
ADMIN - Spiegel & McDiarmid LLP						25,000		25,000	4/14/2016
							-		
<b>Totals</b>	<b>706,547</b>	<b>2,631,529</b>	<b>996,433</b>	<b>65,335</b>	<b>3,091,929</b>	<b>1,152,550</b>	<b>81,555</b>	<b>8,727,278</b>	

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
**For month ending April 30, 2016**

ENCUMBRANCES							FY 2015	PAYDOWN	Apr.30, 2016
<i>FY 2011 Encumbrances:</i>	Oahu	Maui	Molokai	Kauai	Hawaii	Admin	Total		
CAD Upgrade:				419,000			419,000		144,814
<i>FY 2012 Encumbrances:</i>							-		
CAD Upgrades:									
EMS/FIRE	56,040						56,040		
HPD	695,392						695,392		695,392
Total FY 2012 Encumbrances	751,432	-		-	-	-	751,432		695,392
<i>FY 2014 Accruals</i>									
CAD Upgrade					1,500,000		1,500,000		1,366,315
AG Legal Expenses for IRC						21,605	21,605		17,002
Total FY 2014 Encumbrances	-	-	-	-	1,500,000	21,605	1,521,605		1,383,317
FY 2015 Encumbrances									
CAD Upgrade					2,300,000		2,300,000		2,300,000
HPD Smart911 S/W	76,400						76,400		29,819
Imagery License					926,400		926,400		4,383
Kauai ADC				307,000			307,000		100
							-		-
Board Travel						6,000	6,000		-
NENA	9,999	10,500		9,900	10,500	4,086	44,985		-
NASNA						650	650		-
911 Goes to WA		7,000					7,000		-
HxGN Live Hexagon Conf		6,600					6,600		-
WSP Cost Recovery -SprintNextel						35,000	35,000		-
MSAG	46,614	37,590		73,291	39,885		197,380		-
CAD Maint					66,307		66,307		-
HT Telcom Trunk		23,207		27,849	51,057		102,113		-
HPD CML Viper-Kapolei/Alapai	41,650						41,650		-
CML Viper (OSL)	2,973						2,973		-
Imagery Lic Agree		387,892					387,892		-
Office Supplies						110	110		-
RCUH Contract						14,570	14,570		-
HT Long Distance		139	35	145	60		379		-
Microwave Antenna Lease	7,200						7,200		-
							-		-
Total Encumbrances/Accruals	184,836	472,928	35	418,185	3,394,209	60,416	4,530,609		2,334,302
FY2016 Encumbrance				2,300,000					2,300,000
Total	936,268	472,928	35	3,137,185	4,894,209	82,021	7,222,646	-	6,857,824

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

					Hawaii PSAP		
<b>FY-TO-DATE April 2016 (10 mos)</b>					<b>10 (mos.)</b>	<b>ANNUAL Budget</b>	<b>\$ Over/(under) Budget</b>
<b>Total RECEIPTS:</b>					-	-	-
<b>DISBURSEMENTS:</b>							
6200 New & Emerg. Tech Train.							
6201 911 Goes to WashDC					-	7,000	(7,000)
6203 APCO New Tech Conference					-	-	-
6204 APCO Conference					-	-	-
6210 IWCE					-	-	-
6212 NASNA Conference					-	-	-
6214 Nena Conference					(2,588)	7,000	(9,588)
6215 NENA Tech Dev. Conf					-	-	-
6216 Smart911					-	-	-
6222 TriTech CAD Users					-	-	-
6222.01 EMS Users					-	-	-
6222.02 HFD Users					-	-	-
Total 6222 TriTech CAD Users					-	-	-
6228 HxGN Live Hexagon Conf					-	-	-
6230 Other Training					-	-	-
6230.01 HPD (O/T)					-	-	-
Total 6230 Other Training					-	-	-
6200 New & Emerg. Tech Train. - Other					-	-	-
Total 6200 New & Emerg. Tech Train.					(2,588)	14,000	(16,588)
6300 Non-RECURRING							
6301 CAD Replac/Upgrade							
6301.05 Kauai Police Dept					-	-	-
6301.06 Maui PD					-	-	-
6301.07 So. Maui Buildout					-	-	-
6301.08 CAD Related Expenses					-	-	-
Total 6301 CAD Replac/Upgrade					-	-	-
6303 Computers							
6303.13 UPS Battery-HPD					-	-	-
6303.23 HPD SMART911 S/W					-	-	-
6303.24 PRI Install					-	-	-
6303.25 Workstation					-	-	-
Total 6303 Computers					-	-	-
Total 6300 Non-RECURRING					-	-	-
6400 RECURRING EXPENSES							
6402 MAINTENANCE							
6402.02 Imagery Lic Agree					-	-	-
6402.05 Logging Record Maint					-	-	-
6402.07 0011 9-1-1MSAG Maint.					165,390	307,647	(142,257)
6402.08 CAD Maintenance					98,084	68,752	29,332
6402.13 Software Maintenance					-	-	-
6402.131 Integraph DB S/W Maint					-	4,604	(4,604)
Total 6402.13 Software Maintenance					-	4,604	(4,604)
Total 6402 MAINTENANCE					263,474	381,003	(117,529)
6403 Other RECURRING							
6403.01 Telecom Charges							
6403.0102 Long Distance					227	1,200	(973)
6403.0109 Telecom Trunk					204,230	306,344	(102,114)
6403.0111 Wiring Alt Dispatch					-	-	-
6403.0112 HPD CML Viper-Kapolei					-	-	-
6403.0113 HPD CML Viper-Alapala					-	-	-
6403.0114 SD Viper (OSL) (3)					-	-	-
6403.0115 Text-to-911 Service					-	4,000	(4,000)
6403.0116 Alt PSAP Call Route					-	-	-
6403.0117 Telecom Chgs-Other					-	-	-
Total 6403.01 Telecom Charges					204,456	311,544	(107,088)
6403.02 EMS Tower Lease					-	-	-
Total 6403 Other RECURRING					204,456	311,544	(107,088)
Total 6400 RECURRING EXPENSES					467,931	692,547	(224,616)
Total DISBURSEMENTS					465,343	706,547	(241,204)

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

					Kauai PSAP		
FY-T0-DATE April 2016 (10 mos)					10 (mos.)	ANNUAL Budget	\$ Over/(under) Budget
<b>Total RECEIPTS:</b>					-	-	-
<b>DISBURSEMENTS:</b>							
6200 New & Emerg. Tech Train.							
6201 911 Goes to WashDC					-	-	-
6203 APCO New Tech Conference					-	8,700	(8,700)
6204 APCO Conference					-	7,000	(7,000)
6210 IWCE					-	-	-
6212 NASNA Conference					-	-	-
6214 Nena Conference					2,090	10,500	(8,410)
6215 NENA Tech Dev. Conf					-	-	-
6216 Smart911					-	-	-
6222 TriTech CAD Users							
6222.01 EMS Users					-	-	-
6222.02 HFD Users					-	-	-
Total 6222 TriTech CAD Users					-	-	-
6228 HxGN Live Hexagon Conf					-	-	-
6230 Other Training							
6230.01 HPD (O/T)					-	-	-
Total 6230 Other Training					-	-	-
6200 New & Emerg. Tech Train. - Other					-	-	-
Total 6200 New & Emerg. Tech Train.					2,090	26,200	(24,110)
6300 Non-RECURRING							
6301 CAD Replac/Upgrade							
6301.05 Kauai Police Dept					2,300,000	2,300,000	-
6301.06 Maui PD					-	-	-
6301.07 So. Maui Buildout					-	-	-
6301.08 CAD Related Expenses					-	-	-
Total 6301 CAD Replac/Upgrade					2,300,000	2,300,000	-
6303 Computers							
6303.13 UPS Battery-HPD					-	-	-
6303.23 HPD SMART911 S/W					-	-	-
6303.24 PRI Install					-	10,000	(10,000)
6303.25 Workstation					-	-	-
Total 6303 Computers					-	10,000	(10,000)
Total 6300 Non-RECURRING					2,300,000	2,310,000	(10,000)
6400 RECURRING EXPENSES							
6402 MAINTENANCE							
6402.02 Imagery Lic Agree					-	197,015	(197,015)
6402.05 Logging Record Maint					-	-	-
6402.07 0011 9-1-1MSAG Maint.					33,349	204,700	(171,351)
6402.08 CAD Maintenance					-	-	-
6402.13 Software Maintenance							
6402.131 Integrgraph DB S/W Maint					-	-	-
Total 6402.13 Software Maintenance					-	-	-
Total 6402 MAINTENANCE					33,349	401,715	(368,366)
6403 Other RECURRING							
6403.01 Telcom Charges							
6403.0102 Long Distance					84	480	(396)
6403.0109 Telcom Trunk					55,699	111,398	(55,699)
6403.0111 Wiring Alt Dispatch					673	237,736	(237,063)
6403.0112 HPD CML Viper-Kapolei					-	-	-
6403.0113 HPDCML Viper-Alapai					-	-	-
6403.0114 SD Viper (OSL) (3)					-	-	-
6403.0115 Text-to-911 Service					-	4,100	(4,100)
6403.0116 Alt PSAP Call Route					-	300	(300)
6403.0117 Telecom Chgs-Other					171	-	171
Total 6403.01 Telcom Charges					56,627	354,014	(297,387)
6403.02 EMS Tower Lease					-	-	-
Total 6403 Other RECURRING					56,627	354,014	(297,387)
Total 6400 RECURRING EXPENSES					89,976	755,729	(665,753)
Total DISBURSEMENTS					2,392,066	3,091,929	(699,863)

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

FY-T0-DATE April 2016 (10 mos)	Maui PSAP		
	10 (mos.)	ANNUAL Budget	\$ Over/(under) Budget
<b>Total RECEIPTS:</b>	-	-	-
<b>DISBURSEMENTS:</b>			
6200 New & Emerg. Tech Train.			
6201 911 Goes to WashDC	8,399	10,500	(2,101)
6203 APCO New Tech Conference	-	-	-
6204 APCO Conference	7,238	7,240	(2)
6210 IWCE	-	-	-
6212 NASNA Conference	-	-	-
6214 Nena Conference	18	7,000	(6,982)
6215 NENA Tech Dev. Conf	2,821	2,830	(9)
6216 Smart911	-	-	-
6222 TriTech CAD Users			
6222.01 EMS Users	-	-	-
6222.02 HFD Users	-	-	-
Total 6222 TriTech CAD Users	-	-	-
6228 HxGN Live Hexagon Conf	(1,005)	18,875	(19,880)
6230 Other Training			
6230.01 HPD (O/T)	-	-	-
Total 6230 Other Training	-	-	-
6200 New & Emerg. Tech Train. - Other	-	-	-
Total 6200 New & Emerg. Tech Train.	17,471	46,445	(28,974)
6300 Non-RECURRING			
6301 CAD Replac/Upgrade			
6301.05 Kauai Police Dept	-	-	-
6301.06 Maui PD	-	82,000	(82,000)
6301.07 So. Maui Buildout	-	200,000	(200,000)
6301.08 CAD Related Expenses	-	-	-
Total 6301 CAD Replac/Upgrade	-	282,000	(282,000)
6303 Computers			
6303.13 UPS Battery-HPD	-	3,115	(3,115)
6303.23 HPD SMART911 S/W	-	-	-
6303.24 PRI Install	-	-	-
6303.25 Workstation	-	-	-
Total 6303 Computers	-	3,115	(3,115)
Total 6300 Non-RECURRING	-	285,115	(285,115)
6400 RECURRING EXPENSES			
6402 MAINTENANCE			
6402.02 Imagery Lic Agree	0	-	0
6402.05 Logging Record Maint	-	-	-
6402.07 0011 9-1-1MSAG Maint.	155,673	233,393	(77,720)
6402.08 CAD Maintenance	170,000	170,000	-
6402.13 Software Maintenance			
6402.131 Integraph DB S/W Maint	-	-	-
Total 6402.13 Software Maintenance	-	-	-
Total 6402 MAINTENANCE	325,673	403,393	(77,720)
6403 Other RECURRING			
6403.01 Telcom Charges			
6403.0102 Long Distance	119	366	(247)
6403.0109 Telcom Trunk	208,900	257,914	(49,014)
6403.0111 Wiring Alt Dispatch	-	-	-
6403.0112 HPD CML Viper-Kapolei	-	-	-
6403.0113 HPD CML Viper-Alapai	-	-	-
6403.0114 SD Viper (OSL) (3)	-	-	-
6403.0115 Text-to-911 Service	-	3,200	(3,200)
6403.0116 Alt PSAP Call Route	-	-	-
6403.0117 Telecom Chgs-Other	-	-	-
Total 6403.01 Telcom Charges	209,019	261,480	(52,461)
6403.02 EMS Tower Lease	-	-	-
Total 6403 Other RECURRING	209,019	261,480	(52,461)
Total 6400 RECURRING EXPENSES	534,692	664,873	(130,181)
<b>Total DISBURSEMENTS</b>	<b>552,163</b>	<b>996,433</b>	<b>(444,270)</b>



**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

	Molokai PSAP		
<b>FY-TO-DATE April 2016 (10 mos)</b>	<b>10 (mos.)</b>	<b>ANNUAL Budget</b>	<b>\$ Over/(under) Budget</b>
<b>Total RECEIPTS:</b>	-	-	-
<b>DISBURSEMENTS:</b>			
6200 New & Emerg. Tech Train.			
6201 911 Goes to WashDC	-	-	-
6203 APCO New Tech Conference	-	-	-
6204 APCO Conference	-	-	-
6210 IWCE	-	-	-
6212 NASNA Conference	-	-	-
6214 Nena Conference	-	-	-
6215 NENA Tech Dev. Conf	-	-	-
6216 Smart911	-	-	-
6222 TriTech CAD Users			
6222.01 EMS Users	-	-	-
6222.02 HFD Users	-	-	-
Total 6222 TriTech CAD Users	-	-	-
6228 HxGN Live Hexagon Conf	-	-	-
6230 Other Training			
6230.01 HPD (O/T)	-	-	-
Total 6230 Other Training	-	-	-
6200 New & Emerg. Tech Train. - Other	-	-	-
Total 6200 New & Emerg. Tech Train.	-	-	-
6300 Non-RECURRING			
6301 CAD Replac/Upgrade			
6301.05 Kauai Police Dept	-	-	-
6301.06 Maui PD	-	-	-
6301.07 So. Maui Buildout	-	-	-
6301.08 CAD Related Expenses	-	-	-
Total 6301 CAD Replac/Upgrade	-	-	-
6303 Computers			
6303.13 UPS Battery-HPD	-	-	-
6303.23 HPD SMART911 S/W	-	-	-
6303.24 PRI Install	-	-	-
6303.25 Workstation	-	-	-
Total 6303 Computers	-	-	-
Total 6300 Non-RECURRING	-	-	-
6400 RECURRING EXPENSES			
6402 MAINTENANCE			
6402.02 Imagery Lic Agree	-	-	-
6402.05 Logging Record Maint	-	-	-
6402.07 0011 9-1-1MSAG Maint.	-	-	-
6402.08 CAD Maintenance	-	-	-
6402.13 Software Maintenance			
6402.131 Integraph DB S/W Maint	-	-	-
Total 6402.13 Software Maintenance	-	-	-
Total 6402 MAINTENANCE	-	-	-
6403 Other RECURRING			
6403.01 Telecom Charges			
6403.0102 Long Distance	(35)	57	(92)
6403.0109 Telecom Trunk	-	64,478	(64,478)
6403.0111 Wiring Ait Dispatch	-	-	-
6403.0112 HPD CML Viper-Kapolei	-	-	-
6403.0113 HPDCML Viper-Alapai	-	-	-
6403.0114 SD Viper (OSL) (3)	-	-	-
6403.0115 Text-to-911 Service	-	800	(800)
6403.0116 Ait PSAP Call Route	-	-	-
6403.0117 Telecom Chgs-Other	-	-	-
Total 6403.01 Telecom Charges	(35)	65,335	(65,370)
6403.02 EMS Tower Lease	-	-	-
Total 6403 Other RECURRING	(35)	65,335	(65,370)
Total 6400 RECURRING EXPENSES	(35)	65,335	(65,370)
Total DISBURSEMENTS	(35)	65,335	(65,370)

