Oahu Civilian E9-1-1

Status Report

December 1, 2016 - December 31, 2016



December 1, 2016 - December 31, 2016

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1. PSAP OPERATIONS

9-1-1 CALL VOLUME - DECEMBER 2016

(Source: West Safety Services Viper system

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

	9-1-1 Primary PSAP Call Volume																
Honolulu City & County PSAPs		Wire			eless)IP	Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls			
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	Wireless	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned		No. of Other Calls	% of Total Calls
December	85,930	18,527	21.56%	63,528	73.93%	51.98%	21.95%	3,815	4.44%	60	0.07%	2,151	2.50%	11,830	13.77%	639	0.74%

9-1-1 CALL VOLUME - CALENDAR YEAR 2016

	9-1-1 Primary PSAP Call Volume																
	u 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	19,386	22.53%	63,498	73.80%	50.08%	23.72%	3,097	3.60%	60	0.07%	1,482	1.72%	13,099	15.22%	642	0.75%
APR	85,009	19,510	22.95%	62,431	73.44%	49.70%	23.74%	3,026	3.56%	42	0.05%	2,332	2.74%	11,895	13.99%	635	0.75%
MAY	86,950	19,555	22.49%	64,108	73.73%	50.05%	23.68%	3,235	3.72%	52	0.06%	2,003	2.30%	12,015	13.82%	838	0.96%
JUNE	80,312	18,255	22.73%	58,821	73.24%	48.33%	24.91%	3,180	3.96%	56	0.07%	1,981	2.47%	11,411	14.21%	776	0.97%
JULY	86,586	19,231	22.21%	64,108	74.04%	49.47%	24.57%	3,186	3.68%	61	0.07%	2,281	2.63%	11,999	13.86%	512	0.59%
AUG	85,574	18,964	22.16%	63,410	74.10%	51.22%	22.88%	3,166	3.70%	34	0.04%	2,000	2.34%	11,786	13.77%	671	0.78%
SEPT	79,098	17,884	22.61%	58,255	73.65%	51.40%	22.25%	2,935	3.71%	24	0.03%	1,928	2.44%	10,284	13.00%	669	0.85%
ост	83,447	18,108	21.70%	62,151	74.48%	52.56%	21.92%	3,146	3.77%	42	0.05%	2,581	3.09%	11,448	13.72%	662	0.79%
NOV	79,900	17,538	21.95%	59,022	73.87%	53.40%	20.47%	3,268	4.09%	72	0.09%	1,879	2.35%	11,143	13.95%	585	0.73%
DEC	85,930	18,527	21.56%	63,528	73.93%	51.98%	21.95%	3,815	4.44%	60	0.07%	2,151	2.50%	11,830	13.77%	639	0.74%
YTD	1,009,059	226,157		743,841				38,456		605		24,761		141,431		9,489	
MON AVG	84,088	18,846	22.41%	61,987	73.71%	50.87%	22.85%	3,205	3.81%	50	0.06%	2,063	2.45%	11,786	14.01%	791	0.93%

NOTE:

• *Calls with no Ali 0.07% - Statewide average = 0.15% Year 2016



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

		9-1-1 Call Volume by Agency													
2016		Hor	olulu Poli	ce Departn		Honolulu Fire Department									
2010	No. of Total Calls Received	% of Total Calls	Number of Emergency Calls	Number of Non Emergency Calls	Admin	Number of Dropped Calls	No. of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls					
December	74,223	86.38%	18,886	42,367	1,140	11,830	2,221	2.58%	87	47					

		9-1-1 Call Volume by Agency											
2016	Е	mergency M	ledical Servic	es	Ocean Safety								
	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Dropped Calls					
December	8,788	10.23%	871	130	59	0.07%	53	8					

