

# Oahu Civilian E9-1-1

## Status Report

*May 1, 2018 – May 31, 2018*

# Oahu Civilian E9-1-1 Status Report

May 1, 2018 - May 31, 2018

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## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME CIVILIAN PSAPS – MAY 2018

Source: West Safety Services Viper system

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

9-1-1 Primary PSAP Call Volume																	
Honolulu City & County PSAPs		Wireline		Wireless				VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls	
2018	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
May	88,845	17,520	19.72%	68,055	76.60%	47.71%	28.89%	3,234	3.64%	36	0.04%	1,988	2.24%	14,093	15.86%	538	0.61%

### 9-1-1 CALL VOLUME CIVILIAN PSAPS – CALENDAR YEAR 2018

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	
2018	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	90,131	18,612	20.65%	68,004	75.45%	46.10%	29.35%	3,380	3.75%	135	0.15%	1,940	2.15%	15,491	17.19%	528	0.59%
FEB	79,937	16,707	20.90%	60,217	75.33%	45.46%	29.87%	2,998	3.75%	16	0.02%	1,738	2.17%	11,746	14.69%	520	0.65%
MAR	83,942	17,359	20.68%	63,359	75.48%	47.28%	28.20%	3,207	3.82%	17	0.02%	1,671	1.99%	11,777	14.03%	459	0.55%
APR	87,434	17,600	20.13%	66,546	76.11%	47.91%	28.20%	3,235	3.70%	52	0.06%	1,840	2.10%	13,911	15.91%	542	0.62%
MAY	88,845	17,520	19.72%	68,055	76.60%	47.71%	28.89%	3,234	3.64%	36	0.04%	1,988	2.24%	14,093	15.86%	538	0.61%
JUNE																	
JULY																	
AUG																	
SEPT																	
OCT																	
NOV																	
DEC																	
YTD	430,289	87,798		326,181				16,054		256		9,177		67,018		2,587	
MON AVG	86,058	17,560	20.42%	65,236	75.79%	46.89%	28.90%	3,211	3.73%	51	0.06%	1,835	2.13%	13,404	15.54%	517	0.60%

NOTE:

- **911 Calls with No ALI for May 2018 = 0.04% - Statewide average for 2017 = 0.08%**
- **Total call volumes does not include Administrative Calls. Administrative calls = Calls originating on Administrative lines that required 911 service.**
- **Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Dropped Calls are hang ups after transfers.**
- **Abandoned Calls are not included in the Wireline and Wireless total counts respectively.**
- **All VoIP (Voice over Internet Protocol) types of 911 calls are combined in the Call Volume statistic.**

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## 9-1-1 CALL VOLUME BY AGENCY – MAY 2018

2018	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
May	76,917	86.57%	19,992	41,686	1,146	14,093	2,734	3.08%	89	41

2018	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
May	8,613	9.69%	713	84	43	0.05%	40	5

## 9-1-1 CALL VOLUME BY AGENCY – CALENDAR YEAR 2018

2018	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	77,849	86.37%	19,571	41,680	1,107	15,491	2,881	3.20%	87	67	8,837	9.80%	710	125	36	0.04%	36	16
FEB	68,884	86.17%	18,037	38,149	952	11,746	2,245	2.81%	81	38	8,251	10.32%	669	76	37	0.05%	36	6
MAR	72,926	86.88%	19,213	41,054	882	11,777	2,556	3.04%	92	32	7,963	9.49%	661	164	38	0.05%	36	3
APR	75,908	86.82%	19,865	41,279	853	13,911	2,358	2.70%	115	97	8,583	9.82%	831	113	43	0.05%	41	6
MAY	76,917	86.57%	19,992	41,686	1,146	14,093	2,734	3.08%	89	41	8,613	9.69%	713	84	43	0.05%	40	5
JUNE																		
JULY																		
AUG																		
SEPT																		
OCT																		
NOV																		
DEC																		
YTD	372,484		96,678	203,848	4,940	67,018	12,774		464	275	42,247		3,584	562	197		189	36
MON AVG	74,497	86.56%	19,336	40,770	988	13,404	2,555	2.97%	93	55	8,449	9.82%	717	112	39	0.05%	38	7

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**PSAP OPERATION NOTES:**

- Total call volumes does not include Administrative Calls. Administrative calls = Calls originating on Administrative lines that required 911 service.
- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Dropped Calls are hang ups after transfers.
- Abandoned Calls **are** 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.