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

					Oahu PSAP		
FY-T0-DATE April 2016 (10 mos)					10 (mos.)	ANNUAL Budget	\$ Over/(under) Budget
<b>Total RECEIPTS:</b>					-	-	-
<b>DISBURSEMENTS:</b>							
6200 New&Emerg. Tech Train.							
6201 911 Goes to WashDC					-	13,500	(13,500)
6203 APCO New Tech Conference					-	-	-
6204 APCO Conference					13,123	13,125	(2)
6210 IWCE					-	-	-
6212 NASNA Conference					-	-	-
6214 Nena Conference					(1,070)	7,000	(8,070)
6215 NENA Tech Dev. Conf					-	-	-
6216 Smart911					-	-	-
6222 TriTech CAD Users							
6222.01 EMS Users					5,272	6,000	(728)
6222.02 HFD Users					1,458	6,000	(4,542)
<b>Total 6222 TriTech CAD Users</b>					<b>6,730</b>	<b>12,000</b>	<b>(5,270)</b>
6228 HxGN Live Hexagon Conf					-	-	-
6230 Other Training							
6230.01 HPD (O/T)					8,897	8,900	(3)
<b>Total 6230 Other Training</b>					<b>8,897</b>	<b>8,900</b>	<b>(3)</b>
6200 New&Emerg. Tech Train. - Other					-	-	-
<b>Total 6200 New&amp;Emerg. Tech Train.</b>					<b>27,680</b>	<b>54,525</b>	<b>(26,845)</b>
6300 Non-RECURRING							
6301 CAD Replac/Upgrade							
6301.05 Kauai Police Dept					-	-	-
6301.06 Maui PD					-	-	-
6301.07 So. Maui Buildout					-	-	-
6301.08 CAD Related Expenses					3,374	-	3,374
<b>Total 6301 CAD Replac/Upgrade</b>					<b>3,374</b>	<b>-</b>	<b>3,374</b>
6303 Computers							
6303.13 UPS Battery-HPD					-	-	-
6303.23 HPD SMART911 S/W					-	62,400	(62,400)
6303.24 PRI Install					-	-	-
6303.25 Workstation					-	65,000	(65,000)
<b>Total 6303 Computers</b>					<b>-</b>	<b>127,400</b>	<b>(127,400)</b>
<b>Total 6300 Non-RECURRING</b>					<b>3,374</b>	<b>127,400</b>	<b>(124,026)</b>
6400 RECURRING EXPENSES							
6402 MAINTENANCE							
6402.02 Imagery Lic Agree					-	250,000	(250,000)
6402.05 Logging RecordMaint					-	60,775	(60,775)
6402.07 0011 9-1-1MSAG Maint.					433,228	577,638	(144,410)
6402.08 CAD Maintenance					173,021	400,000	(226,979)
6402.13 Software Maintenance							
6402.131 Integraph DB S/W Maint					-	-	-
<b>Total 6402.13 Software Maintenance</b>					<b>-</b>	<b>-</b>	<b>-</b>
<b>Total 6402 MAINTENANCE</b>					<b>606,249</b>	<b>1,288,413</b>	<b>(682,164)</b>
6403 Other RECURRING							
6403.01 Telcom Charges							
6403.0102 Long Distance					-	-	-
6403.0109 Telcom Trunk					789,068	947,000	(157,932)
6403.0111 WiringAltDispatch					-	-	-
6403.0112 HPD CML Viper-Kapolei					70,486	140,916	(70,430)
6403.0113 HPDCMLViper-Alapai					5,706	-	5,706
6403.0114 SD Viper (OSL) (3)					23,829	54,000	(30,171)
6403.0115 Text-to-911 Service					-	12,000	(12,000)
6403.0116 Alt PSAP Call Route					-	-	-
6403.0117 Telecom Chgs-Other					-	-	-
<b>Total 6403.01 Telcom Charges</b>					<b>889,088</b>	<b>1,153,916</b>	<b>(264,828)</b>
6403.02 EMS Tower Lease					7,200	7,600	(400)
<b>Total 6403 Other RECURRING</b>					<b>896,288</b>	<b>1,161,516</b>	<b>(265,228)</b>
<b>Total 6400 RECURRING EXPENSES</b>					<b>1,502,537</b>	<b>2,449,929</b>	<b>(947,392)</b>
<b>Total DISBURSEMENTS</b>					<b>1,533,591</b>	<b>2,631,854</b>	<b>(1,098,263)</b>

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
For month ending April 30, 2016

					ADMIN		
FY-T0-DATE April 2016 (10 mos)					10 (mos.)	ANNUAL Budget	\$ Over/(under) Budget
Total RECEIPTS:					8,015,327	-	8,015,327
DISBURSEMENTS:							
6200 New &Emerg. Tech Train.							
6201 911 Goes to WashDC					17,287	15,500	1,787
6203 APCO New Tech Conference					2,207	2,500	(293)
6204 APCO Conference					7,243	4,195	3,048
6210 IWCE					2,162	2,500	(338)
6212 NASNA Conference					2,148	2,150	(2)
6214 Nena Conference					2,348	3,300	(952)
6215 NENA Tech Dev. Conf					-	-	-
6216 Smart911					-	-	-
6222 TriTech CAD Users							
6222.01 EMS Users					-	-	-
6222.02 HFD Users					-	-	-
Total 6222 TriTech CAD Users					-	-	-
6228 HxGN Live Hexagon Conf					-	-	-
6230 Other Training							
6230.01 HPD (O/T)					-	-	-
Total 6230 Other Training					-	-	-
6200 New &Emerg. Tech Train. - Other					-	70,135	(70,135)
Total 6200 New &Emerg. Tech Train.					33,395	100,280	(66,885)
6300 Non-RECURRING							
6400 RECURRING EXPENSES							
6401 ADMINISTRATION							
6401.01 Exec Dir. Services					106,542	198,000	(91,458)
6401.02 ElectronSignatur					-	250	(250)
6401.05 Audit Expense					13,000	13,025	(25)
6401.06 Bank Charge					-	50	(50)
6401.08 Board Member Travel					24,454	25,000	(546)
6401.09 DB&F Assessments							
6401.0101 DB&F Admin. Assess					45,578	155,000	(109,422)
6401.0102 DB&F Rev Assessment					319,652	462,625	(142,973)
Total 6401.09 DB&F Assessments					365,230	617,625	(252,395)
6401.11 Miscellaneous Expense					(0)	-	(0)
6401.12 NASNA Dues					150	150	-
6401.13 Parking Permits					400	400	-
6401.15 WSP Cost Recovery							
6401.0101 Sprint/Nextel					4,253	-	4,253
6401.15 WSP Cost Recovery - Other					39,120	70,000	(30,880)
Total 6401.15 WSP Cost Recovery					43,372	70,000	(26,628)
6401.17 ADA Compliance					-	200	(200)
6401.18 AG Legal Fees						25,000	(25,000)
6401.19 Public Education					8,721	30,000	(21,279)
6401.20 RCUH Contract					(5,881)	-	(5,881)
6402.21 Cell Phone Charges					897	-	897
6402.22 Office Supplies					4,513	5,000	(487)
6402.23 NG911 Transition Plan					-	145,000	(145,000)
Total 6401 ADMINISTRATION					561,399	1,129,700	(568,301)
Total 6403 Other RECURRING					-	-	-
Total 6400 RECURRING EXPENSES					561,399	1,129,700	(568,301)
Total DISBURSEMENTS					594,793	1,229,980	(635,187)

**HAWAII ENHANCED 911 BOARD STATEMENT OF CASH FLOWS**  
**For month ending April 30, 2016**

**Checks that were paid with only one signatory**

Month	Check #	PAYEE	Amount	Reason			
Jan-16	2203	Director of Finance, State of Hawaii	\$ 925.55	pCard expenditure for office supplies			
Jan-16	2215	Director of Finance, State of Hawaii	\$ 7,291.52	Payroll			
Feb-16	2221	Director of Finance, State of Hawaii	\$ 6,979.30	Payroll			
Feb-16	2226	Director of Finance, State of Hawaii	\$ 293.77	pCard expenditure for office supplies			
Feb-16	2230	Director of Finance, State of Hawaii	\$ 7,068.63	Payroll			
Mar-16	2243	Director of Finance, State of Hawaii	\$ 7,098.52	Payroll			
Mar-16	2245	Director of Finance, State of Hawaii	\$ 583.88	pCard expenditure for office supplies			
Mar-16	2255	Director of Finance, State of Hawaii	\$ 7,394.14	Payroll			
Apr-16	2270	Director of Finance, State of Hawaii	\$ 283.36	pCard expenditure for office supplies			
Apr-16	2273	Director of Finance, State of Hawaii	\$ 7,585.52	Payroll			
<b>Total</b>			<b>\$45,504.19</b>				

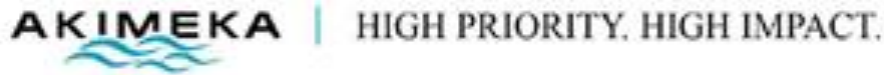
# Hawaii County E9-1-1 Status Report

*April 1, 2016 – April 30, 2016*



# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016



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# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME HAWAII COUNTY PSAPS – APRIL 2016

(Source: West Safety Services (Intrado) Viper system)

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

9-1-1 Call Volume																	
HAWAII 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
APR	17,112	3,074	17.96%	12,026	70.28%	46.50%	53.50%	707	4.13%	21	0.12%	0	0.00%	1,284	7.50%	0	0.00%

### CALL VOLUME HAWAII COUNTY PSAP NOTES:

\*The percentage of Wireless Phase 2 calls (53.50%) has increased from the number of Wireless Phase 1 calls (46.50%) in April 2016.

\*911 Calls with no Ali = 0.12% - Statewide average = 0.18% Year 2015

### 9-1-1 CALL VOLUME – CALENDAR YEAR 2016

9-1-1 Call Volume																	
HAWAII 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%	91	0.49%
APR	17,112	3,074	17.96%	12,026	70.28%	46.50%	53.50%	707	4.13%	21	0.12%	0	0.00%	1,284	7.50%	0	0.00%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	70,796	13,170		48,888				3,048		78		0		5,612		91	
MON AVG	17,699	3,293	18.58%	12,222	69.09%	47.50%	52.50%	762	4.30%	20	0.11%	0	0.00%	1,403	7.92%	23	0.12%

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 9-1-1 CALL VOLUME BY AGENCY – APRIL 2016

2016	9-1-1 Call Volume by Agency									
	Hawaii Police Department					Hawaii Fire Department				
	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
April	13,624	79.62%	0	1,243	0	2,204	12.88%	0	41	0

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

2016	9-1-1 Call Volume by Agency									
	Hawaii Police Department					Hawaii Fire Department				
	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
May										
June										
July										
August										
September										
October										
November										
December										
YTD	56,987		0	5,462	0	9,718		0	150	0
MON AVG	14,247	80.40%	0	1,366	0	2,430	13.71%	0	38	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 E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## TEXT TO 911 – CURRENT MONTH – APRIL 2016

### NOTE:

- Hawaii County deployed a soft launch of Text to 911 on February 1, 2016.
- Sprint PCS conducted a Text to 911 test with the Hawaii Police 911 PSAP on February 1, 2016. During the test, the location received at the PSAP from the 911 texting device was a “Coarse Location” (centroid of a sector coverage area) plot, several miles away from the texter’s actual location.  
911 Text message was transferred to the Hawaii Fire Department successfully as part of the test agenda. Additional Text to 911 tests were also performed internally with personal telephones of the other Wireless Service Providers. The results showed that T-Mobile’s location of the Texter was similar to Sprint’s “Coarse Location”. The AT&T and Verizon tests revealed that the location of the texter sent to the PSAP was utilizing a Location Based Service (LBS) that plotted within 50 meters of the texter’s location.
- 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.

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		
June		
July		
August		
September		
October		
November		
December		
YTD	118	35
Monthly Avg.	29.5	8.75

### NOTE:

- 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.

## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

### WIRELESS PSAP TESTING – APRIL 2016

HAWAII COUNTY - APRIL 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
04/14/16	Verizon	1	7	Hawaii PSAP	Pass	
04/14/16	Verizon	11	17	Hawaii PSAP	12 pass/5 fail	2 Field Testers
04/19/16	Verizon	2	9	Hawaii PSAP	Pass	
04/22/16	Verizon	8	18	Hawaii PSAP	Pass	2 Field Testers

#### NOTES:

- There were four (4) scheduled Wireless 911 Tests for the month of April 2016.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

### MSAG TRANSACTIONS CURRENT MONTH/YEAR – APRIL 2016

HAWAII COUNTY	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
2016		MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	
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									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	1,135	219	898	16	2				1,954
AVG PER MONTH	284	55	225	4	1				489

### Definitions

- (A) **Master Street Address Guide** - Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (B) **Telephone Number Change Request** - Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 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 9-1-1 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.

## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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### MSAG CURRENT MONTH NOTES:

A total of **336** MSAG transactions were processed in 9-1-1 Net during the month of April 2016. **129** 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 **945** customer ANI/ALI (telephone number/address) records updated as a direct result.

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

**201** Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 299 clean-up effort. ESN 299 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record. Six (**6**) ALI DR was submitted as the result of 9-1-1 calls from residences in Pahoa and Kealahou, and businesses in Hilo and Volcano. 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 1,965 Open TN CR Transactions as of April 30, 2016.**
- **Refer to chart in the next section “TNCR Current Status”**

**1,892** Open TN CR transactions are a direct result of the ESN 299 clean-up and are awaiting approval from Hawaiian Telcom, Inc. **73** 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 Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado's internal process requires calling each telephone customer individually for approval to update an address in the 9-1-1 database.

- **There are two (2) Open ALI-DRs as of April 30, 2016**

One Open ALI-DR was submitted for correction in 9-1-1 Net in August 2014. This discrepancy has been referred to the telco since that time. Akimeka requested a status update from West Safety Services (Intrado) in February 2016 and is awaiting further information. The other Open ALI DR was submitted in April 2016 for a business in Hilo. The TN was ported to PLNI and West Safety Services (Intrado) has emailed PLNI with the address update. This ALI DR will remain in Referred status until PLNI confirms the update is complete.

## Hawaii County E9-1-1 Status Report

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### TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – APRIL 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 (Intrado) for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
HAWAII	1,965	175	71	1719

STATUS
<b>TOTAL TNCRs SUBMITTED</b> - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.
<b>PENDING STATUS</b> - 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.
<b>REFERRED STATUS</b> - 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 (Intrado) Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<b>TOTAL UNOPENED TNCR RECORDS STATUS</b> - 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 E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## DISPATCHABLE LOCATION – STATUS AS OF – APRIL 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 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. Seventy-five (75) Telephone Number Change Requests (TN CR) transactions were processed as a result of the Dispatchable Location Project. These transactions have not been updated in 9-1-1 Net pending research by Hawaiian Tel and West Safety Services (Intrado) for providing an additional 60 character field in the ALI data stream to accommodate Dispatchable Location information as an alternative to using the “Driving Directions” field. Until this field is created, no further Dispatchable Location transactions will be submitted. No further developments as of April 2016.

Dispatchable Location				
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Submitted	Number of Transactions Processed**
KINGS SHOPS	CARRY OVER	2015	75	0
		Jan	0	0
		Feb	0	0
		Mar	0	0
		Apr	0	2
		<b>Total</b>	<b>75</b>	<b>2</b>

\*project currently on hold by West Safety Services (Intrado)/Hawaiian Telcom.

Definition
<b>Dispatchable Location</b> 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.
<b>TNCR*</b> Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location in the Exact field on the ALI Screen.
<b>Processed**</b> may include inactive telephone numbers that were removed from the ALI Database.



# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – APRIL 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/28/2016		Deleted thirty-four (34) address points in Captain Cook.
	4/28/2016		Deleted one (1) address point (15 Hawaii Belt Rd) in Hakalau.
	4/28/2016		Deleted twelve (12) address points in Hawi.
	4/28/2016		Deleted fifty-five (55) address points in Hilo.
	4/28/2016		Deleted nine (9) address points in Holualoa.
	4/28/2016		Deleted five (5) address points in Honaunau.
	4/28/2016		Deleted nineteen (19) address points in Honokaa.
	4/28/2016		Deleted six (6) address points in Honomu.
	4/28/2016		Deleted thirty (30) address points in HVNP.
	4/28/2016		Deleted sixty-two (62) address points in Kailua Kona.
	4/28/2016		Deleted sixty-four (64) address points in Kamuela.
	4/28/2016		Deleted seventeen (17) address points in Kapaa.
	4/28/2016		Deleted nine (9) address points in Keaa.
	4/28/2016		Deleted three (3) address points (11, 12 and 13 Mamalahoa Hwy) in Kealahou.
	4/28/2016		Deleted thirteen (13) address points in Keauhou.
	4/28/2016		Deleted five (5) address points in Kurtistown.
	4/28/2016		Deleted five (5) address points in Laupahoehoe.
	4/28/2016		Deleted six (6) address points in Mountain View.
	4/28/2016		Deleted nineteen (19) address points in Naalehu.
	4/28/2016		Deleted two (2) address points (16 and 17 Hawaii Belt Rd) in Ninole.
	4/28/2016		Deleted nine (9) address points in Ocean View.
	4/28/2016		Deleted four (4) address points in Ooala.
	4/28/2016		Deleted two (2) address points (41 and 42 Hawaii Belt Rd) in Paauhau.
	4/28/2016		Deleted thirty-two (32) address points in Paauilo.
	4/28/2016		Deleted fifteen (15) address points in Pahala.
	4/28/2016		Deleted thirty-six (36) address points in Pahoa.
	4/28/2016		Deleted four (4) address points in Papaaloa.
	4/28/2016		Deleted two (2) address points (7 and 8 Hawaii Belt Rd) in Papaikou.
	4/28/2016		Deleted four (4) address points in Pepeekeo.
	4/28/2016		Deleted fifteen (15) address points in Volcano.
4/28/2016		Deleted twenty (20) address points in Waikoloa.	
		04/26/16	
	4/26/2016		Added one (1) address point (734353 Hawaii Belt Rd) in Kailua Kona.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/25/2016		Completed monthly update on address points.
	4/25/2016		Added seven (7) address points in Kailua Kona.
	4/25/2016		Added two (2) address points (50 and 51 Daniel K Inouye Hwy) in Kamuela.
	4/25/2016		Added one (1) address point (42 Daniel K Inouye Hwy) in Paauilo.
	4/22/2016		Added six (6) address points in Captain Cook.
	4/22/2016		Added four (4) address points in Hawi.
	4/22/2016		Added six (6) address points in Hilo.
	4/22/2016		Added one (1) address point (763755 Duarte Rd) in Holualoa.
	4/22/2016		Added one (1) address point (464005 Old Mamalahoa Hwy) in Honokaa.
	4/22/2016		Added twenty-six (26) address points in Kailua Kona.
	4/22/2016		Added four (4) address points in Kamuela.
	4/22/2016		Added one (1) address point (530272 Kapaniaia Rd) in Kapaau.
	4/22/2016		Added eighteen (18) address points in Keaau.
	4/22/2016		Added two (2) address points (816455 and 816469 Onouli Uka Rd) in Kealahou.
	4/22/2016		Added twelve (12) address points in Kurtistown.
	4/22/2016		Added two (2) address points (361725 and 361771 Kamalani Rd) in Laupahoehoe.
	4/22/2016		Added twenty-three (23) address points in Mountain View.
	4/22/2016		Added two (2) address points (941472 Kaulua Cir and 946291 Poko St) in Naalehu.
	4/22/2016		Added ten (10) address points in Ocean View.
	4/22/2016		Added one (1) address point (440228 Hoolauae St) in Paauhau.
	4/22/2016		Added thirteen (13) address points in Pahoa.
	4/22/2016		Added twelve (12) address points in Volcano.
	4/22/2016		Added three (3) address points in Waikoloa.
	4/22/2016		Corrected address to one (1) address point in Captain Cook.
	4/21/2016		Corrected address to one (1) address point (105 Makalea Pl) in Hilo.
	4/20/2016		Aliased seven hundred thirty-eight (738) address points in Captain Cook.
	4/20/2016		Aliased eight (8) address points in Hakalau.
	4/20/2016		Aliased eighty-four (84) address points in Hawi.
	4/20/2016		Aliased two thousand seventy-seven (2077) address points in Hilo.
	4/20/2016		Aliased sixty (60) address points in Holualoa.
	4/20/2016		Aliased sixty-one (61) address points in Honaunau.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/20/2016		Aliased four hundred eighty-eight (488) address points in Honokaa.
	4/20/2016		Aliased eighty-five (85) address points in Honomu.
	4/20/2016		Aliased two (2) address points (127 Mauna Loa Rd and 28 Volcano Rd) in HVNP.
	4/20/2016		Aliased two hundred seventy-one (271) address points in Kailua Kona.
	4/20/2016		Aliased six hundred thirty-three (633) address points in Kamuela.
	4/20/2016		Aliased ninety-seven (97) address points in Kapaa.
	4/20/2016		Aliased five thousand two hundred twenty-seven (5227) address points in Keaau.
	4/20/2016		Aliased one hundred thirty-three (133) address points in Kealahou.
	4/20/2016		Aliased two hundred sixty-eight (268) address points in Keauhou.
	4/20/2016		Aliased four hundred eighty-seven (487) address points in Kurtistown.
	4/20/2016		Aliased two hundred fifty-eight (258) address points in Laupahoehoe.
	4/20/2016		Aliased one thousand six hundred ninety-two (1692) address points in Mountain View.
	4/20/2016		Aliased two hundred thirty-five (235) address points in Naalehu.
	4/20/2016		Aliased four hundred fifty-three (453) address points in Ocean View.
	4/20/2016		Aliased forty (40) address points in Paauhau.
	4/20/2016		Aliased two hundred eighty (280) address points in Paauilo.
	4/20/2016		Aliased one thousand nine hundred fifty-four (1954) address points in Pahoa.
	4/20/2016		Aliased fifty-two (52) address points in Papaaloa.
	4/20/2016		Aliased one hundred seventy-eight (178) address points in Papaikou.
	4/20/2016		Aliased thirty-nine (39) address points in Pepeekeo.
	4/20/2016		Aliased one thousand two hundred thirty-five (1235) address points in Volcano.
	4/20/2016		Aliased seventy-seven (77) address points in Waikoloa.
	4/20/2016		Corrected address to two (2) address points (145009 Laimana Ave and 145009 Laimana Ave A) in Pahoa.
	4/20/2016		Corrected address to one (1) address point (170929 Kukui Heights Rd) in Mountain View.
	4/15/2016		Spatially corrected one hundred ten (110) address points in Mountain View.
	4/14/2016		Corrected address to four (4) address points in Laupahoehoe.
	4/13/2016		Added nine (9) address points in Keaau.
	4/13/2016		Added thirty (30) address points in Hilo.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/13/2016		Corrected address to one (1) address point (160725 Keaau Pahoa Rd A) in Keaau.
	4/13/2016		Spatially corrected one (1) address point (160725 Keaau Pahoa Rd A) in Keaau.
	4/13/2016		Spatially corrected nine (9) address points in Hilo.
	4/13/2016		Corrected location name to three (3) address points (145 Kamana St A, 1370 Ululani St A and 155 W Kawili St A) in Hilo.
	4/13/2016		Corrected address to three (3) address points (145 Kamana St A, 1370 Ululani St A and 155 W Kawili St A) in Hilo.
		04/12/16	
	4/12/2016		Spatially corrected one hundred twenty (120) address points in Pahoa.
	4/7/2016		Added seven (7) address points in Pahoa.
	4/7/2016		Corrected address to one (1) address point (153047 Kauhale St A) in Pahoa.
	4/7/2016		Spatially corrected eighty-seven (87) address points in Pahoa.
	4/6/2016		Spatially corrected one hundred forty-five (145) address points in Pahoa.
	4/5/2016		Added one (1) address point (622619 Kohala Mountain Rd) in Kamuela.
	4/5/2016		Spatially corrected twenty-nine (29) address points in Hilo.
	4/5/2016		Corrected location name to four (4) address points in Hilo.
4/4/2016		Spatially corrected eight (8) address points in Hilo.	
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN			
Fire Beats			

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Fire Districts			
Fire Response Areas			
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	4/28/2016		Deleted three (3) milepost markers in Hilo.
	4/28/2016		Deleted three (3) milepost markers in HVNP.
	4/28/2016		Deleted three (3) milepost markers in Kamuela.
	4/28/2016		Deleted three (3) milepost markers in Kapaau.
	4/28/2016		Deleted three (3) milepost markers in Mountain View.
	4/28/2016		Deleted three (3) milepost markers in Pahoa.
	4/28/2016		Deleted three (3) milepost markers in Pepeekeo.
	4/28/2016		Deleted six (6) milepost markers in Waikoloa.
	4/28/2016		Corrected route name to thirty (30) milepost markers in Hilo.
	4/28/2016		Corrected route name to seven (7) milepost markers in Kailua Kona.
	4/28/2016		Corrected route name to two (2) milepost markers in Kamuela.
	4/28/2016		Corrected route name to eighteen (18) milepost markers in Paauilo.
	4/28/2016		Aliased thirty (30) milepost markers in Hilo.
	4/28/2016		Aliased seventeen (17) milepost markers in Paauilo.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 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.*

HAWAII COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Milepost Markers		04/26/16	
	4/25/2016		Added seven (7) milepost markers in Kailua Kona.
	4/25/2016		Added two (2) milepost markers (MM 200-50 and MM 200-51) in Kamuela.
	4/25/2016		Added one (1) milepost marker (MM 200-42) in Paauilo.
MSAG Communities			
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
Points of Interest	4/28/2016		Added thirty-four (34) points of interest in Captain Cook.
	4/28/2016		Added one (1) point of interest (MM 19-15) in Hakalau.
	4/28/2016		Added twelve (12) points of interest in Hawi.
	4/28/2016		Added fifty-six (56) points of interest in Hilo.
	4/28/2016		Added twelve (12) points of interest in Holualoa.
	4/28/2016		Added five (5) points of interest in Honaunau.
	4/28/2016		Added eighteen (18) points of interest in Honokaa.
	4/28/2016		Added six (6) points of interest in Honomu.
	4/28/2016		Added thirty (30) points of interest in HVNP.
	4/28/2016		Added sixty-two (62) points of interest in Kailua Kona.
	4/28/2016		Added sixty-three (63) points of interest in Kamuela.
	4/28/2016		Added nineteen (19) points of interest is Kapaau.
	4/28/2016		Added eight (8) points of interest in Keaau.
	4/28/2016		Added three (3) points of interest (MM 11-111, MM 11-112 and MM 11-113) in Kealahou.
	4/28/2016		Added ten (10) points of interest in Keauhou.
	4/28/2016		Added six (6) points of interest in Kurtistown.
	4/28/2016		Added five (5) points of interest in Laupahoehoe.
	4/28/2016		Added six (6) points of interest in Mountain View.
	4/28/2016		Added nineteen (19) points of interest in Naalehu.
	4/28/2016		Added two (2) points of interest (MM 19-16 and MM 19-17) in Ninole.
	4/28/2016		Added nine (9) points of interest in Ocean View.
	4/28/2016		Added four (4) points of interest in Ookala.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 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 Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Points of Interest	4/28/2016		Added two (2) points of interest (MM 19-41 and MM 19-42) in Paauhau.
	4/28/2016		Added thirty-one (31) points of interest in Paauilo.
	4/28/2016		Added fifteen (15) points of interest in Pahala.
	4/28/2016		Added thirty-six (36) points of interest in Pahoa.
	4/28/2016		Added four (4) points of interest in Papaaloa.
	4/28/2016		Added two (2) points of interest (MM 19-7 and MM 19-8) in Papaikou.
	4/28/2016		Added four (4) points of interest in Pepekeo.
	4/28/2016		Added fifteen (15) points of interest in Volcano.
	4/28/2016		Added twenty (20) points of interest in Waikoloa.
		04/26/16	
	4/26/2016		Added one (1) point of interest (Matsuyama Food Mart) in Kailua Kona.
		04/12/16	
	4/5/2016		Spatially corrected twenty-two (22) points of interest in Hilo.
	4/5/2016		Spatially corrected one (1) point of interest (Panda Express Makala Blvd) in Kailua Kona.
	4/5/2016		Corrected address to one (1) point of interest (Panda Express Makala Blvd) in Kailua Kona.
	4/5/2016		Deleted three (3) points of interest (Leungs Chop Suey House, McDonalds Restaurant Hilo, and New Star Restaurant) in Hilo.
	4/4/2016		Spatially corrected twenty-three (23) points of interest in Hilo.
Police Beats			
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines	4/27/2016		Added two (2) street segments of Waikoloa Rd in Waikoloa.
	4/27/2016		Split one (1) segment of Waikoloa Rd in Waikoloa.
	4/27/2016		Added twelve (12) street segments in Kamuela.
	4/27/2016		Split four (4) streets in Kamuela.
		04/26/16	
	4/26/2016		Spatially corrected eighteen (18) street segments in Kailua Kona.
	4/25/2016		Completed monthly update on street centerlines.
	4/25/2016		Spatially corrected six (6) street centerlines in Kailua Kona.
4/22/2016		Corrected range to three (3) street segments (one segment of Eleele PI and two segments of Laakea Way) in Waikoloa.	

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## MAPPING LAYERS UPDATED (PART VIII)

*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 Delivered	Other/Remarks	
	Date Created/ Edits Performed			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Street Centerlines	4/21/2016		Corrected range to two (2) streets segments (Halolani St and Waiha Loop) in Kailua Kona.	
	4/21/2016		Added one (1) street segment of Waiha Loop in Kailua Kona.	
	4/21/2016		Added one (1) street segment of Mamaki Ln in Volcano.	
	4/21/2016		Split one (1) segment of Kilauea Rd in Volcano.	
	4/14/2016		Merged six (6) street segments in Captain Cook.	
	4/14/2016		Corrected range to one (1) segment of E Honalo Rd in Holualoa.	
	4/14/2016		Spatially corrected one (1) segment of E Honalo Rd in Holualoa.	
	4/14/2016		Split one (1) segment of Kuakini Hwy in Holualoa.	
	4/14/2016		Split one (1) segment of Kuakini Hwy in Keauhou.	
	4/14/2016		Corrected range to eleven (11) street segments in Honokaa.	
	4/14/2016		Spatially corrected five (5) street segments in Honokaa.	
	4/14/2016		Corrected range to two (2) segments of Old Mamalahoa Hwy in Honomu.	
	4/14/2016		Added one (1) street (Kamalani Rd) in Laupahoehoe.	
	4/14/2016		Split one (1) segment of Manowaiopae Homestead Rd in Laupahoehoe.	
	4/14/2016		Corrected range to two (2) segments of Milo St in Ookala.	
	4/14/2016		Spatially corrected five (5) street segments in Ookala.	
	4/14/2016		Deleted one (1) segment of D Rd in Captain Cook.	
	4/14/2016		Deleted one (1) segment of E Honalo Rd in Holualoa.	
		04/12/16		
		4/11/2016		Spatially corrected thirty-two (32) streets in Kailua Kona.
		4/11/2016		Spatially corrected twenty-five (25) streets in Waikoloa.
		4/8/2016		Spatially corrected forty-one (41) street segments in Waikoloa.
Subdivisions				
Tow Jurisdictions				
Tsunami Evacuation Zones				
Tsunami Heights				
Waste Water Plants				
WSP Cell Sectors	4/29/2016		Per VZW CRS	
	4/28/2016		Per ATT CRS	
		04/26/16		
	4/25/2016		Per VZW CRS	
	4/21/2016		Per VZW CRS	
	4/20/2016		Per VZW CRS	
	4/14/2016		Per ATT CRS	
		04/12/16		



# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## MAPPING LAYERS UPDATED (PART IX)

*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 Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
WSP Cell Towers	4/29/2016		Per VZW CRS
	4/28/2016		Per ATT CRS
		04/26/16	
	4/25/2016		Per VZW CRS
	4/21/2016		Per VZW CRS
	4/20/2016		Per VZW CRS
	4/14/2016		Per ATT CRS
		04/12/16	

## 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
4/29/2016	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Common Places, Street Centerlines and Milepost Markers.
4/26/2016	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Common Places, Street Centerlines and Milepost Markers.
4/12/2016	MapFlex deliverable which included the following updated layers: Address Points, Cell Sectors, Cell Towers, Common Places and Street Centerlines.

## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

### 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 **April 25, 2016**. Results are as follows:

HAWAII COUNTY	Address Points Layer	Street Centerlines Layer
New Addresses Added	147	
Addresses Removed	0	
Address Street Name Changes	1	
Address Street Number Changes	1	
New Street Segments Added		2
Street Segments Removed		0
Street Segment Range Changes		2
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.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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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.

1. 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.
  - a. 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.
  - d. 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 17<sup>th</sup>.
  - e. 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.
  - f. During the month of April 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.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 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. Akimeka is currently awaiting the final NDA to be completed with Akimeka, Spillman Technologies, and the Hawaii Police Department. Once completed, there will be coordination for dates to meet with Spillman Technologies and Akimeka to begin GIS data configuration for the new CAD system.

## FIRE RESPONSE AREA REVIEW

Beginning in late February 2016 and continuing in March 2016, Akimeka reviewed the Hawaii County Fire Response Areas as part of an annual update as well as for preparation for the CAD system deployment. The Fire Response Areas layer contains information not contained within the Fire Beats and Fire Districts in regards to station run order as well as a higher level of boundary divisions, making it a highly robust layer that will play an integral role in the CAD system and routing of first responders.

1. To ensure that Hawaii County's new CAD system operates with full potential and with the most robust data possible, Akimeka reviewed the Fire Response Areas layer and made all necessary corrections to make it as accurate as possible.
  - a. During February and March 2016, Akimeka reviewed the Hawaii County Fire Response Areas. The boundaries to all fifty-two fire response areas were edited for greater accuracy to ensure that a high level of efficiency occurs in regards to the proper personnel being called upon as first responders for the various location and asset based situations.
  - b. During the month of March 2016, Akimeka corrected the boundaries to the GIS layers that are associated with the Fire Response Areas so that proper alignment would occur between the associated layers. This process also included correcting the street segments that were affected by the boundary updates so that potential confusion and discrepancies would be nonexistent.
  - c. During the month of April 2016, no activity took place with the Fire Response Areas layer.

# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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## MILE MARKER PROJECT

In March 2016, Hawaii County Fire Department requested Akimeka to furnish mile markers for the new section of Daniel K Inouye Highway (Route 200). Akimeka proceeded by performing the research necessary for obtaining precise coordinates of all new mile markers.

1. On March 16, 2016, Hawaii County Fire Department requested Akimeka to furnish mile markers for the new section of Daniel K Inouye Highway (Route 200), opened to the public since September 2013, so that mile markers would be both visible and query able to the dispatchers for both the new and old sections of the Highway.
  - a. Akimeka immediately began researching for any available updates to the mile markers and it was discovered that there was no current data available via Hawaii Department of Transportation's website or any other reputable organization's website.
  - b. On March 21, 2016, Akimeka contacted Hawaii Department of Transportation via email to inquire if there were any new mile markers in place for the new stretch of Route 200, and if so if we could acquire the necessary data from them to include in our current mile marker spatial dataset that we provide to the PSAPs. We also inquired if the mile markers for the old section of Route 200 were still in place, and if so if the old stretch of Route 200 had a different route number now, so that confusion would not arise between the mile markers of the new and old routes. In order to clarify and expedite our request for information, Akimeka created a map illustrating the new and old sections of Route 200 for Hawaii Department of Transportation's perusal.
  - c. As of March 28, 2016, Akimeka still had not heard back from Hawaii Department of Transportation regarding the request for updated mile marker information, so we proceeded to phone the organization to check on the status of our request. They informed us that they are processing the request and will get back to us with the information as soon as possible.
  - d. On April 21, 2016, Akimeka received a map from Hawaii Department of Transportation, detailing the location of the ten mile markers for the new section of Route 200. The new mile markers were then digitized into the necessary file format and incorporated into the Milepost Markers layer. This updated layer was delivered to MapFlex and made available to the dispatchers on April 26<sup>th</sup>.
  - e. On April 28, 2016, Akimeka received a request from Hawaii County Fire Department for the mile markers to be query able to the dispatchers in the same manner as the common places.
  - f. On April 28, 2016, Akimeka promptly proceeded with this request by first modifying the naming of fifty-seven of the mile markers in order to differentiate the mile markers of the new section of Route 200 from the mile markers of the old section of Route 200. Then forty-seven of the mile markers were assigned aliases to help ensure they would be located by dispatchers when queried since the name of those particular mile markers might be confused with their historical name. The five hundred nineteen mile markers were then incorporated into the Common Places layer to ensure that dispatchers would be able to correctly and efficiently query them from the spatial dataset.
  - g. On April 29, 2016, Akimeka performed an additional MapFlex deliverable, which included the Common Places and the Milepost Markers layers, thereby making the mile markers query able to the dispatchers. Detailed instructions were also given to the PSAPs on how to query the mile markers correctly so that time would not be wasted trying to figure it out during an emergency situation.