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

							9	9-1-1 Ca	II Volu	me by A	gency							
2016		Honol	ulu Polic	ce Depar	tment		Honol	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	75,195	86.48%	20,540	41,427	1,213	12,015	2,655	3.05%	55	0	8,204	9.44%	682	107	58	0.07%	53	11
JUNE	69,658	86.73%	18,803	38,227	1,217	11,411	1,957	2.44%	58	0	7,851	9.78%	647	109	70	0.09%	59	8
JULY	74,558	86.11%	20,966	40,311	1,282	11,999	2,750	3.18%	93	0	8,693	10.04%	837	116	73	0.08%	69	19
AUG	74,042	86.52%	41,441	19,624	1,191	11,786	2,535	2.96%	67	0	8,284	9.68%	701	115	42	0.05%	41	1
SEPT	68,803	86.98%	18,589	38,759	1,171	10,284	1,783	2.25%	62	0	7,792	9.85%	645	215	51	0.06%	50	2
ост	71,700	85.92%	19,437	39,569	1,246	11,448	2,385	2.86%	74	0	8,652	10.37%	1,214	90	48	0.06%	47	0
NOV	68,572	85.82%	17,756	38,623	1,050	11,143	2,755	3.45%	76	0	7,941	9.94%	709	110	47	0.06%	44	11
DEC	74,223	86.38%	18,886	42,367	1,140	11,830	2,221	2.58%	87	47	8,788	10.23%	871	130	59	0.07%	53	8
YTD	871,720		253,556	462,389	14,344	141,431	28,990		992	47	98,150		8,768	1,509	710		657	89
MON AVG	72,643	86.39%	21,130	38,532	1,195	11,786	2,416	2.87%	83	4	8,179	9.74%	731	126	59	0.07%	55	7



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PSAP OPERATION NOTES:

- Total call volumes does not include Administrative Calls. Administrative calls = Calls originating on Administrative lines that required 911 service.
- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Dropped Calls are hang ups after transfers.
- Abandoned Calls are not included in the Wireline and Wireless total counts respectively.
- All VoIP (Voice over Internet Protocol) types of 911 calls are combined in the Call Volume statistic.

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TEXT TO 911 - CURRENT MONTH - DECEMBER 2016

NOTE:

- The Oahu Civilian PSAPs have deployed a soft launch for Text to 911 on December 21, 2015.
- During this soft launch period, PSAP personnel will utilize this period to sharpen their Texting skills and procedures.
- Although there is a "Text to 911" plot on the MapFlex, the location of the plot is not reliable. Text to 911 Dispatchers should use their skills to ascertain the exact location of the emergency response.
- In a press conference on October 13, 2016, an official announcement was made by the Governor of the State of Hawaii introducing "TEXT TO 911" as an emergency public service now available in the State of Hawaii.

	TEXT TO 911 Oahu 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	143	131	2	0	0	10							
June	137	135	1	0	0	1							
July	156	143	1	1	0	11							
August	133	115	2	3	0	13							
September	148	130	2	1	0	15							
October	209	195	10	4	0	0							
November	219	198	11	0	0	10							
December	390	181	5	0	0	204							
YTD	2046	1633	64	18	0	331							
Monthly Avg.	170.5	136.1	5.3	1.5	0.0	27.6							

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NOTE:

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

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WIRELESS PSAP TESTING - DECEMBER 2016

	OAHU CIVILIAN - DECEMBER 2016													
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:								
12/6/2016	AT&T	1	6	Oahu PSAP	Pass									
12/8/2016	Verizon	7	50	Oahu PSAP	Pass	4 testers								
12/9/2016	AT&T	1	14	Oahu PSAP	Pass	15 sectors scheduled								

NOTES:

• There were six (6) scheduled Wireless 911 Tests for the Oahu Civilian PSAP in December, 2016.

WIRELESS PSAP TESTING - YEARLY TOTALS 2016

			OAHU CIV	ILIAN - 2016		
WIRELESS 911 PSAP	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
TESTING	AT&T	5	67	Oahu PSAP	Pass	
TOTALS	SPRINT	1	4	Oahu PSAP	Pass	
2016	VERIZON	160	529	Oahu PSAP	Pass	
	Total	166	600			

NOTES:

The Oahu Civilian PSAP tested a total of 166 cell tower sites and 600 cell sectors in 2016.

FOR YOUR INFORMATION

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

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - DECEMBER 2016

OAHU				9-1-1	TRANSA	CTIONS	•			
CIVILIAN		MSAG	Al	LI Submitte	ed	Discre	Open ALI epancy Re	cords	Customer	
2016	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Addresses Affected	
JANUARY	24	23	0	1	0	468	0	0	515	
FEBRUARY	244	26	216	2	0	497	0	1	421	
MARCH	97	22	71	3	1	426	0	0	737	
APRIL	96	25	71	0	0	358	0	0	955	
MAY	106	22	83	1	0	295	0	0	93	
JUNE	133	46	87	0	0	280	0	0	3,537	
JULY	117	29	86	2	0	208	0	0	2,561	
AUGUST	108	29	79	0	0	156	0	0	724	
SEPTEMBER	79	14	65	0	0	93	1	0	208	
OCTOBER	68	24	43	1	0	93	0	0	3,336	
NOVEMBER	61	9	52	0	0	94	0	0	128	
DECEMBER	67	11	56	0	0	80	0	0	147	
TOTAL YTD	1,200	280	909	10	1				13,362	
AVG PER MONTH	100	23	76	1	0				1,114	