**FOR YOUR INFORMATION**

FYI ..... For Your Information						
PSAP Operations						
Statewide 911 Call Volumes						
PSAP	2017		2016		2015	
Oahu Civilian	1,022,818	72.16%	1,009,059	71.93%	1,019,402	70.94%
RDC Pearl Harbor	27,916	1.97%	N/A	N/A	N/A	N/A
Hawaii County	193,166	13.63%	205,412	14.64%	217,768	15.15%
Maui County	123,685	8.73%	137,333	9.80%	142,952	9.95%
Kauai County	49,902	3.52%	50,955	3.63%	56,874	3.96%
Total	1,417,487	100.00%	1,402,759	100.00%	1,436,997	100.00%
<b>2016 &amp; 2015 Statewide average does not include Military 911 calls.</b>						

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**TEXT TO 911 OAHU CIVILIAN PSAPS – CURRENT MONTH – MAY 2018**

**NOTE:**

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

TEXT TO 911 Oahu Civilian PSAPs 2018						
Month	Total	HPD	HFD	EMS	OS	911 (handled)
January	145	115	3	0	0	27
February	144	131	1	2	0	10
March	170	144	4	5	0	17
April	155	127	2	11	0	15
May	136	122	4	0	0	10
June						
July						
August						
September						
October						
November						
December						
YTD	750	639	14	18	0	79
Monthly Avg.	150.0	127.8	2.8	3.6	0.0	15.8

**NOTE:**

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

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911 WIRELESS OAHU CIVILIAN PSAP TESTING – MAY 2018

OAHU CIVILIAN - MAY 2018						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:

NOTES:

- There were no (0) scheduled Wireless 911 Test for the Oahu Civilian PSAP in May 2018.
- Verizon Wireless is currently migrating their Wireless network database from West to ComTech.

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### 2. MSAG (MASTER STREET ADDRESS GUIDE)

#### OAHU CIVILIAN MSAG TRANSACTIONS CURRENT MONTH/YEAR – MAY 2018

OAHU CIVILIAN	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer Addresses Affected
2018		MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	
JANUARY	33	14	19	0	0	0	0	0	1,198
FEBRUARY	10	6	3	1	0	0	0	0	982
MARCH	168	9	159	0	0	27	0	0	258
APRIL	15	3	12	0	0	108	0	0	110
MAY	92	10	82	0	0	393	0	0	276
JUNE									
JULY									
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
<b>TOTAL YTD</b>	<b>318</b>	<b>42</b>	<b>275</b>	<b>1</b>	<b>0</b>				<b>2,824</b>
<b>AVG PER MONTH</b>	<b>64</b>	<b>8</b>	<b>55</b>	<b>0</b>	<b>0</b>				<b>565</b>

#### 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.

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## OAHU CIVILIAN MSAG CURRENT MONTH NOTES:

A total of ninety-two (92) MSAG transactions were processed in 9-1-1 Net during the current reporting month. Ten (10) 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 276 customer ANI/ALI (telephone/address) records updated as a direct result.

495 Dispatchable Location transactions were submitted and 26 were processed by West during the current month.

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

82 Telephone Number Change Request (TN CR) transactions were processed and were corrected in 9-1-1 Net during the current month.

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

- **There are three hundred ninety-three (393) Open TN CR Transactions as of May 31, 2018**
- **Refer to chart in the next section “TNCR Current Status”**
  
- **There are no Open ALI-DRs as of May 31, 2018**
- **There is no Open VoIP DRs as of May 31, 2018**

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### TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – MAY, 2018

**NOTE:**

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

<b>PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)</b>				
<b>PSAP</b>	<b>TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA</b>	<b>OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)</b>	<b>OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)</b>	<b>TOTAL UNOPENED TNCR RECORDS</b>
<b>OAHU CIVILIAN</b>	<b>392</b>	<b>1</b>	<b>0</b>	<b>393</b>

<b>STATUS</b>
<b>TOTAL TNCRs SUBMITTED</b> - The total number of TNCR requests for modification that have been submitted in 9-1-1
<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 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 – MAY 2018

#### 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.

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. The Windward Mall will be the pilot location starting in March 2018.

There were 495 transactions submitted and 26 processed in May 2018.