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## WIRELESS ANNUAL AUDIT

During the month of February 2016, the wireless annual audit for Verizon was coordinated and completed as indicated in the Wireless Audit Chart. However during the audit process, it was identified that changes which had been sent through the CRS process for all WSPs were possibly not making their way back to the wireless FMCC database (responsible for information provided via the ALI).

1. On February 29, 2016, after completing the review of the Annual Audit for Verizon wireless Akimeka contacted West to discuss the reason why the annual audit synchronization has degraded in the match accuracy.
  - a. Note – The CRS process performed throughout the year for all WSPs deals with routine maintenance performed on the sites/sectors. The Annual Audit is intended to identify any possible gaps in that process and seeks reconciliation in an effort to re-synchronize the databases. If there are no missed CRSs throughout the year and the database match percentage decreases, then there are apparent issues.
2. On March 15, 2016, Akimeka and West held a conference call to discuss the matter. During the conversation it was identified that the changes sent back from Akimeka to West after accuracy validation, are processed into the FMCC. The issue that Akimeka is seeing when the Annual Audit is provided is resulting from a script West put in place in 2013 to output the CRSs into the approved format at that time.
  - a. The issue is that the format has changed over time due to new technology and more hexadecimal numbering of the wireless sectors. In order to accommodate those changes, Akimeka has developed a translation into an applicable format which the PSAPs are able to use. The format that West is providing each Annual Audit and CRS is overriding the changes within the FMCC, therefore give the appearance of not being synchronized in that process but are. This helps to explain why the wireless testing results are accurate, and the PSAPs are not experiencing a large number of discrepancies in the Mapping Systems when matched with the ALI.
3. Akimeka followed up with West on March 30, 2016, to see if West has re-scripted the format.
  - a. West replied that unfortunately it will require system development at West. Melissa Norton of West did mention that the particular system that needs to be changed is currently backlogged with a few large projects. She opened a Product Development Request at West but there is no ETA on the enhancement. In order to speed up the request, she is working to bundle the request with several other State's requests.
4. Akimeka will continue to follow up on the process to ensure the wireless databases are maintained accurately. With the big push by the WSPs for more LTE sites, which are having the impact on the hexadecimal numbering, Akimeka is hopeful that West can resolve this issue. The additional work involved to re-validate information takes a significant effort and allows for discrepancy. The Annual Audit is supposed to be a raw comparison to the condition of the data in both the FMCC and the GIS database provided in the Mapping Systems. Without both in its raw format, the comparison becomes unclear as to the real condition of the FMCC database.
5. Throughout the month of April 2016, Akimeka had been provided several TVWs by the WSPs for testing and most of the information was good for testing but there was an unusually high number of records that were either missing or were incorrect. Virtually all TVWs sent to Akimeka had some variety of discrepancy in them. This was only applicable to Verizon at the time and since the Annual Audit with Verizon had been completed, bringing the databases to 100% match rate, a reason for the mismatch in TVW information was perplexing. It certainly required more investigation into what was occurring.
6. On April 21, 2016, Akimeka was notified of yet another set of TVWs with issues and the WSP and West investigated their end and said everything was matching. Because the Annual Audit was completed, matching West and Akimeka databases, but yet the TVWs produced from the West database were not matching, something was highly unusual.
  - a. Later the same day, Akimeka provided an example of the discrepancy back to West detailing one of the records along a timeline. Information provided in the TVW matched with the record from 2015. Since that time, there were

## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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several updates, including the Annual Audit. This indicated that the TVWs being generated by West were not accurate and it also was indicating the Annual Audit sent back to West was not be uploaded. This is a major issue.

7. To confirm Akimeka's suspicion that the Annual Audit updates were not being uploaded by West into the FMCC, Akimeka followed up with implementation specialist at West, who the Audit was coordinated with.
  - a. West sent a reply on April 25, 2016, that the audit was not fully completed at West and they were in their final stages before sending changes to the database and on to Verizon. From West "there were a lot of changes that came from the audit which is where you may be seeing the discrepancies. Once Verizon has called in the hot cuts (changes), the data should match the audit sheet you sent".
  - b. This was confirmation that the audit was still not being processed fully by West after 2 months and that the issues with mismatched information in the TVWs were as a result of this.

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### REQUEST FOR 9-1-1 JURISDICTIONAL BOUNDARIES

On March 17, 2016, West had requested information for each of the PSAPs in the State of Hawaii, with the exception of the Honolulu Police Department and Regional Dispatch Center. Akimeka has followed up with West to see if the Honolulu Police Department PSAP was supposed to be included in this request.

1. On March 17, 2016, West requested that each PSAP fill out an attached questionnaire and to provide the PSAP Jurisdictional Boundaries (to include VoIP, Wireless, Text, and Alarms).
2. Akimeka prepared the boundaries of each of the PSAP Jurisdictional Boundaries which included all requested attribution. Given the geography of the Hawaiian Islands, and the operational responses of each PSAP which includes ocean responses, Akimeka included a buffer for each of the PSAP Boundaries that extend into the ocean. This reflects the true nature of the PSAP Jurisdictional Boundary response area and also covers the distance over water which can account for possible Lat/Longs provided during a Text-to-911 call to the PSAP. Since the system is intended to use the location information to determine routing, inclusion of the water area into the PSAP polygons was a more accurate approach.
3. On March 23, 2016, the Akimeka GIS Manager notified West that this information was ready and requested a secure method of transferring the data. Throughout the remainder of March 2016, there was no reply from West.
4. On April 19, 2016, West followed back up with the Akimeka GIS Manager. The West employee was unfamiliar with using an ftp site and was going to touch base with her supervisors to find a more secure manner of transferring the data. Throughout the remainder of April 2016, Akimeka did not hear back.

## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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### MAPFLEX SYSTEM

During the month of April 2016, the MapFlex system performed without any issues and deliverables continued on schedule.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, Intrado, 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 April 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in April 2016
  - a. **Hawaii County** – April 12<sup>th</sup> and April 26<sup>th</sup>
  - b. **Maui County** – April 13<sup>th</sup> and April 27<sup>th</sup>
  - c. **Kauai County** – April 14<sup>th</sup> and April 28<sup>th</sup>
  - d. **Honolulu** – April 1<sup>st</sup>, April 15<sup>th</sup> and April 29<sup>th</sup>



# Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

## 4. SERVICE REQUESTS TRANSACTIONS

### OPEN SERVICE REQUESTS – APRIL 2016

#	Date	Ticket #	Description	PSAP	Urgency	Comments
1	08/19/14	716	Updated Address	FIRE	Normal	TN has been referred to telco via email by West Safety Services (Intrado). RMS
2	04/28/16	844	Updated Address	FIRE	Normal	TN has been referred to telco via email by West Safety Services (Intrado). RMS

Note\* There are two (2) opened service request pending for April 2016.

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

HAWAII COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2016	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		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
May									
June									
July									
August									
September									
October									
November									
December									
<b>TOTAL</b>	<b>18</b>	<b>19</b>	<b>2</b>	<b>16</b>	<b>15</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>

**Note:**

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

Definitions:	Category	Description
	Wireline	Telephone Number (ALI) Discrepancies from land line phones that have been submitted to West Safety Services (Intrado) 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

## Hawaii County E9-1-1 Status Report

April 1, 2016 – April 30, 2016

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### 5. E9-1-1 DATABASE SYNCHRONIZATION

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

## Next Scheduled Database Synchronization is May 2016

AUDIT SUMMARY RESULTS – MAY 2016 -- TBA

AUDIT SUMMARY RESULTS – CONTINUED

AUDIT SUMMARY RESULTS COMPARISON – MAY 1, 2016 VS FEBRUARY 1, 2016 -- TBA

AUDIT SUMMARY RESULTS -- TBA

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

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA

# Kauai County E9-1-1 Status Report

*April 1, 2016 – April 30, 2016*



**AKIMEKA** | HIGH PRIORITY, HIGH IMPACT.

# Kauai County E9-1-1 Status Report

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# Kauai County E9-1-1 Status Report

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## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME – APRIL 2016

(Source: West Safety Services (Intrado) Viper system)

9-1-1 Call Volume																	
KAUAI 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
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%

### 9-1-1 CALL VOLUME – CALENDAR YEAR 2016

9-1-1 Call Volume																	
KAUAI 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																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	17,456	2,661		11,436				533		53		0		2,773		0	
MON AVG	4,364	665	15.23%	2,859	65.53%	46.52%	53.48%	133	3.06%	13	0.30%	0	0.00%	693	15.88%	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 0.27% - Statewide average = 0.18% Year 2015

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### TEXT TO 911 – CURRENT MONTH – APRIL 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.

TEXT TO 911 Kauai County	
Month	Total received
January	23
February	11
March	22
April	4
May	
June	
July	
August	
September	
October	
November	
December	
YTD	60
Monthly Avg.	15.0

### WIRELESS PSAP TESTING – APRIL 2016

KAUAI COUNTY - APRIL 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
4/12/2016	Verizon	2	6	Kauai PSAP	5 pass/1 fail	LTE/AWS technology
4/13/16	Verizon	4	8	Kauai PSAP	Pass	LTE/AWS technology

#### NOTES:

- There were two (2) scheduled Wireless 911 tests for the month of April, 2106.

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

### MSAG TRANSACTIONS CURRENT MONTH/YEAR – APRIL 2016

KAUAI COUNTY	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
MSAG (A)		TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR		
2016									
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									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	152	96	56	0	0				158
AVG PER MONTH	38	24	14	0	0				40

### Definitions

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

(B) **Telephone Number Change Request** - Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 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.



## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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### MSAG CURRENT MONTH NOTES:

A total of twenty-five (25) MSAG transactions were processed in 9-1-1 Net during the month of April 2016. Twenty-one (21) 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 19 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 Intrado on the TN CRs that have been submitted for correction. In April 2016, there were 2 TN CRs completed, however no ESN 499 street records were deleted from the MSAG database.

### OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are 234 Open TN CR Transactions as of April 30, 2016.**
- **Please refer to “TNCR Current Status” chart in the next section.**

172 Open TN CR transactions are a direct result of the ESN 499 clean-up and are awaiting approval from Hawaiian Telcom, Inc. 62 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 Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado'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 April 30, 2016**
- **There are no Open VoIP DRs as of April 30, 2016**

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – APRIL, 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 (Intrado) for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
KAUAI	234	31	53	150

STATUS
<b><u>TOTAL TNCRs SUBMITTED</u></b> - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.
<b><u>PENDING STATUS</u></b> - 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.
<b><u>REFERRED STATUS</u></b> - 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 (Intrado) Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<b><u>TOTAL UNOPENED TNCR RECORDS STATUS</u></b> - 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.

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## DISPATCHABLE LOCATION – STATUS AS OF – APRIL 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. Sixty two (62) Telephone Number Change Requests (TN CR) transactions were processed as a result of the Dispatchable Location Project. These transactions have not been updated in 9-1-1 Net pending research by Hawaiian Tel and West Safety Services (Intrado) for providing an additional 60 character field in the ALI data stream to accommodate Dispatchable Location information as an alternative to using the “Driving Directions” field. Until this field is created, no further Dispatchable Location transactions will be submitted. During the months of November, December, and January 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 830 telephone records are complete and ready for submittal, however there were no further developments as of April 2016 to proceed.

Dispatchable Location					
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Prepared	Number of TNCR* Transactions Submitted	Number of Transactions Processed**
	2015 Carryover	2015	286	62	0
Ching Young Shopping Center	505190 Kuhio Hwy, Hanalei	Jan	84		
Eleele Shopping Center	4469 Waialo Rd, Port Allen		77		
Hanalei Center	505161 Kuhio Hwy, Hanalei		46		
Princeville Center	504280 Kuhio Hwy, Princeville	Feb	181		
Alii Kai Resort	3830 Edward Rd, Princeville	Mar	37		
Sealodge	3700 Kamehameha Rd, Princeville		48		
Nihi Kai Villas	1870 Hoone Rd, Poipu		71		
		Apr	0		
		Total	830	62	0

\*project currently on hold by West Safety Services (Intrado)/Hawaiian Telcom.

Definition
<b>Dispatchable Location</b> 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.
<b>TNCR*</b> Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location in the Exact field on the ALI Screen.
<b>Processed**</b> may include inactive telephone numbers that were removed from the ALI Database.

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – APRIL 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
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points		04/28/16	
	4/27/2016		Added two (2) addresses in Mana
	4/27/2016		Spatially corrected fifty-two (52) address points in Mana
	4/27/2016		Updated fifty-two (52) addresses in Mana
	4/25/2016		Added one (1) address in Kalihiwai
	4/25/2016		Added five (5) address points in Mana
	4/25/2016		Updated twenty-two (22) addresses in Mana
	4/25/2016		Spatially corrected twenty-two (22) address points in Mana
	4/25/2016		Added fifty-one (51) addresses in Poipu
		04/13/16	
	4/6/2016		Added five (5) addresses in Mana
	4/6/2016		Updated sixty-nine (69) addresses in Mana
	4/6/2016		Spatially corrected sixty-six (66) address points in Mana
	4/5/2016		Added fifteen (15) addresses in Mana
	4/5/2016		Spatially corrected thirty-six (36) address points in Mana
	4/5/2016		Updated thirty-six (36) addresses in Mana
	4/4/2016		Added eight (8) addresses in Mana
	4/4/2016		Spatially corrected two (2) address points in Mana
	4/4/2016		Updated two (2) addresses in Mana
	4/1/2016		Added one (1) address in Mana using data from NEMAP
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN			
Fire Beats			

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Fire Districts			
Fire Response Areas			
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			
Points of Interest			
Police Beats			
Police Districts			
Police Response Areas			

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Police Stations			
Post Offices			
Schools			
Street Centerlines		04/28/16	
	4/27/2016		Spatially corrected six (6) street centerline segments in Mana
	4/27/2016		Updated Name of one (1) street centerline segment in Mana
	4/25/2016		Added three (3) street centerline segments in Mana
	4/25/2016		Modified four (4) street centerline range segments in Mana
		04/13/16	
	4/6/2016		Modified eight (8) street centerline segment ranges in Mana
	4/6/2016		Changed the Name of one (1) street centerline segment in Mana
	4/5/2016		Modified eight (8) street centerline segment ranges in Mana
	4/5/2016		Added one (1) street centerline in Mana
	4/5/2016		Changed Street Name for nine (9) street centerline segments in Mana
	4/5/2016		Spatially corrected one (1) street centerline segment in Mana
	4/4/2016		Spatially corrected four (4) street centerline segments in Mana
	4/4/2016		Added one (1) street centerline segment in Mana
	4/4/2016		Modified range for two (2) street centerline segment ranges in Mana
	4/4/2016		Changed one (1) street centerline segment name in Mana
	4/1/2016		Updated nine (9) addresses in Mana using data from NEMAP
	4/1/2016		Modified one (1) street centerline range in Mana
	4/1/2016		Changed one (1) street centerline segment name in Mana
	Subdivisions		
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors	4/29/2016		Per VZW CRS
		04/28/16	
	4/28/2016		Per VZW CRS
		04/13/16	
WSP Cell Towers	4/29/2016		Per VZW CRS
		04/28/16	
	4/28/2016		Per VZW CRS
		04/13/16	

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### NOTE:

- 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
4/28/2016	Prepared and delivered Address Points, Street Centerlines, WSP Cell Sectors and WSP Cell Towers for a MapFlex update
4/28/2016	Prepared and delivered Address Points, Street Centerlines, WSP Cell Sectors, WSP Cell Towers and GEO.xml file for a GeoComm update
4/13/2016	Prepared and delivered updated Address Points, Street Centerlines, WSP Cell Sectors and WSP Cell Towers for MapFlex
4/13/2016	Prepared and delivered updated Address Points, Street Centerlines, WSP Cell Sectors, WSP Cell Towers and GEO xml for GeoComm

#### GPS DATA COLLECTION AND SITE VERIFICATION

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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During the month of April 2016, there were no scheduled GPS data collection and site verifications required. Data capture will continue to be coordinated on an as needed basis.

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### MAPFLEX SYSTEM

During the month of April 2016, the MapFlex system performed without any issues and deliverables continued on schedule.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, Intrado, 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 April 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in April 2016
  - a. **Hawaii County** – April 12<sup>th</sup> and April 26<sup>th</sup>
  - b. **Maui County** – April 13<sup>th</sup> and April 27<sup>th</sup>
  - c. **Kauai County** – April 14<sup>th</sup> and April 28<sup>th</sup>
  - d. **Honolulu** – April 1<sup>st</sup>, April 15<sup>th</sup> and April 29<sup>th</sup>

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### PMRF PROJECT

Beginning on April 1, 2016, Akimeka will be kicking off a project to incorporate new data provided by the Navy from the Navy Emergency Management Addressing Project (NEMAP) on the Pacific Missile Range Facility (PMRF). These changes to the PMRF in Mana will include Address Points and Street Centerline range changes that will be translated into a more accurate application for the Kauai Police Department.

The PMRF updates will be tracked and recorded in April's MSR as this will be an ongoing project until all updates are incorporated. In addition, any subsequent changes to the MSAG database will also be coordinate by Akimeka's MSAG Coordinators.