Definitions

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

- (B) **T**elephone **N**umber **C**hange **R**equest Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 199 attached to them which indicates the need for validation.
- (C) 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) **V**oice **o**ver **I**nternet **P**rotocol **D**iscrepancy **R**ecord Represents an address discrepancy discovered during a live 9-1-1 call, from a VoIP phone. These record corrections are treated with a higher priority and should be processed within 72 hours as a general guideline per Time Warner Operations Center. MSR tracking effective April 2014.

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MSAG CURRENT MONTH NOTES:

A total of **67** MSAG transactions were processed in 9-1-1 Net during the month of December 2016. Eleven (**11**) 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 147 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

56 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 80 Open TN CR Transactions as of December 31, 2016.
- Refer to chart in the next section "TNCR Current Status"

80 Open TN CR transactions are a direct result of the ESN 199 clean-up and are awaiting approval from Hawaiian Telcom, Inc. Once a telephone number is submitted to West for correction, it must be verified against HT records and/or approved by the customer. West's internal process requires calling each telephone customer individually for approval to update an address in the 9-1-1 database.

- There is zero Open ALI-DR as of December 31, 2016.
- There is zero Open VoIP DR as of December 31, 2016.

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

NOTE:

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

	PSAP 9-1-1 Telephone Number Location Change Request						
	(Telephone Number Change Request (TNCR) Status)						
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES	TOTAL UNOPENED TNCR RECORDS			
OAHU CIVILIAN	80	0	74	6			

STATUS

TOTAL TNCRs SUBMITTED - The total number of TNCR requests for modification that have been submitted in 9-1-1 **PENDING STATUS** - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and are pending investigation whether the request is valid or invalid, and/or whether the request requires additional information to validate.

REFERRED STATUS - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and the request requires additional information to validate. The West Safety Services Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.

TOTAL UNOPENED TNCR RECORDS STATUS - The request is submitted by Akimeka on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.

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CHARTER COMMUNICATIONS (TIME WARNER) VOIP DATABASE TNCR

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

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

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

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

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MSAG COMMUNITIES PROJECT -- COMPLETED

MSAG COMMUNITY AND STREET SEGMENT SWEEP - PHASE VII

MSAG Community and Street Segment Sweep – Phase VII

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

Below is the latest Phase VII work effort as of November 30, 2016:

	MSAG CO	MMUNITY AN	GIS UP	DATES		
MSAG COMMUNITY (In Order of Effort)	TARGET START DATE	TARGET COMPLETION DATE	AKIMEKA COMPLETION DATE	NOTES/COMMENTS	DATE GIS DELIVERED TO HPD	DATE GIS LOADED TO CAD BY HPD
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		1	
Kaaawa	11/05/14	11/07/14	10/31/14			
Punaluu	11/10/14	11/11/14	11/05/14			
Hauula	11/12/14	11/17/14	11/06/14		11/14/14	11/21/14
Laie	11/18/14	11/24/14	11/14/14			
Kahuku	11/25/14	12/02/14	11/25/14		11/28/14	12/08/14
Sunset	12/03/14	12/10/14	12/08/14		12/12/14	12/18/14
Haleiwa	12/12/14	12/24/14	01/14/15	There are many farming and cane roads that require lengthy and detailed editing, slowing down progress	01/23/15	02/05/15
Wahiawa	01/02/15	01/21/15	02/03/15		02/06/15	02/13/15
Waialua	01/22/15	01/29/15	02/09/15			
Mokuleia	01/30/15	02/05/15	02/12/15		02/19/15	02/25/15
Kalanianaole Hwy Project	02/09/15	03/04/15	02/19/15		02/19/15	02/25/15
Makaha	03/05/15	03/12/15	02/17/15			
Waianae	03/13/15	03/24/15	03/09/15		03/20/15	04/02/15
Maili	03/25/15	04/02/15	03/17/15		03/20/15	04/02/15
Nanakuli	04/03/15	04/13/15	03/27/15		04/06/15	04/17/15
Makakilo	04/14/15	04/28/15	04/15/15		04/17/15	04/29/15
Kapolei	04/29/15	05/21/15	05/19/15		5/1/2015, 5/15/2015	



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MSAG Community and Street Segment Sweep – Phase VII continued

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

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MSAG Community and Street Segment Sweep - Phase VII continued

