# Oahu Civilian E9-1-1

# Status Report

*July 1, 2018 – July 31, 2018*

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# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## 1. PSAP OPERATIONS

### 9-1-1 CALL VOLUME CIVILIAN PSAPS – JULY 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 Other Calls | % of Total Calls |
| July | 85,828 | 17,441 | 20.32% | 65,246 | 76.02% | 47.42% | 28.60% | 3,124 | 3.64% | 17 | 0.02% | 892 | 1.04% | 12,831 | 14.95% | 629 | 0.73% |

### 9-1-1 CALL VOLUME CILILIAN 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 | 85,038 | 17,076 | 20.08% | 64,935 | 76.36% | 47.07% | 29.29% | 3,010 | 3.54% | 17 | 0.02% | 1,753 | 2.06% | 13,037 | 15.33% | 567 | 0.67% |
| JULY | 85,828 | 17,441 | 20.32% | 65,246 | 76.02% | 47.42% | 28.60% | 3,124 | 3.64% | 17 | 0.02% | 892 | 1.04% | 12,831 | 14.95% | 629 | 0.73% |
| AUG | | | | | | | | | | | | | | | | |
| SEPT | | | | | | | | | | | | | | | | |
| OCT | | | | | | | | | | | | | | | | |
| NOV | | | | | | | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | |
| **YTD** | 601,155 | 122,315 | | 456,362 | | | | 22,188 | | 290 | | 11,822 | | 92,886 | | 3,783 | |
| **MON AVG** | 85,879 | 17,474 | 20.35% | 65,195 | 75.91% | 46.99% | 28.91% | 3,170 | 3.69% | 41 | 0.05% | 1,689 | 1.96% | 13,269 | 15.42% | 540 | 0.63% |

NOTE:

- **\*911 Calls with No ALI for July 2018 = 0.02% - 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.**

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## 9-1-1 CALL VOLUME BY AGENCY – JULY 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 |
| July | 75,132 | 87.54% | 20,242 | 41,345 | 714 | 12,831 | 2,348 | 2.74% | 120 | 40 |

| 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 |
| July | 7,654 | 8.92% | 1 | 64 | 65 | 0.08% | 57 | 13 |

## 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 | 73,294 | 86.19% | 19,386 | 40,054 | 817 | 13,037 | 2,990 | 3.52% | 173 | 34 | 8,127 | 9.56% | 710 | 109 | 60 | 0.07% | 53 | 6 |
| JULY | 75,132 | 87.54% | 20,242 | 41,345 | 714 | 12,831 | 2,348 | 2.74% | 120 | 40 | 7,654 | 8.92% | 1 | 64 | 65 | 0.08% | 57 | 13 |
| AUG | | | | | | | | | | | | | | | | | | |
| SEPT | | | | | | | | | | | | | | | | | | |
| OCT | | | | | | | | | | | | | | | | | | |
| NOV | | | | | | | | | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | | | |
| YTD | 520,910 | | 136,306 | 285,247 | 6,471 | 92,886 | 18,112 | | 757 | 349 | 58,028 | | 4,295 | 735 | 322 | | 299 | 55 |
| MON AVG | 74,416 | 86.65% | 19,472 | 40,750 | 924 | 13,269 | 2,587 | 3.01% | 108 | 50 | 8,290 | 9.66% | 614 | 105 | 46 | 0.06% | 43 | 8 |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

### 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% |
| **2016 & 2015 Statewide average does not include Military 911 calls.** | | | | | | |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

TEXT TO 911 OAHU CIVILIAN PSAPS – CURRENT MONTH – JULY 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 | 168 | 153 | 2 | 1 | 0 | 12 |
| July | 98 | 91 | 2 | 5 | 0 | 0 |
| August | | | | | | |
| September | | | | | | |
| October | | | | | | |
| November | | | | | | |
| December | | | | | | |
| YTD | 1016 | 883 | 18 | 24 | 0 | 91 |
| Monthly Avg. | 145.1 | 126.1 | 2.6 | 3.4 | 0.0 | 13.0 |