Dispatchable Location			
2018	Common Name Place MSAG Address	TNCR*	Transactions
Quarter 2		Transactions Submitted	Processed**
Quarter 1 Carryover		160	150
April	Windward Mall, 460056 Kamehameha Hwy, Kaneohe	108	10
May	Windward Mall, 460056 Kamehameha Hwy, Kaneohe	418	26
	Adon Plaza, 450773 Kamehameha Hwy, Kaneohe	11	0
	Kaneohe Bay Shopping Center, 460047 Kamehameha Hwy, Kaneohe	66	0
June			
Quarter 2 Total		603	36
YTD Total		763	186

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**SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT – MAY 2018**

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

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

<b>*Spectrum (Charter) 9-1-1 VoIP Database Verification Project</b>					
<b>PSAP</b>	<b>TOTAL RECORDS SUBMITTED BY SPECTRUM (A)</b>	<b>TOTAL RECORDS MATCHING &amp; VERIFIED WITH 911 DATABASES (B)</b>	<b>TOTAL RECORDS NOT MATCHING</b>	<b>NON MATCHING RECORDS CORRECTED BY AKIMEKA (C)</b>	<b>PERCENT COMPLETED</b>
<b>HAWAII County</b>	<b>22,044</b>	<b>21,638 (98%)</b>	<b>406</b>	<b>406</b>	<b>100.00%</b>
<b>KAUAI County</b>	<b>8,936</b>	<b>8,695 (97%)</b>	<b>241</b>	<b>241</b>	<b>100.00%</b>
<b>MAUI County</b>	<b>18,256</b>	<b>17,517 (96%)</b>	<b>739</b>	<b>739</b>	<b>100.00%</b>
<b>OAHU Civilian</b>	<b>87,414</b>	<b>85,329 (98%)</b>	<b>2,085</b>	<b>880</b>	<b>42.21%</b>
<b>OAHU Military</b>	<b>3,663</b>	<b>710 (19%)</b>	<b>2,953</b>	<b>2,863</b>	<b>96.95%</b>
<b>TOTAL</b>	<b>140,313</b>	<b>**133,889</b>	<b>6,424</b>	<b>5,129</b>	<b>87.83%</b>

\* Spectrum VoIP Database received on June 21st, 2017

\*\* Akimeka provided VoIP Records with Latitude/Longitude coordinates

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

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### BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT – MAY 2018

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

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

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

<b>*Bandwidth 9-1-1 VoIP Database Verification Project</b>					
<b>PSAP</b>	<b>TOTAL RECORDS SUBMITTED BY BANDWIDTH (A)</b>	<b>TOTAL RECORDS MATCHING &amp; VERIFIED WITH 911 DATABASES (B)</b>	<b>TOTAL RECORDS NOT MATCHING</b>	<b>NON MATCHING RECORDS CORRECTED BY AKIMEKA (C)</b>	<b>PERCENT COMPLETED</b>
<b>HAWAII County</b>	<b>501</b>	<b>496</b>	<b>5</b>	<b>5</b>	<b>100.00%</b>
<b>KAUAI County</b>	<b>305</b>	<b>303</b>	<b>2</b>	<b>2</b>	<b>100.00%</b>
<b>MAUI County</b>	<b>765</b>	<b>760</b>	<b>5</b>	<b>5</b>	<b>100.00%</b>
<b>OAHU Civilian</b>	<b>3,610</b>	<b>3,596</b>	<b>14</b>	<b>14</b>	<b>100.00%</b>
<b>OAHU Military</b>	<b>53</b>	<b>50</b>	<b>3</b>	<b>3</b>	<b>100.00%</b>
<b>TOTAL</b>	<b>5,234</b>	<b>5,205</b>	<b>29</b>	<b>29</b>	<b>100.0%</b>

### \*Bandwidth VoIP Database received on April 5th, 2018

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

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## 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – MAY 2018