	MSAG COM	MUNITY AND	GIS UPDATES			
MSAG COMMUNITY (In Order of Effort)	TARGET START DATE	TARGET COMPLETION DATE	AKIMEKA COMPLETION DATE	NOTES/COMMENTS	DATE GIS DELIVERED TO HPD	DATE GIS LOADED TO CAD BY HPD
McCully	09/28/16	10/12/16	09/19/16		09/16/16	09/29/16
Ft Derussy	10/13/16	10/13/16	09/21/16		09/30/16	
Waikiki	10/14/16	10/26/16	09/27/16		09/30/16	
Kahala	10/27/16	11/08/16	10/05/16		10/14/16	
Kapahulu	11/09/16	11/17/16	10/11/16	FTP connectivity issues	10/28/16	
Kaimuki	11/18/16	12/19/16	11/03/16		11/11/16	
Waialae	12/20/16	12/28/16	11/07/16		11/11/16	
Aina Haina	12/29/16	01/11/17	11/14/16		11/23/16	
Hawaii Kai	01/12/17	02/08/17	11/29/16		12/09/16	

The Phase VII Project was completed on November 29, 2016, three months ahead of schedule. Akimeka is now entering a review process throughout the month of January and will make further updates island-wide as needed.

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3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – DECEMBER 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.

		OAI	HU CIVILIAN			
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks			
Cl	RITICAL 9-1-1 I		Y LAYERS FOR DISPATCH & RESPONSE			
	(Listed Alphabetically)					
	12/30/2016		Added thirty-two (32) address points in Waialae			
	12/30/2016		Added one (1) building number in Waialae			
	12/30/2016		Added fifteen (15) address points in Kaneohe			
	12/30/2016		Added nineteen (19) address points in Kahala			
	12/30/2016		Deleted two (2) location names in Haleiwa			
	12/30/2016		Added one (1) location name in Haleiwa			
	12/30/2016		Spatially corrected eighty-four (84) address points in Haleiwa			
	12/29/2016		Deleted one (1) address point in Haleiwa			
	12/29/2016		Added two (2) location names in Haleiwa			
	12/29/2016		Spatially corrected one hundred twenty-four (124) address points in Haleiwa			
	12/29/2016		Added one hundred four (104) address points in Kaneohe			
	12/28/2016		Added one (1) location name in Sunset			
	12/28/2016		Added one (1) address point in Sunset			
	12/28/2016		Deleted two (2) address points in Sunset			
	12/28/2016		Corrected two (2) tmk in Sunset			
Address Delines	12/28/2016		Spatially corrected one hundred ninety-four (194) address points in Sunset			
Address Points	12/28/2016		Added seventy-six (76) address points in Waialae			
	12/28/2016		Added twenty-seven (27) address points in Manoa			
	12/27/2016		Added six (6) address points in Kahuku			
	12/27/2016		Added one (1) location name in Kahuku			
	12/27/2016		Spatially corrected fifteen (15) address points in Kahuku			
	12/27/2016		Added one (1) building number in Kahuku			
	12/27/2016		Added sixty-nine (69) address points in Kahala			
	12/27/2016		Added two (2) building numbers in Laie			
	12/27/2016		Added one (1) apartment number in Laie			
	12/27/2016		Added forty-six (46) address points in Laie			
	12/27/2016		Added one (1) building number in Downtown			
	12/27/2016		Added thirty-one (31) address points in Downtown			
		12/23/16				
	12/23/2016		Added one (1) building number in Waianae			
	12/23/2016		Spatially corrected one (1) address point in Waianae			
	12/23/2016		Added forty-five (45) address points in Waianae			

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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.