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### WIRELESS ANNUAL AUDIT



# Kauai County E9-1-1 Status Report

**April 1, 2016 - April 30, 2016**

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During the month of February 2016, the wireless annual audit for Verizon was coordinated and completed as indicated in the Wireless Audit Chart. However during the audit process, it was identified that changes which had been sent through the CRS process for all WSPs were possibly not making their way back to the wireless FMCC database (responsible for information provided via the ALI).

1. On February 29, 2016, after completing the review of the Annual Audit for Verizon wireless Akimeka contacted West to discuss the reason why the annual audit synchronization has degraded in the match accuracy.
  - a. Note – The CRS process performed throughout the year for all WSPs deals with routine maintenance performed on the sites/sectors. The Annual Audit is intended to identify any possible gaps in that process and seeks reconciliation in an effort to re-synchronize the databases. If there are no missed CRSs throughout the year and the database match percentage decreases, then there are apparent issues.
2. On March 15, 2016, Akimeka and West held a conference call to discuss the matter. During the conversation it was identified that the changes sent back from Akimeka to West after accuracy validation, are processed into the FMCC. The issue that Akimeka is seeing when the Annual Audit is provided is resulting from a script West put in place in 2013 to output the CRSs into the approved format at that time.
  - a. The issue is that the format has changed over time due to new technology and more hexadecimal numbering of the wireless sectors. In order to accommodate those changes, Akimeka has developed a translation into an applicable format which the PSAPs are able to use. The format that West is providing each Annual Audit and CRS is overriding the changes within the FMCC, therefore give the appearance of not being synchronized in that process but are. This helps to explain why the wireless testing results are accurate, and the PSAPs are not experiencing a large number of discrepancies in the Mapping Systems when matched with the ALI.
3. Akimeka followed up with West on March 30, 2016, to see if West has re-scripted the format.
  - a. West replied that unfortunately it will require system development at West. Melissa Norton of West did mention that the particular system that needs to be changed is currently backlogged with a few large projects. She opened a Product Development Request at West but there is no ETA on the enhancement. In order to speed up the request, she is working to bundle the request with several other State's requests.
4. Akimeka will continue to follow up on the process to ensure the wireless databases are maintained accurately. With the big push by the WSPs for more LTE sites, which are having the impact on the hexadecimal numbering, Akimeka is hopeful that West can resolve this issue. The additional work involved to re-validate information takes a significant effort and allows for discrepancy. The Annual Audit is supposed to be a raw comparison to the condition of the data in both the FMCC and the GIS database provided in the Mapping Systems. Without both in its raw format, the comparison becomes unclear as to the real condition of the FMCC database.
5. Throughout the month of April 2016, Akimeka had been provided several TVWs by the WSPs for testing and most of the information was good for testing but there was an unusually high number of records that were either missing or were incorrect. Virtually all TVWs sent to Akimeka had some variety of discrepancy in them. This was only applicable to Verizon at the time and since the Annual Audit with Verizon had been completed, bringing the databases to 100% match rate, a reason for the mismatch in TVW information was perplexing. It certainly required more investigation into what was occurring.
6. On April 21, 2016, Akimeka was notified of yet another set of TVWs with issues and the WSP and West investigated their end and said everything was matching. Because the Annual Audit was completed, matching West and Akimeka databases, but yet the TVWs produced from the West database were not matching, something was highly unusual.
  - a. Later the same day, Akimeka provided an example of the discrepancy back to West detailing one of the records along a timeline. Information provided in the TVW matched with the record from 2015. Since that time, there were several updates, including the Annual Audit. This indicated that the TVWs being generated by West were not accurate and it also was indicating the Annual Audit sent back to West was not be uploaded. This is a major issue.

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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7. To confirm Akimeka's suspicion that the Annual Audit updates were not being uploaded by West into the FMCC, Akimeka followed up with implementation specialist at West, who the Audit was coordinated with.
  - a. West sent a reply on April 25, 2016, that the audit was not fully completed at West and they were in their final stages before sending changes to the database and on to Verizon. From West "there were a lot of changes that came from the audit which is where you may be seeing the discrepancies. Once Verizon has called in the hot cuts (changes), the data should match the audit sheet you sent".
  - b. This was confirmation that the audit was still not being processed fully by West after 2 months and that the issues with mismatched information in the TVWs were as a result of this.

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### REQUEST FOR 9-1-1 JURISDICTIONAL BOUNDARIES

On March 17, 2016, West had requested information for each of the PSAPs in the State of Hawaii, with the exception of the Honolulu Police Department and Regional Dispatch Center. Akimeka has followed up with West to see if the Honolulu Police Department PSAP was supposed to be included in this request.

1. On March 17, 2016, West requested that each PSAP fill out an attached questionnaire and to provide the PSAP Jurisdictional Boundaries (to include VoIP, Wireless, Text, and Alarms).
2. Akimeka prepared the boundaries of each of the PSAP Jurisdictional Boundaries which included all requested attribution. Given the geography of the Hawaiian Islands, and the operational responses of each PSAP which includes ocean responses, Akimeka included a buffer for each of the PSAP Boundaries that extend into the ocean. This reflects the true nature of the PSAP Jurisdictional Boundary response area and also covers the distance over water which can account for possible Lat/Longs provided during a Text-to-911 call to the PSAP. Since the system is intended to use the location information to determine routing, inclusion of the water area into the PSAP polygons was a more accurate approach.
3. On March 23, 2016, the Akimeka GIS Manager notified West that this information was ready and requested a secure method of transferring the data. Throughout the remainder of March 2016, there was no reply from West.
4. On April 19, 2016, West followed back up with the Akimeka GIS Manager. The West employee was unfamiliar with using an ftp site and was going to touch base with her supervisors to find a more secure manner of transferring the data. Throughout the remainder of April 2016, Akimeka did not hear back.

### 4. SERVICE REQUESTS TRANSACTIONS

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### OPEN SERVICE REQUESTS – APRIL 2016

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

#### NOTE:

There are no open service requests for April 2016.

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

KAUAI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2016	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		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									
June									
July									
August									
September									
October									
November									
December									
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### Note:

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

Definitions:	Category	Description
	Wireline	Telephone Number (ALI) Discrepancies from land line phones that have been submitted to West Safety Services (Intrado) 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

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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

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

The database synchronization effort included comparing Kauai County's 9-1-1 MSAG received from the 911 Database provider, Intrado on April 1, 2016, against its 9-1-1 GIS Street Centerline data. A total number of **1,331** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on April 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%.

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.

### AUDIT SUMMARY RESULTS – 2016

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of July 1 , 2015		As of October 1 , 2015		As of January 1 , 2016		As of April 1 , 2016	
		9-1-1 MSAG Dated 7-01-15		9-1-1 MSAG Dated 10-01-15		9-1-1 MSAG Dated 1-01-15		9-1-1 MSAG Dated 4-01-16	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		1,290		1,297		1,300		1,331	
Less: 9-1-1 MSAG Exception Records	(1)	67	5.2%	66	5.1%	72	5.5%	77	5.8%
Net 9-1-1 MSAG Records Eligible for Comparison		1,223		1,231		1,228		1,254	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		1,223	100.0%	1,231	100.0%	1,223	99.6%	1,249	99.6%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	0	0.0%	0	0.0%	5	0.4%	4	0.3%
9-1-1 MSAG Record With No GIS Record	(3)	0	0.0%	0	0.0%	0	0.0%	1	0.1%
Total 9-1-1 MSAG Records No Match		0	0.0%	0	0.0%	5	0.4%	5	0.4%

**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 January 2016 with a 99.6% Match Rate to a 99.6% Match Rate as of April 2016.

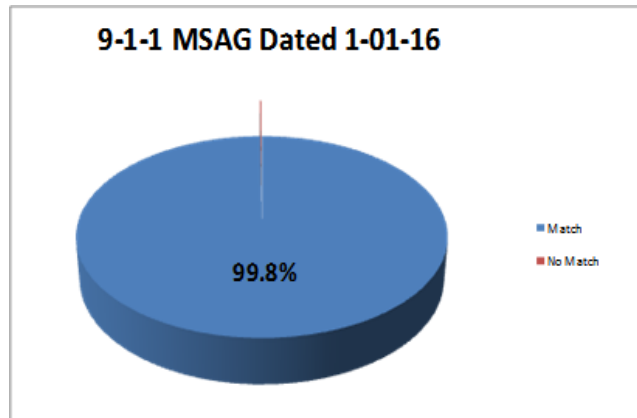
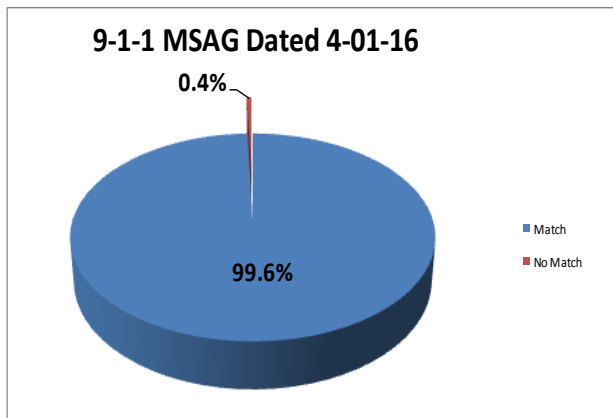
## NOTES:

- 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.

AUDIT SUMMARY RESULTS – APRIL 1, 2016 MSAG VS. JANUARY 1, 2016 MSAG

# Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016



**Kauai County level of accuracy for 9-1-1 Match percentage remained consistent with a 99.6% as of April 1, 2016 compared to 99.8% as of January 1, 2016**

*The NENA recommended minimum match rate of 98% has been met consistently in 2013 and continues in 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” increased (0 to 4) from January 2016 to April 2016. This is a result in which MSAG records submitted in 9-1-1 Net were not completed prior to the end of the month.
- ❖ “MSAG record with no GIS record” increased (0 to 1) from January 2016 to April 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. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the July 2016 re-analysis.
- ❖ “MSAG Records Corrections Required” decreased (5 to 3) from January 2016 to April 2016 respectively. MSAG records have been combined, split, and high/low ranges have been changed, to match the Street Centerlines, and will be reflected in the July 2016 re-analysis.
- ❖ 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.

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

## Kauai County E9-1-1 Status Report

**April 1, 2016 - April 30, 2016**

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:

KAUAI	Invalid MSAG Records			
	9-1-1 MSAG Dated 1-01-16		9-1-1 MSAG Dated 04-01-16	
	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records
<b>ESN 499</b>	<b>43</b>	<b>3.2%</b>	<b>38</b>	<b>2.8%</b>

These invalid MSAG records represent **2.8%** of the Total MSAG records for Kauai County as of the April 1, 2016 MSAG as compared to **3.2%** as of the January 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 Intrado for approval.

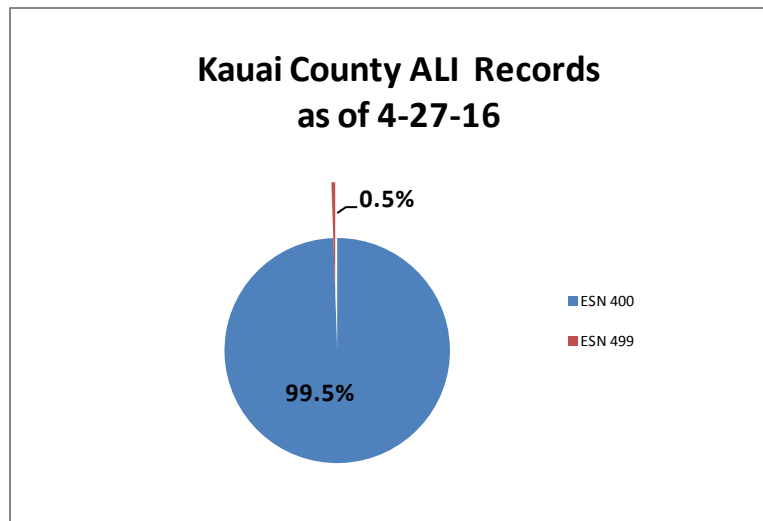
### AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT

## Kauai County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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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 April 27, 2016, there are **135** ESN 499 ALI records, representing **0.5%** of Kauai County's Total ALI records. The number of ESN 499 ALI records was further reduced by **4.3%** (141 to 135) from January 28, 2016 to April 27, 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”.



# Maui County E9-1-1 Status Report

*April 1, 2016 – April 30, 2016*



**AKIMEKA** | HIGH PRIORITY. HIGH IMPACT.

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME MAUI PSAP – APRIL 2016

(Source: West Safety Services (Intrado) Viper system)

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

9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
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%

### CALL VOLUME MAUI PSAP NOTES:

\*Calls with no Ali 0.17% - Statewide average = 0.18% Year 2015

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

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

9-1-1 Call Volume																	
MAUI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	11,627	2,130	18.32%	7,796	67.05%	60.31%	39.69%	334	2.87%	19	0.16%	0	0.00%	1,348	11.59%	0	0.00%
FEB	9,968	1,941	19.47%	6,639	66.60%	56.64%	43.36%	263	2.64%	7	0.07%	0	0.00%	1,118	11.22%	0	0.00%
MAR	11,240	2,216	19.72%	7,452	66.30%	57.11%	42.89%	262	2.33%	12	0.11%	0	0.00%	1,298	11.55%	0	0.00%
APR	11,162	2,180	19.53%	7,376	66.08%	57.57%	42.43%	249	2.23%	19	0.17%	0	0.00%	1,338	11.99%	0	0.00%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	43,997	8,467		29,263				1,108		57		0		5,102		0	
MON AVG	10,999	2,117	19.26%	7,316	66.51%	57.91%	42.09%	277	2.52%	14	0.13%	0	0.00%	1,276	11.59%	0.00	0.00%

## 9-1-1 CALL VOLUME MOLOKAI PSAP – APRIL 2016

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
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%

## CALL VOLUME MOLOKAI PSAP NOTES:

\*Calls with no Ali 0.46% - Statewide average = 0.18% Year 2015

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

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

9-1-1 Call Volume																	
MOLOKAI PSAP		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	371	109	29.38%	210	56.60%	58.57%	41.43%	6	1.62%	2	0.54%	0	0.00%	44	11.86%	0	0.00%
FEB	337	126	37.39%	178	52.82%	54.49%	45.51%	3	0.89%	2	0.59%	0	0.00%	28	8.31%	0	0.00%
MAR	355	106	29.86%	205	57.75%	45.85%	54.15%	3	0.85%	2	0.56%	0	0.00%	39	10.99%	0	0.00%
APR	435	153	35.17%	232	53.33%	51.29%	48.71%	1	0.23%	2	0.46%	0	0.00%	47	10.80%	0	0.00%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	1,498	494		825				13		8		0		158		0	
MON AVG	375	124	32.95%	206	55.13%	52.55%	47.45%	3.25	0.90%	2	0.54%	0	0.00%	39.5	10.49%	0	0.00%

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

9-1-1 Call Volume																	
MAUI COUNTY PSAPS		Wireline		Wireless				VOIP Calls		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
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%

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

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

9-1-1 Call Volume																	
MAUI COUNTY PSAPs		Wireline		Wireless				VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	11,998	2,239	18.66%	8,006	66.73%	60.27%	39.73%	340	2.83%	21	0.18%	0	0.00%	1,392	11.60%	0	0.00%
FEB	10,305	2,067	20.06%	6,817	66.15%	56.58%	43.42%	266	2.58%	9	0.09%	0	0.00%	1,146	11.12%	0	0.00%
MAR	11,595	2,322	20.03%	7,657	66.04%	56.81%	43.19%	265	2.29%	14	0.12%	0	0.00%	1,337	11.53%	0	0.00%
APR	11,597	2,333	20.12%	7,608	65.60%	57.37%	42.63%	250	2.16%	21	0.18%	0	0.00%	1,385	11.94%	0	0.00%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	45,495	8,961		30,088				1,121		65		0		5,260		0	
MON AVG	11,374	2,240	19.72%	7,522	66.13%	57.76%	42.24%	280	2.46%	16	0.14%	0.00	0.00%	1,315	11.55%	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 911 calls made from the Viper System.

## TEXT TO 911 – CURRENT MONTH – APRIL 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.

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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		
June		
July		
August		
September		
October		
November		
December		
YTD	51	7
Monthly Avg.	12.75	1.8

### WIRELESS PSAP TESTING – APRIL 2016

MAUI COUNTY - APRIL 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
4/12/2016	Verizon	1	1	Molokai PSAP	Pass	Molokai LTE



## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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### NOTES:

- There was one (1) scheduled Wireless test conducted in April, 2016 for the Maui and Molokai PSAPs.

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – APRIL 2016

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
2016		MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	
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									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	535	60	474	0	1				1,396
AVG PER MONTH	134	8	167	0	1				173

### Definitions

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

(B) **Telephone Number Change Request** - Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 399/359 attached to them which indicates the need for validation.

(C) **Automatic Location Information Discrepancy Record** - Represents an address discrepancy discovered during a live 9-1-1 call, from a landline. These record corrections are treated with a higher priority and should be processed within 48 hours as a general guideline.

(D) **Voice over Internet Protocol Discrepancy Record** - Represents an address discrepancy discovered during a live 9-1-1 call, from a VoIP phone. These record corrections are treated with a higher priority and should be processed within 72 hours as a general guideline per Time Warner Operations Center. MSR tracking effective April 2014.

### MSAG CURRENT MONTH NOTES:

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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A total of **132** MSAG transactions were processed in 9-1-1 Net during the month of April 2016. Twenty-five (**25**) 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 **895** customer ANI/ALI (telephone number/address) records updated as a direct result.