### 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 PSAPS				
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks	
	Date Created/Edits Performed			
<b>CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH &amp; RESPONSE (Listed Alphabetically)</b>				
Address Points		<b>05/25/18</b>		
	5/24/2018		Added thirty-eight (38) Address Points at Makakiloa Elementary School in Makakilo.	
	5/24/2018		Spatially corrected one (1) Address Point in Makakilo.	
	5/24/2018		Added Location Name to fifty-four (54) Address Points in Makakilo.	
	5/23/2018		Added one (1) Address Point in Kunia.	
	5/22/2018		Added eighty-two (82) address points at Hoopili in Kapolei.	
	5/21/2018		Added seventy-six (76) Address Points at Waipahu Intermediate School in Waipahu.	
	5/21/2018		Spatially corrected one (1) Address Point in Waipahu.	
	5/21/2018		Spatially corrected one (1) Address Point in Waianae.	
	5/21/2018		Added sixty-seven (67) Address Points at Waianae Intermediate School in Waianae.	
	5/18/2018		Corrected TMK to two (2) Address Points in Kahaluu.	
	5/18/2018		Spatially corrected two (2) Address Points in Kahaluu.	
	5/18/2018		Added Routing ID to one hundred sixty six (166) Address Points in Mililani.	
	5/17/2018		Added Routing ID to two-hundred eighty (280) Address Points in Mililani.	
	5/17/2018		Added five (5) Address Points in Kahaluu.	
	5/17/2018		Spatially corrected twenty five (25) Address Points in Kahaluu.	
	5/15/2018		Added fifty-five (55) Address Points in Waipahu for Kaleiopuu Elementary School.	
	5/15/2018		Corrected spatial to ten (10) Address Points in Ewa Beach.	
	5/14/2018		Added three (3) new Address Points in Ewa Beach.	
	5/14/2018		Corrected spatial to fifteen (15) Address Points in Ewa Beach.	
			<b>05/11/18</b>	
	5/10/2018			Added one (1) new Address Point in Ewa Beach.
	5/10/2018			Corrected house numbers for two (2) Address Points in Ewa Beach.
	5/10/2018			Corrected spatial to ten (10) Address Points in Ewa Beach.
	5/8/2018			Corrected address to two (2) Address Points in Waianae.
	5/4/2018			Corrected street name to one (1) Address Point in Ewa Beach.
5/4/2018			Added one (1) new Address Point in Ewa Beach.	
5/4/2018			Corrected spatial to thirty-seven (37) Address Points in Ewa Beach.	

# Oahu Civilian 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.*

OAHU CIVILIAN PSAPS			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/ Edits Performed		
<b>CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH &amp; RESPONSE (Listed Alphabetically)</b>			
Airports			
AMR Response Areas			
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			
Incident Response Areas			
Lodging			
Major Roads			

# Oahu Civilian E9-1-1 Status Report

May 1, 2018 - May 31, 2018

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 PSAPS			
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks
	Date Created/Edits Performed		
<b>CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH &amp; RESPONSE (Listed Alphabetically)</b>			
Medic Beats			
Medic Districts			
Medic Response Areas			
Medic Stations			
Medical Facilities			
Milepost Markers			
Military Response Areas			
MSAG Communities			
Net Junctions			
Ocean Rescue Boundaries			
Ocean Safety			
Parcels			
Parks			
Parks Polygon			
Points of Interest		<b>05/25/18</b>	
	5/21/2018		Spatially corrected one (1) Point Of Interest in Waianae.
	5/18/2018		Spatially corrected twenty-two (22) Points Of Interests in Kahaluu.
	5/17/2018		Spatially corrected thirteen (13) Points Of Interests in Kahaluu.
		<b>05/11/18</b>	
	5/7/2018		Corrected spatial to thirty-four (34) Points of Interest in Kaneohe.
Police Beats			
Police Districts			
Police Response Areas			
Police Stations			
Post Offices			
Schools			
Street Centerlines	5/29/2018		Corrected range to one (1) segment in Kapolei.
	5/29/2018		Corrected parity to two (2) segments in Kapolei.
	5/29/2018		Corrected street type to thirteen (13) segments in Mililani.
		<b>05/25/18</b>	
	5/22/2018		Corrected owner for three (3) segments in Kahala.
	5/21/2018		Split five (5) segments in Waipahu.