		OAl	HU CIVILIAN			
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks			
C	CRITICAL 9-1-1 P		Y LAYERS FOR DISPATCH & RESPONSE			
	(Listed Alphabetically)					
	12/23/2016		Added thirty-five (35) address points in Kahala			
	12/23/2016		Added one (1) building number in Kahala			
	12/23/2016		Added one (1) building number in Kahuku			
	12/23/2016		Added one hundred seven (107) address points in Kahuku			
	12/22/2016		Deleted three (3) address points in Laie			
	12/22/2016		Added two (2) location names in Laie			
	12/22/2016		Added one (1) apartment number in Laie			
	12/22/2016		Corrected two (2) apartment numbers in Laie			
	12/22/2016		Spatially corrected one hundred thirty-four (134) address points in Laie			
	12/22/2016		Spatially corrected three (3) address points in Kahuku			
	12/22/2016		Added one (1) location name in Kahuku			
	12/22/2016		Added thirteen (13) address points in Kaimuki			
	12/22/2016		Added six (6) building numbers in Kaimuki			
	12/22/2016		Spatially corrected one (1) address point in Kapahulu			
	12/22/2016		Added one (1) building number in Kapahulu			
Address Points	12/22/2016		Added six (6) address points in Kapahulu			
Address Folitis	12/21/2016		Spatially corrected twenty-one (21) address points in Kaaawa			
	12/21/2016		Added one (1) location name in Kaaawa			
	12/21/2016		Spatially corrected sixty-six (66) address points in Punaluu			
	12/21/2016		Deleted one (1) address point in Punaluu			
	12/21/2016		Added two (2) location names in Hauula			
	12/21/2016		Spatially corrected one hundred two (102) address points in Hauula			
	12/21/2016		Deleted three (3) address points in Hauula			
	12/21/2016		Added one (1) routing id in Hauula			
	12/21/2016		Corrected one (1) apartment number in Hauula			
	12/21/2016		Added one (1) address point in Hauula			
	12/21/2016		Spatially corrected one hundred (100) address points in Laie			
	12/21/2016		Added two (2) location names in Laie			
	12/21/2016		Added five (5) address points in Laie			
	12/20/2016		Added seven (7) address points in Hawaii Kai			
	12/20/2016		Deleted two (2) address points in Hawaii Kai			
	12/20/2016		Added one (1) location name in Hawaii Kai			

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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.

		OAI	HU CIVILIAN
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
C	RITICAL 9-1-1 F	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
		(Liste	d Alphabetically)
	12/20/2016		Spatially corrected nineteen (19) address points in Hawaii Kai
	12/20/2016		Spatially corrected one (1) address points in Waimanalo
	12/20/2016		Corrected eight (8) address points in Kailua
	12/20/2016		Deleted one (1) address point in Kailua
	12/20/2016		Spatially corrected fifty (50) address points in Kaneohe
	12/20/2016		Added nine (9) location names in Kaneohe
	12/20/2016		Added four (4) address points in Kaneohe
	12/20/2016		Deleted three (3) address points in Kaneohe
	12/20/2016		Corrected one (1) address in Kaneohe
	12/20/2016		Deleted two (2) location names in Kaneohe
	12/20/2016		Corrected one (1) location name in Kaneohe
	12/20/2016		Spatially corrected thirty-one (31) address points in Kaaawa
	12/20/2016		Deleted three (3) address points in Kaaawa
	12/19/2016		Deleted one (1) location name in Hawaii Kai
	12/19/2016		Added one (1) routing id in Hawaii Kai
	12/19/2016		Added fourteen (14) location names in Hawaii Kai
Address Points	12/19/2016		Added sixteen (16) address points in Hawaii Kai
	12/19/2016		Deleted two (2) address points in Hawaii Kai
	12/19/2016		Corrected one (1) tmk in Hawaii Kai
	12/19/2016		Spatially corrected eight hundred sixteen (816) address points in Hawaii Kai
	12/16/2016		Deleted two (2) address points in Hawaii Kai
	12/16/2016		Added one (1) location name in Hawaii Kai
	12/16/2016		Added one (1) address point in Hawaii Kai
	12/16/2016		Spatially corrected one thousand three hundred forty-four (1344) address points in Hawaii Kai
	12/15/2016		Added three (3) location names in Hawaii Kai
	12/15/2016		Deleted two (2) location names in Hawaii Kai
	12/15/2016		Added one (1) address point in Hawaii Kai
	12/15/2016		Spatially corrected two thousand one hundred thirty-one (2131) address points in Hawaii Kai
	12/15/2016		Spatially corrected nine (9) locations in Hawaii Kai
	12/14/2016		Deleted four (4) address points in Hawaii Kai
	12/14/2016		Added one (1) location name in Hawaii Kai

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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.