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

## July 1, 2018 - July 31, 2018

### 911 WIRELESS OAHU CIVILIAN PSAP TESTING – JULY 2018

| OAHU CIVILIAN - JULY 2018 | | | | | | |
|---|---|---|---|---|---|---|
| Date | WSP | Sites Tested | Sectors Tested | Tested By: | Test Pass/Fail | Comments: |
| 7/9/2018 | Sprint | 1 | 2 | Oahu PSAP | Pass | |
| | | | | | | |
| | | | | | | |

NOTES:

- There was one (1) scheduled Wireless 911 Test for the Oahu Civilian PSAP in July 2018.
- Verizon Wireless is currently migrating their Wireless network database from West to ComTech.

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## 2. MSAG (MASTER STREET ADDRESS GUIDE)

### OAHU CIVILIAN MSAG TRANSACTIONS CURRENT MONTH/YEAR – JULY 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 | 324 | 7 | 316 | 1 | 0 | 338 | 0 | 0 | 610 |
| JULY | 349 | 23 | 326 | 0 | 0 | 88 | 0 | 0 | 744 |
| AUGUST | | | | | | | | | |
| SEPTEMBER | | | | | | | | | |
| OCTOBER | | | | | | | | | |
| NOVEMBER | | | | | | | | | |
| DECEMBER | | | | | | | | | |
| TOTAL YTD | 991 | 72 | 917 | 2 | 0 | | | | 4,178 |
| AVG PER MONTH | 142 | 10 | 131 | 0 | 0 | | | | 597 |

| 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

## July 1, 2018 - July 31, 2018

### OAHU CIVILIAN MSAG CURRENT MONTH NOTES:

A total of three hundred-forty nine **(349)** MSAG transactions were processed in 9-1-1 Net during the current reporting month. Twenty-three **(23)** 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 **774** customer ANI/ALI (telephone/address) records updated as a direct result.

**262** Dispatchable Location transactions were submitted and **221** were processed by West during the current month.

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

**326** 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 eighty-eight (88) Open TN CR Transactions as of July 31, 2018**

- **Refer to chart in the next section "TNCR Current Status"**

- **There are no Open ALI-DRs as of July 31, 2018**

- **There is no Open VoIP DRs as of July 31, 2018**

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

**TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – JULY, 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.

| 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** | **92** | **2** | **88** | **2** |

| 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. |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

### DISPATCHABLE LOCATION – STATUS AS OF – JULY 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 262 transactions submitted and 221 processed in July 2018.

| Dispatchable Location | | | |
|---|---|---|---|
| **2018**<br>Quarter 3 | **Common Name Place**<br>**MSAG Address** | **TNCR***<br>**Transactions**<br>**Submitted** | **Transactions**<br>**Processed**** |
| Quarter 2 Carryover | | 933 | 783 |
| **July** | Kaneohe Shopping Center, 450934 Kamehameha Hwy, Kaneohe | 0 | 34 |
| | Windward Square, 451151 Kamehameha Hwy, Kaneohe | 0 | 26 |
| | Koolau Center, 470388 Hui Iwa St, Kaneohe | 0 | 90 |
| | Koko Marina Center, 7192 Kalanianaole Hwy, Hawaii Kai | 191 | 0 |
| | Kailua Beach Center, 130 Kailua Rd, Kailua | 31 | 31 |
| | Enchanted Lake Center, 1020 Keolu Dr, Kailua | 40 | 40 |
| **August** | | | |
| | | | |
| | | | |
| **September** | | | |
| | | | |
| | | | |
| **Quarter 3 Total** | | 262 | 221 |
| **YTD Total** | | 1,457 | 1,225 |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

### SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT – JULY 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.