# Oahu Civilian E9-1-1 Status Report

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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 PSAPS				
Type of Layer	Akimeka GIS Server	Date GIS Delivered	Other/Remarks	
	Date Created/ Edits Performed			
<b>CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH &amp; RESPONSE (Listed Alphabetically)</b>				
Street Centerlines	5/21/2018		Added one (1) new segment in Waipahu.	
	5/21/2018		Added twelve (12) ingresses in Waipahu.	
	5/18/2018		Corrected range to two (2) segments in Kahaluu.	
	5/18/2018		Corrected range to two (2) segments in Mililani.	
	5/17/2018		Corrected range to eight (8) segments in Fort Shafter.	
	5/14/2018		Corrected spatial to one (1) segment in Honolulu.	
	5/14/2018		Corrected range to one (1) segment in Kapolei.	
		<b>05/11/18</b>		
	5/7/2018		Corrected range to two (2) segments in Kaneohe.	
5/3/2018		Added three (3) new segments in Kapolei.		
Subdivisions				
Tow Jurisdictions				
Tsunami Evacuation Zones				
Tsunami Heights				
Waste Water Plants				
WSP Cell Sectors	5/31/2018		Per Verizon CRS	
		<b>05/25/18</b>		
	5/18/2018		Per ATT CRS	
	5/17/2018		Per ATT CRS	
	5/15/2018		Per Sprint CRS	
		<b>05/11/18</b>		
	5/10/2018		Per Sprint CRS	
	5/9/2018		Per ATT CRS	
5/2/2018		Per ATT CRS		
WSP Cell Towers	5/31/2018		Per Verizon CRS	
		<b>05/25/18</b>		
	5/18/2018		Per ATT CRS	
	5/17/2018		Per ATT CRS	
	5/15/2018		Per Sprint CRS	
		<b>05/11/18</b>		
	5/10/2018		Per Sprint CRS	
	5/9/2018		Per ATT CRS	
5/2/2018		Per ATT CRS		

# Oahu Civilian E9-1-1 Status Report

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## GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVES

### GIS KEY ACTIVITIES/UPDATES

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

Date	Key Activities/Updates
5/11/2018	Delivered Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD.
5/11/2018	Delivered Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD.
5/11/2018	Delivered. 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.
5/11/2018	Delivered Address Points, Street Centerlines, Common Places, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, AMR Response Areas to AMR for TriTech CAD
5/25/2018	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
5/25/2018	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
5/25/2018	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD

## Oahu Civilian E9-1-1 Status Report

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### MAPFLEX SYSTEM

During the month of May 2018, the MapFlex system received updates manually as a result of MapFlex having several issues pertaining to the automated upload processes.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, West, was implemented across the State of Hawaii, in the below narrative there is some information pertaining to all of the Hawaiian Islands. For a record of historical information regarding the MapFlex system, please see MSRs during the 2015 through 2017 years.

1. Akimeka delivered GIS data to the MapFlex system on the following dates in May 2018
  - a. **Hawaii County** – May 8<sup>th</sup>, 2018 and May 22<sup>th</sup>, 2018
  - b. **Maui County** – May 9<sup>th</sup>, 2018 and May 23<sup>rd</sup>, 2018
  - c. **Kauai County** – May 10<sup>th</sup>, 2018, and May 24<sup>th</sup>, 2018
  - d. **Honolulu** – May 11<sup>th</sup>, 2018, and May 25<sup>th</sup>, 2018

### MAPFLEX ISSUES

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

DATE	ISSUE	DESCRIPTION	STATUS
8/2016	Wireless Addresses	MapFlex system began displaying wireless information incorrectly. MapFlex system is doing a reverse query for additional information in the GIS and this is overriding the ALI information with the closest address in the GIS.	Partially Resolved (Nov 2016) The overriding ALI with updated Lat/Longs from the GIS is still occurring
11/2016	Phase I Display	Wireless Phase I calls plotting at centroid of coverage area and landing in the ocean. After installation of new MapFlex version to correct other issues, the configurations for Wireless Phase I were not set up properly by West, in which the mapping did not point to the correct information in MapFlex.	Partially Resolved (Dec 2016) According to PSAPs, it's not fully resolved. The icon of the tower still doesn't plot for Phase I.
11/2016	Wireless Confidence	Sprint calls coming across with unusually high confidence. Coordination is taking place with Sprint and West. West provides the PDE services for Sprint.	Pending
3/22/2017	ArcGIS Address Locator	The locators in MapFlex have a configurations which does not include ESNs. A reported issue has occurred with the Sheraton in Waikiki. The address locator does not differentiate between the Sheraton hotel and the surf break and plots on the surf break. The bigger issue is that this same issue will occur with complexes that have same primary address.	Pending A new SP 5.4 update by West is aimed to correct this issue.