		OAF	HU CIVILIAN
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
C	RITICAL 9-1-1 F		Y LAYERS FOR DISPATCH & RESPONSE
		(Liste	d Alphabetically)
	12/14/2016		Spatially corrected two thousand one hundred forty-five (2145) address points in Hawaii Kai
	12/13/2016		Added one (1) location name in Aina Haina
	12/13/2016		Spatially corrected forty-four (44) address points in Aina Haina
	12/13/2016		Added sixty-four (64) address points in Hawaii Kai
	12/13/2016		Added one (1) location name in Hawaii Kai
	12/13/2016		Spatially corrected one thousand one hundred forty (1140) address points in Hawaii Kai
	12/12/2016		Deleted five (5) address points in Aina Haina
	12/12/2016		Added one (1) location name in Aina Haina
	12/12/2016		Spatially corrected three hundred sixty (360) address points in Aina Haina
		12/09/16	
	12/9/2016		Added one (1) location name in Aina Haina
	12/9/2016		Deleted five (5) address points in Aina Haina
	12/9/2016		Corrected one (1) address in Aina Haina
	12/9/2016		Spatially corrected one thousand seventy-one (1071) address points in Aina Haina
Address Points	12/9/2016		Spatially corrected thirty-seven (37) address points in Hawaii Kai
	12/8/2016		Deleted one (1) location name in Aina Haina
	12/8/2016		Spatially corrected nine hundred seventy-one (971) address points in Aina Haina
	12/7/2016		Spatially corrected ninety-eight (98) address points in Aina Haina
	12/6/2016		Added one (1) routing id in Waialae
	12/6/2016		Deleted two (2) address points in Waialae
	12/6/2016		Spatially corrected five hundred fifty-seven (557) address points in Waialae
	12/6/2016		Added five (5) location names in Aina Haina
	12/6/2016		Corrected one (1) tmk in Aina Haina
	12/6/2016		Added four (4) address points in Aina Haina
	12/6/2016		Added two (2) aliases in Aina Haina
	12/6/2016		Corrected two (2) addresses in Aina Haina
	12/6/2016		Spatially corrected one thousand three hundred seventy-one (1371) address points in Aina Haina
	12/6/2016		Added one (1) address point in Kalaeloa
	12/5/2016		Added one (1) location name in Kaimuki



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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.

		OAI	HU CIVILIAN
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
C	RITICAL 9-1-1 P	UBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
		(Liste	d Alphabetically)
	12/5/2016		Deleted one (1) address point in Kaimuki
	12/5/2016		Spatially corrected two hundred twenty-one (221) address points in Kaimuki
	12/5/2016		Deleted two (2) address points in Waialae
	12/5/2016		Deleted one (1) location name in Waialae
	12/5/2016		Added one (1) location name in Waialae
	12/5/2016		Added one (1) address point in Waialae
	12/5/2016		Added one (1) apartment number in Waialae
	12/5/2016		Spatially corrected two thousand ninety (2090) address points in Waialae
	12/2/2016		Deleted four (4) address points in Kaimuki
Address Points	12/2/2016		Corrected one (1) TMK in Kaimuki
	12/2/2016		Spatially corrected two (2) address points in Ewa Beach
	12/2/2016		Spatially corrected two (2) address points in Nuuanu
	12/2/2016		Spatially corrected one (1) address point in Kalihi
	12/2/2016		Spatially corrected one thousand two hundred twenty-one (1221) address points in Kaimuki
	12/1/2016		Added two (2) location names in Kaimuki
	12/1/2016		Corrected three (3) tmk in Kaimuki
	12/1/2016		Deleted six (6) address points in Kaimuki
	12/1/2016		Spatially corrected eight hundred forty-four (844) address points in Kaimuki
Airports			
Bridges			
Building Footprints			
Bus Stops			
Churches			
Coastal Names			
Coastline			
		12/23/16	
	12/23/2016		Spatially corrected one (1) location in Kapahulu
	12/23/2016		Spatially corrected four (4) locations in Kahuku
Common Places	12/20/2016		Spatially corrected three (3) locations in Hawaii Kai
	12/20/2016		Corrected three (3) locations in Kailua
	12/20/2016		Spatially corrected twenty-four (24) locations in Kaneohe
	12/19/2016		Spatially corrected forty-two (42) locations in Hawaii Kai

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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.

		OAI	HU CIVILIAN
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
CI	RITICAL 9-1-1 I	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
		(Liste	d Alphabetically)
	12/16/2016		Spatially corrected ten (10) locations in Hawaii Kai
	12/14/2016		Spatially corrected one (1) location in Hawaii Kai
	12/13/2016		Spatially corrected one (1) location in Aina Haina
	12/13/2016		Spatially corrected twenty (20) locations in Hawaii Kai
	12/12/2016		Spatially corrected five (5) locations in Aina Haina
		12/09/16	
Common Places	12/9/2016		Spatially corrected four (4) locations in Aina Haina
	12/8/2016		Spatially corrected two (2) locations in Aina Haina
	12/6/2016		Spatially corrected fifteen (15) locations in Aina Haina
	12/5/2016		Spatially corrected two (2) locations in Kaimuki
	12/5/2016		Spatially corrected twenty-four (24) locations in Waialae
	12/2/2016		Spatially corrected two (2) locations in Kaimuki
	12/1/2016		Spatially corrected five (5) locations in Kaimuki
Correctional Facilities			
Emergency Callboxes			
Emergency Operation			
Centers			
Emergency Shelters			
ESZ/ESN	12/12/2016		Corrected boundary for ESN 131
Fire Beats			
Fire Districts			
Fire Response Areas			
Fire Stations			
Food & Beverage			
Gas Stations			
Gate Codes			
Government Buildings			
Harbors			
Helipads			
Hiking Trails			
Hospitals			
Hydrants			
Hyrdology Layers			