---

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

**107** 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 Intrado on the TN CRs that have been submitted for correction. In April 2016, there were 248 TN CRs completed and as a result, four (4) ESN 399 street records were deleted from the MSAG database.

---

### OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- **There are 1,795 Open TN CR Transactions as of April 30, 2016.**
- **Refer to chart in the next section “TNCR Current Status”**

**1,732** Open TN CR transactions are a direct result of the ESN 399 clean-up and are awaiting approval from Hawaiian Telcom, Inc. **63** 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 Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado'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 April 30, 2016**
- **There are no VoIP DRs Open as of April 30, 2016**

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

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 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 (Intrado) for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
County	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
MAUI	1,395	107	79	1,209
MOLOKAI	400	17	11	372
TOTAL	1,795	124	90	1,581

STATUS
<b><u>TOTAL TNCRS SUBMITTED</u></b> - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.
<b><u>PENDING STATUS</u></b> - 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.
<b><u>REFERRED STATUS</u></b> - 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 (Intrado) Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<b><u>TOTAL UNOPENED TNCR RECORDS STATUS</u></b> - The request is submitted by Akimeka on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.

DISPATCHABLE LOCATION – STATUS AS OF – APRIL 2016 - PENDING

### NARRATIVE:

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

During the August 2015 State of Hawaii 911 Board meeting, Akimeka provided a “State of Hawaii PSAPs Proposed ALI Compliance 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. In September, the Dispatchable Location transactions have been temporarily stopped. Transactions have not been updated in 9-1-1 Net pending research by Hawaiian Tel and West Safety Services (Intrado) for providing an additional 60 character field in the ALI data stream to accommodate Dispatchable Location information as an alternative to using the “Driving Directions” field. Until this field is created, no further Dispatchable Location transactions will be submitted. There are currently 498 transactions prepared for submission. No further developments as of April 2016.

Dispatchable Location					
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Prepared	Number of TNCR* Transactions Submitted	Number of Transactions Processed**
Queen Kaahumanu Center	Carryover from 2015	2015		368	299
		Jan		0	0
		Feb		0	0
Lahaina Outlets	900 Front St, Lahaina	Mar	155	0	6
Maui Mall	70 E Kaahumanu Ave, Kahului		88	0	
Shops at Wailea	3750 Wailea Alanui Dr, Wailea	Apr	255	0	0
		Total	498	368	305

\*project currently on hold by West Safety Services (Intrado)/Hawaiian Telcom.

Definition
<b>Dispatchable Location</b> 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.
<b>TNCR*</b> Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location in the Exact field on the ALI Screen.
<b>Processed**</b> may include inactive telephone numbers that were removed from the ALI Database.

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – APRIL 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 E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points		04/27/16	
	4/26/2016		Changed Location Name of one (1) address in Kihei
	4/26/2016		Added one (1) address in Kula
	4/26/2016		Added two (2) addresses in Wailuku
	4/26/2016		Spatially corrected five (5) address points in Wailuku
	4/21/2016		Added four (4) addresses in Lahaina
	4/21/2016		Added one (1) address in Kualapuu
	4/20/2016		Spatially corrected ninety-three (93) address points in Wailea
	4/19/2016		Added three (3) addresses in Hana
	4/19/2016		Spatially corrected three (3) address points in Hana
	4/19/2016		Added two (2) addresses in Pukoo
	4/19/2016		Spatially corrected one (1) address point in Pukoo
	4/18/2016		Spatially corrected two (2) address points in Kihei
	4/15/2016		Added one (1) address in Wailuku
	4/15/2016		Spatially corrected one hundred eighty-five (185) address points in Wailuku
		04/13/16	
	4/13/2016		Changed Street Name for one (1) Mile Marker address in Kahului
	4/12/2016		Added one (1) address in Hana
	4/12/2016		Added two (2) addresses in Kahului
	4/12/2016		Added one (1) address in Makawao
	4/12/2016		Spatially corrected four (4) address points in Makawao
	4/11/2016		Corrected Location Name for one (1) address in Haiku
	4/11/2016		Corrected Location Name for one (1) address in Kaanapali
	4/11/2016		Corrected Location Name for two (2) addresses in Kahului
	4/11/2016		Corrected Location Name for three (3) addresses in Kaunakakai
	4/11/2016		Corrected Location Name for one (1) address in Kihei
	4/11/2016		Corrected Location Name for one (1) address in Kula
	4/11/2016		Corrected Location Name for three (3) addresses in Lanai
	4/11/2016		Spatially corrected one (1) address point in Lanai
	4/11/2016		Spatially corrected four (4) address points in Kahului
	4/11/2016		Spatially corrected one (1) address point in Kihei
	4/11/2016		Corrected Location Name for one (1) address in Maalaea
	4/11/2016		Corrected Location Name for six (6) addresses in Haiku
	4/8/2016		Changed one (1) address in Lahaina

## MAPPING LAYERS UPDATED (PART II)

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

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/8/2016		Added two (1) addresses in Kaunakakai
	4/8/2016		Spatially corrected twenty-three (23) address points in Kihei
	4/7/2016		Added one (1) address in Kapalua
	4/7/2016		Added one (1) address in Kaunakakai
	4/7/2016		Added one (1) address in Kihei
	4/7/2016		Corrected Location Name for one (1) address in Lahaina
	4/7/2016		Changed one (1) address in Spreckelsville
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places			
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN			
Fire Beats			
Fire Districts			
Fire Response Areas			
Fire Stations			
Food & Beverage			
Gas Stations			
Gate Codes			
Government Buildings			
Harbors			
Helipads			
Hiking Trails			
Hospitals			
Hydrants			
Hyrdology Layers			

## MAPPING LAYERS UPDATED (PART III)

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

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Incident Response Areas			
Lodging			
Major Roads			
Medic Beats			
Medic Districts			
Medic Response Areas			
Medic Stations			
Medical Facilities			
Milepost Markers			
MSAG Communities			
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
Points of Interest		04/27/16	
	4/26/2016		Updated two (2) POI addresses in Lahaina
	4/26/2016		Added twenty-eight (28) POI in Lahaina
	4/26/2016		Spatially corrected one (1) POI in Lahaina
		04/13/16	
Police Beats			
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines		04/27/16	
	4/26/2016		Modified one (1) street centerline range segment in Wailuku
	4/22/2016		Spatially corrected twelve (12) street centerline segments in Wailea
	4/21/2016		Modified range for one (1) street centerline segment in Kualapuu
	4/21/2016		Spatially corrected seven (7) street centerline segments in Wailea
	4/20/2016		Spatially corrected seventeen (17) street centerline segments in Wailea
	4/19/2016		Spatially corrected eighteen (18) street centerline segments in Kihei

## MAPPING LAYERS UPDATED (PART IV)

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



# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

MAUI COUNTY			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Street Centerlines	4/18/2016		Spatially corrected thirteen (13) street centerline segments in Kihei
		04/13/16	
	4/12/2016		Modified one (1) street centerline range in Kahului
	4/12/2016		Spatially corrected sixteen (16) street centerline segments in Kihei
	4/11/2016		Spatially corrected thirty (30) street centerline segments in Kihei
	4/8/2016		Spatially corrected nine (9) street centerline segments in Kihei
	4/7/2016		Spatially corrected three (3) street centerline segments in Kihei
	4/7/2016		Modified one (1) street centerline range segment in Lanai
	4/7/2016		Modified two (2) street centerline range segments in Spreckelsville
	4/7/2016		Per Maui Dispatch removed Alias Name from four (4) street centerline segments in Wailuku
	4/4/2016		Changed one (1) street name in Kahului
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors	4/29/2016		Per VZW CRS
		04/27/16	
	4/25/2016		Per VZW CRS
	4/14/2016		Per ATT CRS
		04/13/16	
WSP Cell Towers	4/29/2016		Per VZW CRS
	4/25/2016		Per VZW CRS
	4/14/2016		Per ATT CRS
		04/13/16	

## 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

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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

Date	Key Activities/Updates
4/27/2016	Delivered the following data for an Intergraph CAD map update: Maui Cell Coverage .csv, .str, .rte and .map which included updated Address Points, Common Places Lookup Table, Points of Interest, Rescue Tubes, Street Centerlines and WSP Cell Towers
4/26/2016	Prepared Address Points, Street Centerlines, Points of Interest, Rescue Tubes, WSP Cell Towers, Common Places Look Up table for Intergraph deliverable. Rescue Tubes is a new layer so additional work had to be done. Also deleted duplicate street labels and moved street labels that overlapped other features. This is an ongoing process.
4/13/2016	Prepared and Delivered the following data for an Intergraph CAD map update: Maui Cell Coverage .csv, .str, .rte and .map which included updated Address Points, Common Lookup Table, Street Centerlines and WSP Cell Towers
4/13/2016	Prepared and Delivered the following data for a MapFlex update: Address Points, Street Centerlines, WSP Cell Sectors and WSP Cell Towers

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INTERGRAPH CAD UPGRADE

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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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 April 13, 2016, the following data was delivered for an Intergraph CAD Map update:
  - a. Address Points, Common Places Lookup Table, Street Centerlines and WSP Cell Towers.
  - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
2. Akimeka delivered an updated Intergraph CAD map on April 27, 2016 which included:
  - a. Address Points, Common Places Lookup Table, Rescue Tubes, Street Centerlines and WSP Cell Towers.
  - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
3. Throughout April, Street Centerline labels were added for new centerlines and overlapping and duplicate street labels were deleted. This is an ongoing process.
4. A Rescue Tubes layer was added to the Intergraph CAD map as requested by Maui Dispatch. These tubes are in the Lahaina/Kaanapali area. Additional setup work was done including labeling and symbology.

During May 2016, the Intergraph CAD map will continue to be delivered on a bi-monthly basis, which has been coordinated with all mapping system updates and synchronizations with other 911 databases.

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### MAPFLEX SYSTEM

During the month of April 2016, the MapFlex system performed without any issues and deliverables continued on schedule.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, Intrado, 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 April 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in April 2016
  - a. **Hawaii County** – April 12<sup>th</sup> and April 26<sup>th</sup>
  - b. **Maui County** – April 13<sup>th</sup> and April 27<sup>th</sup>
  - c. **Kauai County** – April 14<sup>th</sup> and April 28<sup>th</sup>
  - d. **Honolulu** – April 1<sup>st</sup>, April 15<sup>th</sup> and April 29<sup>th</sup>

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### WIRELESS ANNUAL AUDIT

# Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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During the month of February 2016, the wireless annual audit for Verizon was coordinated and completed as indicated in the Wireless Audit Chart. However during the audit process, it was identified that changes which had been sent through the CRS process for all WSPs were possibly not making their way back to the wireless FMCC database (responsible for information provided via the ALI).

1. On February 29, 2016, after completing the review of the Annual Audit for Verizon wireless Akimeka contacted West to discuss the reason why the annual audit synchronization has degraded in the match accuracy.
  - a. Note – The CRS process performed throughout the year for all WSPs deals with routine maintenance performed on the sites/sectors. The Annual Audit is intended to identify any possible gaps in that process and seeks reconciliation in an effort to re-synchronize the databases. If there are no missed CRSs throughout the year and the database match percentage decreases, then there are apparent issues.
2. On March 15, 2016, Akimeka and West held a conference call to discuss the matter. During the conversation it was identified that the changes sent back from Akimeka to West after accuracy validation, are processed into the FMCC. The issue that Akimeka is seeing when the Annual Audit is provided is resulting from a script West put in place in 2013 to output the CRSs into the approved format at that time.
  - a. The issue is that the format has changed over time due to new technology and more hexadecimal numbering of the wireless sectors. In order to accommodate those changes, Akimeka has developed a translation into an applicable format which the PSAPs are able to use. The format that West is providing each Annual Audit and CRS is overriding the changes within the FMCC, therefore give the appearance of not being synchronized in that process but are. This helps to explain why the wireless testing results are accurate, and the PSAPs are not experiencing a large number of discrepancies in the Mapping Systems when matched with the ALI.
3. Akimeka followed up with West on March 30, 2016, to see if West has re-scripted the format.
  - a. West replied that unfortunately it will require system development at West. Melissa Norton of West did mention that the particular system that needs to be changed is currently backlogged with a few large projects. She opened a Product Development Request at West but there is no ETA on the enhancement. In order to speed up the request, she is working to bundle the request with several other State's requests.
4. Akimeka will continue to follow up on the process to ensure the wireless databases are maintained accurately. With the big push by the WSPs for more LTE sites, which are having the impact on the hexadecimal numbering, Akimeka is hopeful that West can resolve this issue. The additional work involved to re-validate information takes a significant effort and allows for discrepancy. The Annual Audit is supposed to be a raw comparison to the condition of the data in both the FMCC and the GIS database provided in the Mapping Systems. Without both in its raw format, the comparison becomes unclear as to the real condition of the FMCC database.
5. Throughout the month of April 2016, Akimeka had been provided several TVWs by the WSPs for testing and most of the information was good for testing but there was an unusually high number of records that were either missing or were incorrect. Virtually all TVWs sent to Akimeka had some variety of discrepancy in them. This was only applicable to Verizon at the time and since the Annual Audit with Verizon had been completed, bringing the databases to 100% match rate, a reason for the mismatch in TVW information was perplexing. It certainly required more investigation into what was occurring.
6. On April 21, 2016, Akimeka was notified of yet another set of TVWs with issues and the WSP and West investigated their end and said everything was matching. Because the Annual Audit was completed, matching West and Akimeka databases, but yet the TVWs produced from the West database were not matching, something was highly unusual.
  - a. Later the same day, Akimeka provided an example of the discrepancy back to West detailing one of the records along a timeline. Information provided in the TVW matched with the record from 2015. Since that time, there were several updates, including the Annual Audit. This indicated that the TVWs being generated by West were not accurate and it also was indicating the Annual Audit sent back to West was not be uploaded. This is a major issue.

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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7. To confirm Akimeka's suspicion that the Annual Audit updates were not being uploaded by West into the FMCC, Akimeka followed up with implementation specialist at West, who the Audit was coordinated with.
  - a. West sent a reply on April 25, 2016, that the audit was not fully completed at West and they were in their final stages before sending changes to the database and on to Verizon. From West "there were a lot of changes that came from the audit which is where you may be seeing the discrepancies. Once Verizon has called in the hot cuts (changes), the data should match the audit sheet you sent".
  - b. This was confirmation that the audit was still not being processed fully by West after 2 months and that the issues with mismatched information in the TVWs were as a result of this.

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### REQUEST FOR 9-1-1 JURISDICTIONAL BOUNDARIES

On March 17, 2016, West had requested information for each of the PSAPs in the State of Hawaii, with the exception of the Honolulu Police Department and Regional Dispatch Center. Akimeka has followed up with West to see if the Honolulu Police Department PSAP was supposed to be included in this request.

1. On March 17, 2016, West requested that each PSAP fill out an attached questionnaire and to provide the PSAP Jurisdictional Boundaries (to include VoIP, Wireless, Text, and Alarms).
2. Akimeka prepared the boundaries of each of the PSAP Jurisdictional Boundaries which included all requested attribution. Given the geography of the Hawaiian Islands, and the operational responses of each PSAP which includes ocean responses, Akimeka included a buffer for each of the PSAP Boundaries that extend into the ocean. This reflects the true nature of the PSAP Jurisdictional Boundary response area and also covers the distance over water which can account for possible Lat/Longs provided during a Text-to-911 call to the PSAP. Since the system is intended to use the location information to determine routing, inclusion of the water area into the PSAP polygons was a more accurate approach.
3. On March 23, 2016, the Akimeka GIS Manager notified West that this information was ready and requested a secure method of transferring the data. Throughout the remainder of March 2016, there was no reply from West.
4. On April 19, 2016, West followed back up with the Akimeka GIS Manager. The West employee was unfamiliar with using an ftp site and was going to touch base with her supervisors to find a more secure manner of transferring the data. Throughout the remainder of April 2016, Akimeka did not hear back.

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### MAPFLEX SYSTEM ISSUE

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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During the month of March 2016, there were some identified addresses not present within the MapFlex system. Throughout the month of March, Akimeka and MPD worked closely to identify what data is the most current in the system and when the updated GIS data will be available in the MapFlex. Akimeka coordinated several times with West (formerly Intrado) to correct the issue.

1. On April 6<sup>th</sup>, 2016, Akimeka was contacted by West. West identified that there was a blockage from the deliverable sent because the delivery file had an extra space in the name. However, after the system was cleared, a blockage acquired again because the delivery file was incorrectly named.
2. On April 19<sup>th</sup>, Akimeka sent new addresses that were part of the April 13<sup>th</sup> delivery for Maui Dispatch to test. As of this report, Maui Dispatch has not responded.

As a result of the continued coordination with West through April with no resolution to date, Akimeka escalated the situation and MPD is expecting for the discrepancy to be resolved early on in May 2016. Akimeka will continue to upload on an out of schedule basis as needed in order to ensure MPD is receiving GIS updates into the MapFlex system.

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### RESCUE TUBES

On April 18<sup>th</sup>, 2016 Akimeka created a Rescue Tubes layer as requested by the Maui Police Dispatch Center. The data was provided by Kaanapali Operations Association. The data provided included Rescue Tube number, latitude and longitude and a physical location for each tube. There are twenty-seven rescue tube locations in the Lahaina and Kaanapali area. This layer was included in the Intergraph CAD map with the April 27<sup>th</sup>, 2016 deliverable.