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5/17/2017	VoIP Calls Plotting Incorrectly	Recognized in late April and early May 2017, the PSAPs have been receiving several VoIP calls which are plotting in the incorrect locations. After further research it was determined that it is because MapFlex is configured to plot the received Lat/Long. The problem is that these are not always maintained properly and that ideally the system should first choose to match with the GIS data based on the provided address. During the September 20, 2017 PSAP conference call, HT relayed there was confirmation that the Time Warner records were in fact passing through the West FMCC.	Partially Resolved – the Lat/Longs are no longer being plotted in MapFlex due to a software release.
5/17/2017	Landline Calls Producing X/Y on calls	It was determined that for normal landline calls, the X/Y coordinates are being sent. The PSAPs have asked where these are being generated and why would they be sent for landline calls.	West is looking into this (May - June 2017)
5/23/2018	Phase I & Phase II coverage area	Phase I calls received at the Kihei Maui PSAP are displaying a circular circumference area rather than a cone shaped directional coverage. Phase II calls are not plotting the COF meters correctly.	Pending
5/24/2018	Incorrect Addresses	MapFlex system began displaying incorrect addresses in the bubble display when an Address Point is right mouse clicked to see information by the PSAPs. However, the address in the data is still correct as shown on the left hand side.	Pending

## Oahu Civilian E9-1-1 Status Report

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### STREET UTILITY CHECK

This is an ongoing project to correct the errors identified. A comparison of the raw CAD generated report from the Street Check Utility was performed between the Street Centerline GIS data on May 28, 2018 and April 30, 2018.

Street Utility Check				
	First Report 06/01/13	4/30/2018	5/28/2018	Improvements/Corrections
Total Number of GIS Records	26,602	31,144	31,166	Increased by 8 records
Errors Identified				
Zero Errors	5,112	2	0	Decreased by 2 errors
Low > High Errors	3	0	0	No change
Mixed Parity Errors	1	0	0	No change
Changed Parity Errors	105	6	5	Decreased by 1 error
Address Gap Errors	2,629	15	9	Decreased by 6 errors
Address Overlap Errors	423	5	10	Increased by 5 errors
Flipped Link Errors	1,030	6	9	Increased by 3 errors
<b>Total Errors</b>	<b>9,303</b>	<b>34</b>	<b>33</b>	Decreased by 1 error

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.

As a result of the GIS efforts within the military jurisdictional areas covered primarily by the RDC, the GIS data is undergoing several changes within the bases which will cause a fluctuation in the Street Check results, which is to be expected. Any discrepancies that are identified will be corrected in the following GIS deliverable.

### TRITECH CAD ADDRESS POINT PROJECT

During the month of February 2018 after several months of discussion and testing, the Address Points were loaded into TriTech and moved into the HFD/EMS shared CAD. Since that time, HFD, EMS, and Akimeka have been working closely together to identify and update subaddress location for various complexes around Oahu. Several hundred new address points have been added to the GIS as a result of this collaboration.

During the month of March 2018, there were only a couple minor updates communicated and one issue identified with addresses within close proximity to the H1 freeway.

1. Akimeka ran an analysis and added routing information into more than 27,000 Address Points to resolve the geotolerance within TriTech.
2. During the month of April 2018, it was identified that the issue related to the H1 Fwy still remain and after investigation it was determined that a component within the SQL server for TriTech requires a potential update to allow for routing to be overridden based off of the Routing ID information.
  - a. A trouble ticket has been opened with TriTech who is further investigating the potential correction, outside of the GIS data.
3. During the month of May 2018, there were no further developments.

# Oahu Civilian E9-1-1 Status Report

May 1, 2018 - May 31, 2018

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## SPEED LIMIT UPDATES

Beginning in April 2017, and now that the Street Centerline data has achieved not only an above 98% synchronization rating but also a high degree of accuracy in the spatial accuracy, a new project to correct speed limits has begun. The project is beginning in Waimanalo and continuing in a counter-clockwise patten around the island of Oahu. The initial focus is on Highways, Freeways, and other major roads, but also not limited to additional corrections, especially those which are immediately identified to positively impact vehicle routing, etc.

All updates are shared directly with the PSAPs and the agency most affected (positively) is HFD since they actively use vehicle routing and this will assist in better CAD unit recommendations. During each GIS deliverable, a list of updates are being provided.