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MAPPING LAYERS UPDATED (PART VII)

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

OAHU CIVILIAN				
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks	
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				
Police Beats				
Police Districts				
Police Response Areas				
Police Stations				
Post Offices				
Schools				
Street Centerlines	12/27/2016		Split six (6) street segments in Ala Moana	
	12/27/2016		Added thirty (30) street segments in Ala Moana	
		12/23/16	The state of the s	
	12/23/2016		Corrected seven (7) elevations in Mililani	
	12/21/2016		Split one (1) street segment in Kaaawa	
	12/16/2016		Added nineteen (19) street segments in Ewa Beach	
	12/16/2016		Split one (1) street segment in Ewa Beach	
	12/12/2016		Split one (1) street segment in Mililani	



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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 Created/ Edits Performed	Date GIS Delivered	Other/Remarks	
CI	RITICAL 9-1-1 I	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE	
		(Liste	d Alphabetically)	
	12/12/2016		Split six (6) street segments in Airport	
	12/12/2016		Split two (2) street segments in Waipio	
	12/12/2016		Split one (1) street segment in Kalihi	
	12/12/2016		Split one (1) street segment in Honolulu	
	12/12/2016		Split one (1) street segment in Kapahulu	
	12/12/2016		Split one (1) street segment in Downtown	
	12/12/2016		Split one (1) street segment in Waikiki	
		12/09/16		
	12/7/2016		Split six (6) street segments in Pearl City	
	12/7/2016		Split six (6) street segments in Waipio	
	12/7/2016		Split nine (9) street segments in Mililani	
Start Contailing	12/7/2016		Split two (2) street segments in Kaneohe	
Street Centerlines	12/7/2016		Split two (2) street segments in Honolulu	
	12/7/2016		Split two (2) street segments in Kaimuki	
	12/7/2016		Split one (1) street segment in Waipahu	
	12/7/2016		Split one (1) street segment in Kalihi	
	12/7/2016		Split four (4) street segments in Hawaii Kai	
	12/7/2016		Split one (1) street segment in Nuuanu	
	12/7/2016		Split one (1) street segment in Waialae	
	12/7/2016		Split one (1) street segment in Aiea	
	12/7/2016		Corrected range to four (4) street segments in Mililani	
	12/1/2016		Added one (1) street segment in Kaimuki	
	12/1/2016		Split one (1) street segment in Kaimuki	
	12/1/2016		Split one (1) street segment in Wahiawa	
Subdivisions				
Tow Jurisdictions				
Tsunami Evacuation Zones				
Tsunami Heights				
Waste Water Plants				

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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.

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)				
	12/14/2016		Per AT&T CRS	
		12/09/16		
WSP Cell Sectors	12/8/2016		Per Sprint CRS	
	12/6/2016		Per AT&T CRS	
	12/2/2016		Per VZW CRS	
WSP Cell Towers	12/14/2016		Per AT&T CRS	
		12/09/16		
	12/8/2016	-	Per Sprint CRS	
	12/6/2016		Per AT&T CRS	
	12/2/2016		Per VZW CRS	

GIS Summary for 2016				
OAHU CIVILIAN				
Type of Layer	Totals	Totals Remarks		
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE				
Address Points	119,078	Approximate number of new and/or edited *Address Points added to the Oahu Civilian GIS map and database in 2016.		
Street Centerlines	9,007	Approximate number of new and/or edited *Street Centerlines added to the Oahu Civilian GIS map and database in 2016.		
Points of Interest	3,032	Approximate number of new and/or edited *Points of Interest/Common Name Places added to the Oahu Civilian GIS map and database in 2016.		

^{*} Specific details available upon request.