| PSAP | *Spectrum (Charter) 9-1-1 VoIP Database Verification Project | | | | |
|---|---|---|---|---|---|
| | TOTAL RECORDS SUBMITTED BY SPECTRUM (A) | TOTAL RECORDS MATCHING & VERIFIED WITH 911 DATABASES (B) | TOTAL RECORDS NOT MATCHING | NON MATCHING RECORDS CORRECTED BY AKIMEKA (C) | PERCENT COMPLETED |
| HAWAII County | 22,044 | 21,638 (98%) | 406 | 406 | 100.00% |
| KAUAI County | 8,936 | 8,695 (97%) | 241 | 241 | 100.00% |
| MAUI County | 18,256 | 17,517 (96%) | 739 | 739 | 100.00% |
| OAHU Cilivian | 87,414 | 85,329 (98%) | 2,085 | 1,400 | 67.15% |
| OAHU Military | 3,663 | 710 (19%) | 2,953 | 2,892 | 97.93% |
| TOTAL | 140,313 | **133,889 | 6,424 | 5,678 | 93.02% |

**\* 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) | Verifcation Process Completed. |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

### BANDWIDTH 9-1-1 VOIP DATABASE VERIFICATION PROJECT – JULY 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.

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

**\*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) | Verifcation Process Completed. |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

### 3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JULY 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**<br>**Date Created/ Edits Performed** | **Date GIS Delivered** | **Other/Remarks** |
| CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE<br>(Listed Alphabetically) | | | |
| **Address Points** | 7/31/2018 | | Spatially corrected nine (9) Address Points in Haleiwa. |
| | 7/27/2018 | | Spatially corrected one (1) Address Point in Moanalua V. |
| | 7/26/2018 | | Added two (2) Address Points in Aiea. |
| | 7/24/2018 | | Spatially corrected one (1) Address Point in Salt Lake. |
| | | **07/20/18** | |
| | 7/19/2018 | | Spatially corrected one (1) Address Point in Sunset. |
| | 7/18/2018 | | Added one (1) new Address Point in Waipio. |
| | 7/18/2018 | | Spatially corrected one (1) Address Point in Makiki. |
| | 7/18/2018 | | Spatially corrected one (1) Address Point in Sunset. |
| | 7/17/2018 | | Spatially corrected five (5) Address Points in Kahuku. |
| | 7/17/2018 | | Added one hundred seventy nine (179) Address Points at Kuilima Estates in Kahuku. |
| | 7/16/2018 | | Added seven (7) segments in Nanakuli. |
| | 7/16/2018 | | Corrected House Number to one (1) Address Point in Ewa Beach. |
| | 7/16/2018 | | Spatially corrected one (1) Address Point in Kahuku. |
| | 7/16/2018 | | Added one (1) Address Point in Nanakuli. |
| | 7/16/2018 | | Added one hundred seventy six (176) Address Points at Kuilima Estates West in Kahuku. |
| | 7/13/2018 | | Added fifty seven (57) Address Points at Ocean View Villas in Kahuku. |
| | 7/12/2018 | | Added sixteen (16) Address Points at Kapolei Commons in Kapolei. |
| | 7/12/2018 | | Added Apartment Number to two (2) Address Points in Kapolei. |
| | 7/12/2018 | | Spatially corrected two (2) Address Points in Kapolei. |
| | 7/12/2018 | | Added one (1) Address Point to Iroquois Point Elementary School in Iroquois. |
| | | **07/06/18** | |
| | 7/5/2018 | | Added one (1) Address Point in Kahuku. |
| | 7/5/2018 | | Spatially corrected one (1) Address Point in Kahuku. |
| **Airports** | | | |
| **AMR Response Areas** | | | |
| **Bridges** | | | |
| **Building Footprints** | | | |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