## 4. SERVICE REQUESTS TRANSACTIONS

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - APRIL 2016

MAUI COUNTY						
#	Date	Ticket #	Description	PSAP	Urgency	Comments
			NONE			

#### NOTE:

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

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

MAUI COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2016	TOTAL		Open	WIRELINE		WIRELESS		VoIP	
	Created	Closed		Created	Closed	Created	Closed	Created	Closed
2015 Carryover*			0						
January	1	1	0	0	0	0	0	1	1
February	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0
April	1	1	0	1	1	0	0	0	0
May									
June									
July									
August									
September									
October									
November									
December									
<b>TOTAL</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

#### Note:

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

Definitions:	Category	Description
	Wireline	Telephone Number (ALI) Discrepancies from land line phones that have been submitted to West Safety Services (Intrado) 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

## Maui County E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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

### Next Scheduled Database Synchronization is June 2016

AUDIT SUMMARY RESULTS – 2015-2016 -- TBA

MSAG AUDIT SUMMARY RESULTS – JUNE 1, 2016 - MARCH 1, 2016 -- TBA

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

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA



# Oahu Civilian E9-1-1

## Status Report

*April 1, 2016 – April 30, 2016*

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME – APRIL 2016

(Source: West Safety Services (Intrado) Viper system)

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

9-1-1 Primary PSAP Call Volume																	
Honolulu City & 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
April	85,009	19,510	22.95%	62,431	73.44%	49.70%	23.74%	3,026	3.56%	43	0.05%	2,332	2.74%	11,895	13.99%	635	0.75%

### 9-1-1 CALL VOLUME – CALENDAR YEAR 2016

9-1-1 Primary PSAP Call Volume																	
Honolulu City & County PSAPs		Wireline		Wireless				VOIP Calls		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	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%	43	0.05%	2,332	2.74%	11,895	13.99%	635	0.75%
MAY																	
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	341,262	78,094		250,438				12,525		205		7,957		49,515		4,137	
MON AVG	85,316	19,524	22.89%	62,610	73.38%	50.50%	22.88%	3,131	3.67%	51	0.06%	1,989	2.33%	12,379	14.51%	1,034	1.20%

#### NOTE:

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

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 9-1-1 CALL VOLUME BY AGENCY – APRIL 2016

2016	9-1-1 Call Volume by Agency									
	Honolulu Police Department						Honolulu Fire Department			
	No. of Total Calls Received	% of Total Calls	Number of Emergency Calls	Number of Non Emergency Calls	Number of Admin Calls	Number of Dropped Calls	No. of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls
April	73,760	86.77%	19,959	40,560	1,346	11,895	2,388	2.81%	119	0

2016	9-1-1 Call Volume by Agency							
	Emergency Medical Services				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
April	8,179	9.62%	824	140	47	0.06%	43	14

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

2016	9-1-1 Call Volume by Agency																	
	Honolulu Police Department						Honolulu Fire Department				Emergency Medical Services				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																		
JUNE																		
JULY																		
AUG																		
SEPT																		
OCT																		
NOV																		
DEC																		
YTD	294,969		77,138	163,482	4,834	49,515	9,949		420	0	31,945		2,462	517	262		241	29
MON AVG	73,742	86.44%	19,285	40,871	1,209	12,379	2,487	2.91%	105	0	7,986	9.38%	616	129	66	0.08%	60	7

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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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.

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## TEXT TO 911 – CURRENT MONTH – APRIL 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.

TEXT TO 911 Oahu Civilian PSAPs 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						
June						
July						
August						
September						
October						
November						
December						
YTD	511	405	30	9	0	67
Monthly Avg.	127.8	101.3	7.5	2.3	0.0	16.8

### NOTE:

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

## Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### WIRELESS PSAP TESTING – APRIL 2016

OAHU CIVILIAN - APRIL 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
4/7/2016	Verizon	2	19	Oahu PSAP	Pass	2 Testers
4/8/2016	Verizon	11	31	Oahu PSAP	Pass	2 Testers
4/15/2016	Verizon	5	11	Oahu PSAP	6 Pass/5 Fail	Waipio site display error
4/15/2016	Verizon	4	26	Oahu PSAP	17 Pass/9 Fail	test sites not in the system
4/22/2016	Verizon	6	20	Oahu PSAP	Pass	2 Testers
4/29/2016	Verizon	1	8	Oahu PSAP	7 Pass/1 Fail	re-build sector required
4/29/2016	Verizon	1	8	Oahu PSAP	4/Pass/4 Fail	re-test next month

#### NOTES:

- There were ten (10) scheduled Wireless 911 Tests for the Oahu Civilian PSAP in April, 2016. A total of 123 Cell Sectors were tested. Failed sectors will be rescheduled after technical issues are resolved.



# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – APRIL 2016

OAHU CIVILIAN	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
2016		MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	
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									
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	461	96	358	6	1				2,628
AVG PER MONTH	115	24	90	2	0				657

### Definitions

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

(B) **Telephone Number Change Request** - Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 199 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.

## Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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### MSAG CURRENT MONTH NOTES:

A total of **96** MSAG transactions were processed in 9-1-1 Net during the month of April 2016. Twenty-five (**25**) 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 **955** customer ANI/ALI (telephone number/address) records updated as a direct result.

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

**71** 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 358 Open TN CR Transactions as of April 30, 2016.**
- **Refer to chart in the next section “TNCR Current Status”**

**358** 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 Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado'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 April 30, 2016.**
- **There is zero Open VoIP DR as of April 30, 2016.**

## Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

### TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – APRIL, 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 (Intrado) for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
OAHU CIVILIAN	358	13	221	124

STATUS
<b>TOTAL TNCRs SUBMITTED</b> - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.
<b>PENDING STATUS</b> - 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.
<b>REFERRED STATUS</b> - 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 (Intrado) Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.
<b>TOTAL UNOPENED TNCR RECORDS STATUS</b> - 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.

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 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 counter-clockwise 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 **April 30, 2016**:

MSAG COMMUNITY (In Order of Effort)	MSAG COMMUNITY AND STREET SEGMENT SWEEP -- PHASE VII				GIS UPDATES	
	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			
Sunset	12/03/14	12/10/14	12/08/14		11/28/14	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		02/19/15	02/25/15
Mokuleia	01/30/15	02/05/15	02/12/15			
Kalaniana'ole Hwy Project	02/09/15	03/04/15	02/19/15			
Makaha	03/05/15	03/12/15	02/17/15			
Waianae	03/13/15	03/24/15	03/09/15		03/20/15	04/02/15
Mali	03/25/15	04/02/15	03/17/15			
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	

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## MSAG Community and Street Segment Sweep – Phase VII continued

MSAG COMMUNITY (In Order of Effort)	MSAG COMMUNITY AND STREET SEGMENT SWEEP -- PHASE VII				GIS UPDATES	
	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	01/14/16
PC PEN	01/27/16	02/02/16	01/19/16		01/08/16	
McGrew PT	02/03/16	02/04/16	01/20/16	ArcGIS License Issues at HPD on workstation	01/22/16	
Halawa	02/05/16	02/08/16	01/20/16			
Aliamanu	02/12/16	02/17/16	01/21/16			
Moanalua T	02/18/16	02/23/16	01/26/16			
Hale Moku	02/24/16	02/29/16	01/26/16			
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	ArcGIS License Item was resolved	02/19/16	02/23/16
Airport	03/11/16	03/25/16	02/12/16			
Catlin Pk	03/28/16	03/31/16	02/16/16			
Miller Pk	04/01/16	04/05/16	02/19/16			
Halsey T	04/06/16	04/11/16	02/22/16		03/04/16	03/15/16
Radford T	04/12/16	04/14/16	02/23/16			
Mapunapuna	04/15/16	04/20/16	03/03/16			
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	IN PROGRESS			
Nuuanu	06/22/16	07/07/16				
Punchbowl	07/08/16	07/20/16				
Downtown	07/21/16	08/02/16				
Kakaako	08/03/16	08/08/16				
Ala Moana	08/09/16	08/11/16				
Honolulu	08/12/16	08/29/16				
Makiki	08/30/16	09/07/16				
Manoa	09/08/16	09/27/16				

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – APRIL 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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points		04/29/16	
	4/28/2016		Deleted one (1) location name in Kalihi
	4/28/2016		Added seven (7) location names in Kalihi
	4/28/2016		Spatially corrected eighty-nine (89) address points in Kalihi
	4/27/2016		Added one (1) routing id in Kalihi
	4/27/2016		Corrected six (6) TMK in Kalihi
	4/27/2016		Added ten (10) location names in Kalihi
	4/27/2016		Corrected one (1) address in Kalihi
	4/27/2016		Added one (1) alias in Kalihi
	4/27/2016		Added eleven (11) address points in Kalihi
	4/27/2016		Deleted ten (10) address points in Kalihi
	4/27/2016		Spatially corrected one hundred thirty-one (131) address points in Kalihi
	4/25/2016		Corrected six (6) TMK in Kalihi
	4/25/2016		Added ten (10) location names in Kalihi
	4/25/2016		Added forty-four (44) address points in Kalihi
	4/25/2016		Added three (3) building numbers in Kalihi
	4/25/2016		Deleted two (2) location names in Kalihi
	4/25/2016		Deleted seventeen (17) address points in Kalihi
	4/25/2016		Corrected two (2) ESN in Kalihi
	4/25/2016		Added two (2) routing ids in Kalihi
	4/25/2016		Spatially corrected one hundred eighteen (118) address points in Kalihi
	4/22/2016		Spatially corrected eleven (11) address points in Kalihi
	4/21/2016		Corrected one (1) TMK in Kalihi
	4/21/2016		Added two (2) apartment numbers in Kalihi
	4/21/2016		Added two (2) address points in Kalihi
	4/21/2016		Added six (6) location names in Kalihi
	4/21/2016		Corrected one (1) address in Kalihi
	4/21/2016		Deleted two (2) location names in Kalihi
	4/21/2016		Spatially corrected three hundred eighty-one (381) address points in Kalihi
	4/19/2016		Deleted two (2) address points in Kalihi
	4/19/2016		Corrected three (3) TMK in Kalihi
	4/19/2016		Added eleven (11) location names in Kalihi
	4/19/2016		Corrected one (1) address in Kalihi
	4/19/2016		Added one (1) routing id in Kalihi

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 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.*

OAHU CIVILIAN			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Address Points	4/19/2016		Added three (3) address points in Kalihi
	4/19/2016		Spatially corrected six hundred eighty-seven (687) address points in Kalihi
		04/15/16	
	4/15/2016		Added two (2) location names in Kalihi
	4/15/2016		Corrected two (2) TMK in Kalihi
	4/15/2016		Deleted four (4) address points in Kalihi
	4/15/2016		Added one (1) floor number in Kalihi
	4/15/2016		Spatially corrected seven hundred eighty (780) address points in Kalihi
	4/14/2016		Added one (1) location name in Kalihi
	4/14/2016		Spatially corrected one hundred twenty-one (121) address points in Kalihi
	4/13/2016		Deleted two (2) address points in Kalihi
	4/13/2016		Corrected one (1) tmk in Kalihi
	4/13/2016		Spatially corrected five hundred fifteen (515) address points in Kalihi
	4/12/2016		Added three (3) address points in Kalihi
	4/12/2016		Added four (4) location names in Kalihi
	4/12/2016		Corrected five (5) TMK in Kalihi
	4/12/2016		Corrected one (1) address in Kalihi
	4/12/2016		Added one (1) building number in Kalihi
	4/12/2016		Deleted five (5) address points in Kalihi
	4/12/2016		Spatially corrected one thousand thirty-one (1031) address points in Kalihi
	4/11/2016		Deleted five (5) address points in Kalihi
	4/11/2016		Added two (2) location names in Kalihi
	4/11/2016		Added one hundred eleven (111) address points in Kalihi
	4/11/2016		Deleted one (1) location name in Kalihi
	4/11/2016		Spatially corrected six hundred ninety-two (692) address points in Kalihi
	4/8/2016		Added twelve (12) address points in Kalihi
	4/8/2016		Added one (1) building number in Kalihi
	4/8/2016		Deleted two (2) address points in Kalihi
	4/8/2016		Corrected two (2) TMK in Kalihi
	4/8/2016		Spatially corrected seventy-seven (77) address points in Kalihi
	4/8/2016		Added three (3) routing IDs in Aliamanu
	4/8/2016		Added one (1) building number in Aliamanu
	4/8/2016		Added three (3) address points in Aliamanu
	4/8/2016		Spatially corrected nine hundred fifty-four (954) address points in Aliamanu

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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 GIS Delivered	Other/Remarks	
	Date Created/ Edits Performed			
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
Address Points	4/7/2016		Corrected one (1) house number in Kalihi	
	4/7/2016		Added seven (7) address points in Kalihi	
	4/7/2016		Added eight (8) location names in Kalihi	
	4/7/2016		Deleted four (4) location names in Kalihi	
	4/7/2016		Corrected one (1) TMK in Kalihi	
	4/7/2016		Spatially corrected four hundred forty-two (422) address points in Kalihi	
	4/6/2016		Added three (3) apartment numbers in Kalihi	
	4/6/2016		Added six (6) address points in Kalihi	
	4/6/2016		Corrected three (3) TMK in Kalihi	
	4/6/2016		Added three (3) location names in Kalihi	
	4/6/2016		Deleted one (1) address point in Kalihi	
	4/6/2016		Spatially corrected four hundred thirty-six (436) address points in Kalihi	
	4/5/2016		Deleted one (1) address point in Kalihi	
	4/5/2016		Corrected two (2) TMK in Kalihi	
	4/5/2016		Added two (2) location names in Kalihi	
	4/5/2016		Added eleven (11) address points in Kalihi	
	4/5/2016		Added one (1) apartment number in Kalihi	
	4/5/2016		Spatially corrected seven hundred seventy (770) address points in Kalihi	
	4/4/2016		Added thirty-three (33) address points in Kalihi	
	4/4/2016		Added five (5) building numbers in Kalihi	
	4/4/2016		Added ten (10) location names in Kalihi	
	4/4/2016		Added one (1) routing ID in Kalihi	
	4/4/2016		Corrected one (1) address in Kalihi	
	4/4/2016		Added one (1) apartment number in Kalihi	
	4/4/2016		Added seventy-six (76) location names in Makaha	
	4/4/2016		Added seventy-six (76) apartment numbers in Makaha	
		04/01/16		
	4/1/2016			Corrected one (1) location name in Waipahu
	4/1/2016			Spatially corrected one (1) address point in Waipahu
	4/1/2016			Corrected one (1) location name in Mililani
	4/1/2016			Added two (2) aliases in Punaluu



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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	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
Common Places		04/29/16	
	4/28/2016		Spatially corrected five (5) locations in Kalihi
	4/27/2016		Spatially corrected twenty-five (25) locations in Kalihi
	4/25/2016		Spatially corrected thirty-four (34) locations in Kalihi
	4/22/2016		Spatially corrected eleven (11) locations in Kalihi
	4/21/2016		Spatially corrected thirty-seven (37) locations in Kalihi
	4/19/2016		Spatially corrected sixteen (16) locations in Kalihi
		04/15/16	
	4/15/2016		Spatially corrected one (1) location in Kalihi
	4/12/2016		Spatially corrected five (5) locations in Kalihi
	4/11/2016		Spatially corrected five (5) locations in Kalihi
	4/8/2016		Spatially corrected one (1) location in Kalihi
	4/8/2016		Spatially corrected two (2) locations in Aliamanu
	4/7/2016		Spatially corrected forty-one (41) locations in Kalihi
	4/6/2016		Spatially corrected fourteen (14) locations in Kalihi
	4/5/2016		Spatially corrected two (2) locations in Kalihi
	4/4/2016		Spatially corrected forty-two (42) locations in Kalihi
		04/01/16	
	4/1/2016		Corrected three (3) names in Mililani
	4/1/2016		Spatially corrected two (2) locations in Mililani
	4/1/2016		Corrected three (3) addresses in Mililani
	4/1/2016		Added five (5) new Common Places in Mililani
	4/1/2016		Corrected two (2) names in Waipahu
	4/1/2016		Spatially corrected two (2) locations in Waipahu
	4/1/2016		Corrected one (1) address in Waipio
	4/1/2016		Corrected forty-seven (47) names in Waipio
	4/1/2016		Deleted one (1) Common Place in Waipio

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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			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Common Places	4/1/2016		Spatially corrected one (1) location in Waipio
	4/1/2016		Deleted one (1) Common Place in Waipahu
	4/1/2016		Added one (1) Common Place in Wahiawa
	4/1/2016		Added one (1) Common Place in Aiea
	4/1/2016		Added one (1) Common Place in Kaneohe
	4/1/2016		Spatially corrected seven (7) locations in Aiea
	4/1/2016		Deleted one (1) Common Place in Aiea
	4/1/2016		Corrected one (1) police sub beat in Mililani
	4/1/2016		Corrected one (1) tow boundary in Mililani
	4/1/2016		Corrected one (1) MSAG community in Mililani
	4/1/2016		Corrected one (1) ESN in Mililani
	4/1/2016		Corrected one (1) police in Mililani
Correctional Facilities			
Emergency Callboxes			
Emergency Operation Centers			
Emergency Shelters			
ESZ/ESN		04/29/16	
	4/29/2016		Corrected one (1) ESN in Honolulu
	4/25/2016		Corrected boundaries for ESNs 122, 120, 125, 126, and 123
	4/21/2016		Corrected boundaries for ESNs 122 and 125
	4/20/2016		Corrected boundaries for ESNs 122 and 125
		04/15/16	
	4/15/2016		Corrected boundaries for ESNs 120, 126, 125
Fire Beats			
Fire Districts			
Fire Response Areas		04/29/16	
	4/25/2016		Corrected boundaries for STA4, STA6, STA25, STA1, and STA31
	4/21/2016		Corrected boundaries for STA4 and STA6
	4/20/2016		Corrected boundaries for STA4 and STA6
		04/15/16	
	4/15/2016		Corrected boundaries for STA6, STA31, STA1
Fire Stations			
Food & Beverage			
Gas Stations			