NOTE:

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

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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
12/23/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
12/23/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
12/9/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
12/9/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
12/9/2016	Address Points, Common Places, Street Centerlines, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety

POLICE BEATS CORRECTIONS

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

Akimeka had completed the Police Beats review process and corrections on November 2, 2016. All recommend changes to the written descriptions were sent to HPD PMT. The final Police Beats GIS data was provided for the HPD CAD system on November 11, 2016.

Upload Process

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

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MAPFLEX SYSTEM

During the month of December 2016, the MapFlex system received one manual update as a result of MapFlex having several issues pertaining to the automated upload processes.

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

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

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in December 2016
 - a. **Hawaii County** December 9, 2016
 - b. Maui County December 9, 2016
 - c. Kauai County December 9, 2016
 - d. **Honolulu** December 9, 2016
- 2. Although there were no official confirmation that the manual updates were completed, Akimeka confirmed on December 20th that the GIS data was successfully updated in the MapFlex system.

MAPFLEX ISSUE

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

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

- 1. There was an upload issue with the Kauai MapFlex system on July 24, 2016 which was related to an issue which Maui PD experienced earlier in the year. The MapFlex screen went blank and there was no mapping capability.
 - a. West relayed that there is an issue with the automatic update script and there are updates required for them to make to the system.
 - b. All of the PSAPs agreed to hold off on all GIS updates in MapFlex until West has resolved the issue.
- 2. The MapFlex system began displaying wireless information incorrectly during the month of August 2016.
 - a. The issue described is that when wireless calls are coming into the PSAPs, the ALI information appears to be correct and it matches with the GIS data, so it subsequently displays a Phase I location for Phase I calls. What is occurring directly after this, is the MapFlex system is doing a reverse query for additional information in the GIS and this is overriding the ALI information with the closest address in the GIS.
 - b. West and HT are looking into the issue and are planning a software update that should help resolve the issue.
- 3. The Text-to-911 icons have stopped displaying at the PSAPs.
 - a. It was identified that the icons for text calls have stopped displaying in the MapFlex maps. Previously when calls came in as a text call, there would be an icon displaying "TEXT" where the call was plotted.
 - b. West and HT will be researching the issue.
- 4. Throughout October 2016 West and HT continued to work on the patches to fix some of the above issues.
- 5. During November 2016, the updates were installed on the MapFlex systems throughout the State of Hawaii.
 - a. After the updates had taken place, issues were identified with the display of Phase I coverage areas in MapFlex identified by the Honolulu Fire Department. In addition, the only information that was being displayed for Phase I calls were Lat/Longs with a static coverage of approximately 330 meters for all calls. The issue was first identified when calls had plotted in the ocean, while the caller was surely on land.

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- b. The issue was brought to West and HT's attention for resolution.
- c. West had worked internally with their team and determined that it was an issue with the confidence with Sprint wireless and that Sprint was the source of the issue in MapFlex.
- d. The discussions on this issue circled for some time throughout November without resolution until it was discovered later in November that the reason the coverage area was not being displayed was due to the MapFlex upgrade that was installed. After installation, the configurations for Wireless Phase I were not set up properly by West, in which the mapping did not point to the correct information in MapFlex.
- e. The additional issue with MapFlex plotting the centroid of the sector as the tower location still remains and is being troubleshot by West and HT.
- f. West and HT will be following up with the PSAPs with a resolution in December 2016.
- g. The next conference call with West, HawaiianTel, and the PSAPs is scheduled for January 11th.

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 October 3, 2016 and November 21, 2016. There were no Street Checks performed in December, 2016.

Street Utility Check								
	First Report 06/01/13	10/3/2016	11/21/2016	Improvements/Corrections				
Total Number of GIS Records	26,602	29,655	29,752	Increased by 97 records				
Errors Identified								
Zero Errors	5,112	18	6	Decreased by 12 errors				
Low > High Errors	3	0	0	No change				
Mixed Parity Errors	1	0	0	No change				
Changed Parity Errors	105	3	0	Decreased by 3 errors				
Address Gap Errors	2,629	2	1	Decreased by 1 error				
Address Overlap Errors	423	3	1	Decreased by 2 errors				
Flipped Link Errors	1,030	620	277	Decreased by 343 errors				
Total Errors	9,303	646	285	Decreased by 361 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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4. E9-1-1 DATABASE SYNCHRONIZATION

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

Next Scheduled Database Synchronization – January 2017

AUDIT SUMMARY RESULTS - 2016 -- TBA

AUDIT SUMMARY RESULTS - JANUARY 1, 2017 MSAG VS. OCTOBER 1, 2016 MSAG -- TBA

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

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

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA

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