### 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** <br> **Date Created/ Edits Performed** | **Date GIS Delivered** | **Other/Remarks** |
| **CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE** <br> **(Listed Alphabetically)** | | | |
| Bus Stops | 7/31/2018 | | Spatially corrected thirty five (35) Bus Stops in Haleiwa. |
| | 7/31/2018 | | Spatially corrected eight (8) Bus Stops in Waialua. |
| | 7/31/2018 | | Spatially corrected twelve (12) Bus Stops in Mokuleia. |
| | 7/30/2018 | | Spatially corrected thirteen (13) Bus Stops in Haleiwa. |
| | | **07/20/18** | |
| | 7/19/2018 | | Spatially corrected fourteen (14) Bus Stops in Sunset. |
| | 7/18/2018 | | Spatially corrected two (2) Bus Stops in Kahuku. |
| | 7/18/2018 | | Spatially corrected thirty three (33) Bus Stops in Sunset. |
| | 7/17/2018 | | Spatially corrected four (4) Bus Stops in Kahuku. |
| | | **07/06/18** | |
| | 7/5/2018 | | Spatially corrected eighteen (18) Bus Stops in Kahuku. |
| **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** | | | |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 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.*

| Type of Layer | Akimeka GIS Server<br>Date Created/ Edits Performed | Date GIS Delivered | Other/Remarks |
|---|---|---|---|
| **OAHU CIVILIAN PSAPS** | | | |
| **CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE**<br>(Listed Alphabetically) | | | |
| Hospitals | | | |
| Hydrants | | | |
| Hyrdology Layers | | | |
| Incident Response Areas | | | |
| Lodging | | | |
| Major Roads | | | |
| 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 | 7/31/2018 | | Spatially corrected fifteen (15) Points of Interest in Haleiwa. |
| | 7/31/2018 | | Spatially corrected eight (8) Points of Interest in Waialua. |
| | 7/31/2018 | | Spatially corrected three (3) Points of Interest in Mokuleia. |
| | 7/30/2018 | | Spatially corrected one (1) Point of Interest in Sunset. |
| | 7/30/2018 | | Spatially corrected three (3) Points of Interest in Haleiwa. |
| | 7/27/2018 | | Added one (1) Common Place in Wahiawa. |
| | 7/27/2018 | | Added two (2) Common Places in Haleiwa. |
| | 7/27/2018 | | Spatially corrected one (1) Point of Interest in Moanalua V. |
| | | 07/20/18 | |
| | 7/19/2018 | | Spatially corrected five (5) Points of Interest in Sunset. |
| | 7/18/2018 | | Spatially corrected two (2) Bus Stops in Haleiwa. |
| | 7/18/2018 | | Spatially corrected two (2) Points of Interest in Kahuku. |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## 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** <br> **Date Created/ Edits Performed** | **Date GIS Delivered** | **Other/Remarks** |
| **CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE** <br> **(Listed Alphabetically)** | | | |
| **Points of Interest** | 7/18/2018 | | Spatially corrected twenty one (21) Points of Interest in Sunset. |
| | 7/17/2018 | | Spatially corrected one (1) Point of Interest in Kahuku. |
| | 7/13/2018 | | Spatially corrected one (1) Point of Interest in Aiea. |
| | 7/12/2018 | | Corrected spatial to one (1) Point of Interest in Kapolei. |
| | 7/12/2018 | | Added one (1) Common Place in Kapolei. |
| | 7/11/2018 | | Added one (1) Common Place in Haleiwa. |
| | 7/11/2018 | | Added one (1) Common Place in Ala Moana. |
| | 7/11/2018 | | Spatially corrected one (1) Point of Interest in Ala Moana. |
| | | **07/06/18** | |
| | 7/5/2018 | | Spatially corrected five (5) Points of Interest in Kahuku. |
| | 7/3/2018 | | Spatially corrected three (3) Points of Interest in Kahuku. |
| **Police Beats** | | | |
| **Police Districts** | | | |
| **Police Response Areas** | | | |
| **Police Stations** | | | |