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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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
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		04/29/16	
	4/25/2016		Corrected boundaries for Kalihi and Nuuanu
		04/15/16	
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
Points of Interest			
Police Beats		04/29/16	
	4/25/2016		Corrected Police Beat boundaries 560, 562, and 570
		04/15/16	
		04/01/16	
	4/1/2016		Corrected Police Beat 152 according to the HPD written policies and procedures, and began correcting 154, 156, and 157

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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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines		04/29/16	
	4/29/2016		Spatially corrected one (1) street segment in Punchbowl
	4/29/2016		Spatially corrected five (5) street segments in Honolulu
	4/29/2016		Spatially corrected twenty-four (24) street segments in Downtown
	4/28/2016		Split three (3) street segments in Kalihi
	4/26/2016		Spatially corrected fifty-one (51) street segments in Kalihi
	4/26/2016		Deleted one (1) street segment in Kalihi
	4/22/2016		Spatially corrected sixty-two (62) street segments in Kalihi
	4/20/2016		Corrected one (1) street range in Manoa
	4/20/2016		Split one (1) street segment in Kalihi
	4/20/2016		Added one (1) street segment in Kalihi
	4/20/2016		Spatially corrected thirty-five (35) street segments in Kalihi
	4/19/2016		Flipped two (2) street segments in Kalihi
	4/18/2016		Corrected two (2) elevations in Moanalua V
	4/18/2016		Corrected one (1) elevation in Kalihi
	4/18/2016		Split one (1) street segment in Kalihi
	4/18/2016		Corrected two (2) police attributes in Kalihi
	4/18/2016		Spatially corrected thirty-six (36) street segments in Kalihi
		04/15/16	
	4/14/2016		Flipped one (1) street segment in Kalihi
	4/14/2016		Spatially corrected six (6) street segments in Kalihi
	4/13/2016		Spatially corrected thirty-three (33) street segments in Kalihi
	4/13/2016		Added one (1) street segment in Kalihi
	4/7/2016		Corrected two (2) street ranges in Kalihi
		04/01/16	
	4/1/2016		Added one (1) street segment in Downtown
	4/1/2016		Split one (1) street segment in Downtown
	4/1/2016		Spatially corrected fifteen (15) street segments in Downtown

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## MAPPING LAYERS UPDATED (PART VIII)

*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 GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)			
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
WSP Cell Sectors		04/29/16	
	4/29/2016		Per VZW CRS
	4/28/2016		Per ATT CRS
	4/28/2016		Per VZW CRS
	4/26/2016		Per VZW CRS
	4/25/2016		Per VZW CRS
		04/18/16	
		04/15/16	
	4/14/2016		Per ATT CRS
		04/11/16	
		04/04/16	
		04/01/16	
WSP Cell Towers		04/29/16	
	4/29/2016		Per VZW CRS
	4/28/2016		Per ATT CRS
	4/28/2016		Per VZW CRS
	4/26/2016		Per VZW CRS
	4/25/2016		Per VZW CRS
		04/18/16	
		04/15/16	
	4/14/2016		Per ATT CRS
		04/11/16	
		04/04/16	
		04/01/16	

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## GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVE

### GIS KEY ACTIVITIES/UPDATES

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

Date	Key Activities/Updates
4/29/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
4/29/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
4/29/2016	Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety
4/25/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
4/18/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
4/15/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
4/15/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
4/15/2016	Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety
4/11/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
4/4/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
4/1/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
4/1/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
4/1/2016	Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety

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## 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 April 2016 and has corrected one (1) more Police Beats (152), and is in the process of correcting three (3) additional Police Beat boundaries (154, 156, and 157) according to the HPD written Policies and Procedures and performed routing maintenance on three (3) Police Beats (560, 562, and 570).

### 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.

## MAPFLEX SYSTEM

During the month of April 2016, the MapFlex system performed without any issues and deliverables continued on schedule.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, Intrado, 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 April 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in April 2016
  - a. **Hawaii County** – April 12<sup>th</sup> and April 26<sup>th</sup>
  - b. **Maui County** – April 13<sup>th</sup> and April 27<sup>th</sup>
  - c. **Kauai County** – April 14<sup>th</sup> and April 28<sup>th</sup>
  - d. **Honolulu** – April 1<sup>st</sup>, April 15<sup>th</sup> and April 29<sup>th</sup>

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## MAPFLEX ISSUE

During the Month of March 2016, the Honolulu Police Department identified an issue with the MapFlex responder bar. There was information that was missing in the responder bar, previously displayed.

1. On March 18, 2016, HPD contacted Akimeka, West (formerly known as Intrado), and HT to see if there was any identified issues.
2. Akimeka reviewed the issue and didn't recognize any changes in the GIS data, however prepared an out-of-schedule upload to trigger a system change in case there was data backlogged.
3. A few days later, HPD identified that the Responder Bar in the MapFlex began displaying the correct information again.
4. There were no further issues identified however the MapFlex will continue to be monitored.

## 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 March 25, 2016, and April 19, 2016.

Street Utility Check				
	First Report 06/01/13	3/25/2016	4/19/2016	Improvements/Corrections
Total Number of GIS Records	26,602	29,355	29,392	Increased by 37 records
Errors Identified				
Zero Errors	5,112	16	18	Increased by 2 errors
Low > High Errors	3	0	0	No Change
Mixed Parity Errors	1	0	0	No Change
Changed Parity Errors	105	0	0	No Change
Address Gap Errors	2,629	2	0	Decreased by 2 errors
Address Overlap Errors	423	0	0	No Change
Flipped Link Errors	1,030	590	592	Increased by 2 errors
Total Errors	9,303	608	612	Increased by 4 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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## WIRELESS ANNUAL AUDIT

During the month of February 2016, the wireless annual audit for Verizon was coordinated and completed as indicated in the Wireless Audit Chart. However during the audit process, it was identified that changes which had been sent through the CRS process for all WSPs were possibly not making their way back to the wireless FMCC database (responsible for information provided via the ALI).

1. On February 29, 2016, after completing the review of the Annual Audit for Verizon wireless Akimeka contacted West to discuss the reason why the annual audit synchronization has degraded in the match accuracy.
  - a. Note – The CRS process performed throughout the year for all WSPs deals with routine maintenance performed on the sites/sectors. The Annual Audit is intended to identify any possible gaps in that process and seeks reconciliation in an effort to re-synchronize the databases. If there are no missed CRSs throughout the year and the database match percentage decreases, then there are apparent issues.
2. On March 15, 2016, Akimeka and West held a conference call to discuss the matter. During the conversation it was identified that the changes sent back from Akimeka to West after accuracy validation, are processed into the FMCC. The issue that Akimeka is seeing when the Annual Audit is provided is resulting from a script West put in place in 2013 to output the CRSs into the approved format at that time.
  - a. The issue is that the format has changed over time due to new technology and more hexadecimal numbering of the wireless sectors. In order to accommodate those changes, Akimeka has developed a translation into an applicable format which the PSAPs are able to use. The format that West is providing each Annual Audit and CRS is overriding the changes within the FMCC, therefore give the appearance of not being synchronized in that process but are. This helps to explain why the wireless testing results are accurate, and the PSAPs are not experiencing a large number of discrepancies in the Mapping Systems when matched with the ALI.
3. Akimeka followed up with West on March 30, 2016, to see if West has re-scripted the format.
  - a. West replied that unfortunately it will require system development at West. Melissa Norton of West did mention that the particular system that needs to be changed is currently backlogged with a few large projects. She opened a Product Development Request at West but there is no ETA on the enhancement. In order to speed up the request, she is working to bundle the request with several other State's requests.
4. Akimeka will continue to follow up on the process to ensure the wireless databases are maintained accurately. With the big push by the WSPs for more LTE sites, which are having the impact on the hexadecimal numbering, Akimeka is hopeful that West can resolve this issue. The additional work involved to re-validate information takes a significant effort and allows for discrepancy. The Annual Audit is supposed to be a raw comparison to the condition of the data in both the FMCC and the GIS database provided in the Mapping Systems. Without both in its raw format, the comparison becomes unclear as to the real condition of the FMCC database.
5. Throughout the month of April 2016, Akimeka had been provided several TVWs by the WSPs for testing and most of the information was good for testing but there was an unusually high number of records that were either missing or were incorrect. Virtually all TVWs sent to Akimeka had some variety of discrepancy in them. This was only applicable to Verizon at the time and since the Annual Audit with Verizon had been completed, bringing the databases to 100% match rate, a reason for the mismatch in TVW information was perplexing. It certainly required more investigation into what was occurring.
6. On April 21, 2016, Akimeka was notified of yet another set of TVWs with issues and the WSP and West investigated their end and said everything was matching. Because the Annual Audit was completed, matching West and Akimeka databases, but yet the TVWs produced from the West database were not matching, something was highly unusual.
  - a. Later the same day, Akimeka provided an example of the discrepancy back to West detailing one of the records along a timeline. Information provided in the TVW matched with the record from 2015. Since that time, there were

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several updates, including the Annual Audit. This indicated that the TVWs being generated by West were not accurate and it also was indicating the Annual Audit sent back to West was not be uploaded. This is a major issue.

7. To confirm Akimeka's suspicion that the Annual Audit updates were not being uploaded by West into the FMCC, Akimeka followed up with implementation specialist at West, who the Audit was coordinated with.
  - a. West sent a reply on April 25, 2016, that the audit was not fully completed at West and they were in their final stages before sending changes to the database and on to Verizon. From West "there were a lot of changes that came from the audit which is where you may be seeing the discrepancies. Once Verizon has called in the hot cuts (changes), the data should match the audit sheet you sent".
  - b. This was confirmation that the audit was still not being processed fully by West after 2 months and that the issues with mismatched information in the TVWs were as a result of this.

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### REQUEST FOR 9-1-1 JURISDICTIONAL BOUNDARIES

On March 17, 2016, West had requested information for each of the PSAPs in the State of Hawaii, with the exception of the Honolulu Police Department and Regional Dispatch Center. Akimeka has followed up with West to see if the Honolulu Police Department PSAP was supposed to be included in this request.

1. On March 17, 2016, West requested that each PSAP fill out an attached questionnaire and to provide the PSAP Jurisdictional Boundaries (to include VoIP, Wireless, Text, and Alarms).
2. Akimeka prepared the boundaries of each of the PSAP Jurisdictional Boundaries which included all requested attribution. Given the geography of the Hawaiian Islands, and the operational responses of each PSAP which includes ocean responses, Akimeka included a buffer for each of the PSAP Boundaries that extend into the ocean. This reflects the true nature of the PSAP Jurisdictional Boundary response area and also covers the distance over water which can account for possible Lat/Longs provided during a Text-to-911 call to the PSAP. Since the system is intended to use the location information to determine routing, inclusion of the water area into the PSAP polygons was a more accurate approach.
3. On March 23, 2016, the Akimeka GIS Manager notified West that this information was ready and requested a secure method of transferring the data. Throughout the remainder of March 2016, there was no reply from West.
4. On April 19, 2016, West followed back up with the Akimeka GIS Manager. The West employee was unfamiliar with using an ftp site and was going to touch base with her supervisors to find a more secure manner of transferring the data. Throughout the remainder of April 2016, Akimeka did not hear back.

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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## 4. E9-1-1 DATABASE SYNCHRONIZATION

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

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

The database synchronization effort included comparing Oahu Civilian's 9-1-1 MSAG received from the 911 Database provider, Intrado on April 1, 2016, against the PSAP's 911 GIS Street Centerline data. A total number of **7,766** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on April 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.

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## AUDIT SUMMARY RESULTS – 2016

9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	As of July 1, 2015		As of October 1, 2015		As of January 1, 2016		As of April 1, 2016	
		9-1-1 MSAG Dated 7-01-15		9-1-1 MSAG Dated 10-01-15		9-1-1 MSAG Dated 1-01-16		9-1-1 MSAG Dated 4-01-16	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		7,597		7,749		7,752		7,766	
Less: 9-1-1 MSAG Exception Records	(1)	40	0.5%	35	0.5%	30	0.4%	33	0.4%
Net 9-1-1 MSAG Records Eligible for Comparison		7,557		7,714		7,722		7,733	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required)		7,547	99.9%	7,694	99.7%	7,710	99.8%	7,719	99.8%
9-1-1 MSAG -- GIS No Match - Minor Correction Required	(2)	6	0.1%	16	0.2%	11	0.1%	13	0.2%
9-1-1 MSAG Record With No Matching GIS Record	(3)	4	0.1%	4	0.1%	1	0.0%	1	0.0%
Total 9-1-1 MSAG Records No Match		10	0.1%	20	0.3%	12	0.2%	14	0.2%

**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 January 2016 with a 99.8% Match Rate to a 99.8% Match Rate as of April 2016

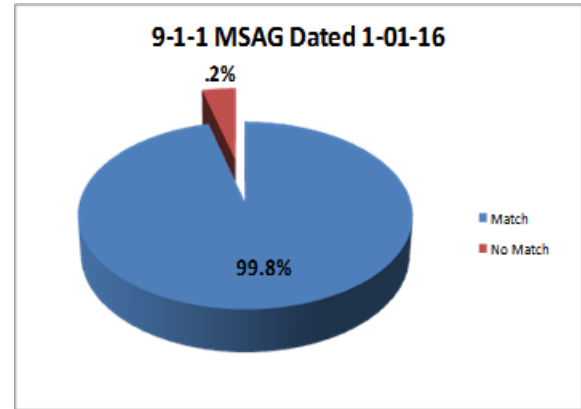
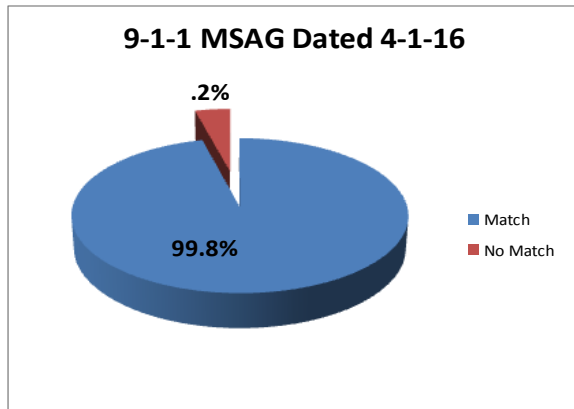
### NOTES:

- 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.

# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 2016

## AUDIT SUMMARY RESULTS – APRIL 1, 2016 MSAG VS. JANUARY 1, 2016 MSAG



**Oahu Civilian’s level of accuracy or 9-1-1 Match percentage remained consistent with a 99.8% as of April 1, 2016 compared to 99.8% as of January 1, 2016.**

**The majority of the remaining MSAG and GIS discrepancies are in the Honolulu MSAG Community.**

- ❖ As agreed between HPD PMT and Akimeka, Akimeka would initially focus on the existing MSAG 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 new MSAG 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” increased (11 to 13) from January 2016 to April 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 E9-1-1 Status Report

April 1, 2016 - April 30, 2016

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## AUDIT SUMMARY RESULTS – APRIL 1, 2016 MSAG VS. JANUARY 1, 2016 MSAG CONTIUNED

- ❖ “MSAG Record with No GIS Record” remained the same (1 to 1) from January 2016 to April 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. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the July 2016 re-analysis.
- ❖ “GIS MSAG Records with No Matching E9-1-1 MSAG Record” increased (2 to 4) from January 2016 to April 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. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the July 2016 re-analysis.
- ❖ “GIS –Minor Corrections” decreased (14 to 8) from January 2016 to April 2016. Low and high address ranges, street suffixes, and MSAG Community were adjusted in the GIS database to correspond with the MSAG record. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the July 2016 re-analysis.
- ❖ 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.

## Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 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:

OAHU CIVILIAN	Invalid MSAG Records			
	9-1-1 MSAG Dated 01-01-16		9-1-1 MSAG Dated 04-01-16	
	Number of Records	% of Total Invalid MSAG Records	Number of Records	% of Total Invalid MSAG Records
ESN 199	122	1.5%	114	1.4%

These invalid MSAG records represent **1.4%** of the Total MSAG records for the City & County of Honolulu as of the April 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.

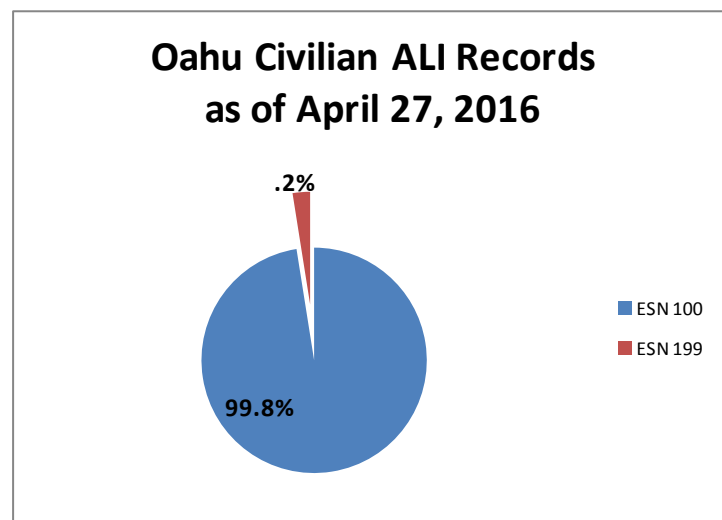
# Oahu Civilian E9-1-1 Status Report

April 1, 2016 - April 30, 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 April 1, 2016, there are **752** ALI records with an assigned ESN of 199, representing **.2%** 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 **5.3%** (794 to 752) from January 2016 to April 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".