1. During the 2017 year, from April 2017 to December 2017, more than 4,200 street segments were updated to reflect posted speed limit restrictions from Waimanalo to Nanakuli.
2. During January 2018, 1,187 segments were updated in Maili, Nanakuli, and Kapolei.
3. Throughout the month of February 2018, 2,025 speed limits were updated in Ewa Beach, Makakilo, and Iroquois.
4. During March 2018, 3,743 street segments were updated across Makakilo, Kunia, Iroquois, Pearl Harbor, Waipahu, Wahiawa, Waialua, and Mililani.
5. During the month of April 2018, Akimeka held on the speed limit updates until HFD has had a chance to test out the TriTech and to ensure the routing is correct (see TriTech Address Points Project narrative above for further information on routing items).
6. During the month of May 2018, Akimeka continued the hold on the speed limit updates until HFD has had a chance to test out the TriTech and to ensure routing is correct (see TriTech Address Points Project narrative above for further information on routing items).

## HONOLULU EMS RESPONSE AREA

During the month of December 2017, EMS requested a high resolution map of the Honolulu Response Area which will likely be divided into 5 separate response areas to better support the EMS operations and ambulance response times.

1. With HPD's approval, Akimeka prepared a map of the requested area and provided to EMS on December 12, 2017.
2. Considering the additional response areas will certainly require the creation of additional ESZ/ESNs; HPD, EMS, and Akimeka will be coordinating so that the project can be mapped out on a timeline so that the changes can take place while maintaining an above 99% synchronization level between GIS, MSAG, and ALI.
3. An operational consideration has already begun a discussion, in that the military ESNs will likely be reallocated to a new numbering so that both civilian and military responses will have enough ESNs to support their individual operations.
4. During the first half of 2018, there will be further discussion on the creation of the new Response Areas, allocation of military ESNs, and create of new ESZs/ESNs.

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## AMR-H

The American Medical Response Hawaii (AMR-H) Project is a joint venture by the Honolulu Emergency Services Department (HESD) to provide accurate address and location information to its other public safety agencies. This project is to ensure AMR-H is utilizing the same address and location information as the other HESD public safety agencies, and to ensure compliance with National 9-1-1 directives such as the FCC Docket 15-9 regarding location accuracy. The intent is to provide the same accurate location information to all the HESD public safety response agencies to help reduce response times to the 9-1-1 caller.

### NOTE:

This work is performed under a separate contract.

## AMERICAN MEDICAL RESPONSE (AMR) HAWAII PROJECT

Since the start of the GIS deliverable schedule with AMR, there have been no reported issues or concerns. In order to open up discussion on any operational improvements via the GIS data, or to identify any updates that can be made, AMR and Akimeka held a brief conference call on December 5, 2017.

1. During the discussion there was overwhelming agreement that the data provided by Akimeka is working great for the dispatchers and first responders at AMR.
2. There were some areas that were discussed where searching for certain addresses will prompt a list of invalid addresses.
  - a. Through the discussion it was identified that the CAD system is aggregating various data sources since they are dispatching throughout the State. The data that Akimeka provides for the island of Oahu is working great, however since the neighbor islands are using various sources of data in different formats, the accuracy of that data is greatly in question and is likely not fully supportive of the search requirements in the CAD.
3. A final topic of discussion was on training for the AMR dispatcher. Joe from AMR who was on the call, took this as an action item to prepare training material for searching criteria, especially intersections. Akimeka volunteered that they can make themselves available to collaborate on the training material if needed.
4. There are no follow up calls scheduled at this time, however Akimeka informed that any issues or improvements identified will be looked at immediately and to send the requests as they are identified.

## Oahu Civilian E9-1-1 Status Report

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### 4. E9-1-1 OAHU CIVILIAN 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 – July 2018

AUDIT SUMMARY RESULTS – 2018 - 2017 -- TBA

AUDIT SUMMARY RESULTS – JULY 1, 2018 MSAG VS. APRIL 1, 2018 MSAG -- TBA

AUDIT SUMMARY RESULTS - JULY 1, 2018 MSAG VS. APRIL 1, 2017 MSAG CONTINUED

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

AUTOMATIC LOCATION IDENTIFICATION (ALI) DATABASE DISCREPANCIES -- TBA