| **Post Offices** | | | |
| **Schools** | 7/26/2018 | | Added thirty five (35) Address Points at Radford High School in Aiea. |
| | 7/24/2018 | | Added thirteen (13) Address Points at Moanalua High School in Salt Lake. |
| | 7/24/2018 | | Spatially corrected one (1) Address Point at Radford High School in Aiea. |
| | 7/24/2018 | | Added fifty seven (57) Address Points at Radford High School in Aiea. |
| | | **07/20/18** | |
| | 7/13/2018 | | Spatially corrected two (2) Address Points at Aiea High School in Aiea. |
| | 7/13/2018 | | Spatially corrected one (1) Address Points at Aiea Intermediate School in Aiea. |
| | 7/13/2018 | | Added seventeen (17) Address Points at Aiea Intermediate School in Aiea. |
| **Street Centerlines** | 7/27/2018 | | Corrected range to four (4) segments in Kunia. |
| | 7/27/2018 | | Flipped street to one (1) segment in Nanakuli. |
| | 7/27/2018 | | Split street to three (3) segments in Moanalua V. |
| | 7/27/2018 | | Added one (1) ingress in Moanalua V. |
| | 7/27/2018 | | Flipped street to one (1) segment in Monalua V. |
| | | **07/20/18** | |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## 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 PSAPS | | | |
|---|---|---|---|
| **Type of Layer** | **Akimeka GIS Server** <br> **Date Created/ Edits Performed** | **Date GIS Delivered** | **Other/Remarks** |
| **CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE** <br> **(Listed Alphabetically)** | | | |
| **Street Centerlines** | 7/19/2018 | | Split street to thirteen (13) segments in Kunia. |
| | 7/18/2018 | | Flipped one (1) street segment in Moanalua V. |
| | 7/17/2018 | | Corrected range for two (2) segment in Makakilo. |
| | 7/16/2018 | | Split street to two (2) segment in Makakilo. |
| | 7/16/2018 | | Added two (2) new segments in Makakilo. |
| | 7/13/2018 | | Corrected range for one (1) segment in Airport. |
| | 7/11/2018 | | Merged four (4) segments in Haleiwa. |
| | 7/11/2018 | | Corrected street owner to nine (9) segments in Kalihi. |
| | 7/11/2018 | | Spatially corrected to two (2) segments in Haleiwa. |
| | | **07/06/18** | |
| | 7/6/2018 | | Corrected range to one (1) segment in Kalihi. |
| | 7/5/2018 | | Corrected range to two (2) segments in Kalihi. |
| **Subdivisions** | | | |
| **Tow Jurisdictions** | | | |
| **Tsunami Evacuation Zones** | | | |
| **Tsunami Heights** | | | |
| **Waste Water Plants** | | | |
| **WSP Cell Sectors** | 7/27/2018 | | Per Verizon CRS |
| | 7/25/2018 | | Per Verizon 2018 Audit |
| | | **07/20/18** | |
| | 7/18/2018 | | Per Verizon 2018 Audit |
| | 7/12/2018 | | Per ATT CRS |
| | 7/9/2018 | | Per Verizon CRS |
| | | **07/06/18** | |
| | 7/3/2018 | | Per Sprint CRS |
| **WSP Cell Towers** | 7/27/2018 | | Per Verizon CRS |
| | 7/25/2018 | | Per Verizon 2018 Audit |
| | | **07/20/18** | |
| | 7/18/2018 | | Per Verizon 2018 Audit |
| | 7/12/2018 | | Per ATT CRS |
| | 7/9/2018 | | Per Verizon CRS |
| | | **07/06/18** | |
| | 7/3/2018 | | Per Sprint CRS |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## 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 |
|------|------------------------|
| 7/6/2018 | Delivered Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD. |
| 7/6/2018 | Delivered Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD. |
| 7/6/2018 | 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. |
| 7/20/2018 | Delivered Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD. |
| 7/20/2018 | Delivered Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD. |
| 7/20/2018 | 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. |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## MAPFLEX SYSTEM

During the month of July 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 July 2018
   a. **Hawaii County –** July 3rd , 2018, July 17th, and July 31st, 2018
   b. **Maui County –** July 3rd, 2018, and July 13th, 2018
   c. **Kauai County –** July 5th, 2018, and July 13th, 2018
   d. **Honolulu –** July 6th , 2018, and July 20th , 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. |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

| 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 |
| 6/27/2018 | Moving Labels | It was brought up during the PSAP teleconference with Hawaiian Tel and West that the Hawaii Fire Department submitted a trouble ticket regarding the parcel labels. When the base map is checked on for viewing the owner's names on the parcel layer, the names of some of the parcels will follow and leave their parcel as the map is panned following streets. This problem was also recreated at the Hawaii Police Department. | Pending |

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## 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 June 29, 2018 and July 31, 2018.

| Street Utility Check | | | | |
|---|---|---|---|---|
| | **First Report 06/01/13** | **6/29/2018** | **7/31/2018** | **Improvements/Corrections** |
| Total Number of GIS Records | 26,602 | 31,167 | 31,184 | Increased by 17 records |
| Errors Identified | | | | |
| Zero Errors | 5,112 | 0 | 1 | Increased by 1 error |
| Low > High Errors | 3 | 0 | 0 | No change |
| Mixed Parity Errors | 1 | 0 | 1 | Increased by 1 error |
| Changed Parity Errors | 105 | 5 | 2 | Decreased by 3 errors |
| Address Gap Errors | 2,629 | 10 | 2 | Decreased by 8 errors |
| Address Overlap Errors | 423 | 11 | 14 | Increased by 3 errors |
| Flipped Link Errors | 1,030 | 11 | 7 | Decreased by 4 errors |
| Total Errors | **9,303** | **37** | **27** | Decreased by 10 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.

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 July 2018, there were no further developments.

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## 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 patter 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).
7. During the month of June 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).
8. During the month of July 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 (refer to 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.

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

## 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

## July 1, 2018 - July 31, 2018

| | |
|---|---|
| **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)**

As part of Akimeka's value added services, Akimeka conducted a database synchronization audit for the Oahu Civilian PSAP on July 1, 2018.

The database synchronization effort included comparing Oahu Civilian's 9-1-1 MSAG received from the 911 Database provider, West Safety Servicers on July 1, 2018, against the PSAP's 911 GIS Street Centerline data.  A total number of **7,791** 9-1-1 MSAG records were reviewed in the audit and analyzed.  Results of the database synchronization audit completed on July 1, 2018 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 remain at a 100 percent match rate.  It can be expected that the percentage will fluctuate by a small degree.  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

## July 1, 2018 - July 31, 2018

### AUDIT SUMMARY RESULTS – 2018 - 2017

| 9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS | Notes | As of October 1, 2017 9-1-1 MSAG Dated 10-01-17 | | As of January 1, 2018 9-1-1 MSAG Dated 1-01-18 | | As of April 1, 2018 9-1-1 MSAG Dated 4-01-18 | | As of July 1, 2018 9-1-1 MSAG Dated 7-01-18 | |
|---|---|---|---|---|---|---|---|---|---|
| | | # of Records | % | # of Records | % | # of Records | % | # of Records | % |
| Total 9-1-1 MSAG Records Reviewed | | 7,783 | | 7,783 | | 7,789 | | 7,791 | |
| Less: 9-1-1 MSAG Exception Records | (1) | 35 | 0.4% | 35 | 0.4% | 42 | 0.5% | 43 | 0.6% |
| Net 9-1-1 MSAG Records Eligible for Comparison | | 7,748 | | 7,748 | | 7,747 | | 7,748 | |
| Total 9-1-1 MSAG Records Match (9-1-1 MSAG -- GIS Match -- No Corrections Required) | | 7,737 | 99.9% | 7,737 | 99.9% | 7,741 | 99.9% | 7,735 | 99.8% |
| 9-1-1 MSAG -- GIS No Match - Minor Correction Required | (2) | 8 | 0.1% | 8 | 0.1% | 5 | 0.1% | 11 | 0.1% |
| 9-1-1 MSAG Record With No Matching GIS Record | (3) | 3 | 0.0% | 3 | 0.0% | 1 | 0.0% | 2 | 0.0% |
| Total 9-1-1 MSAG Records No Match | | 11 | 0.1% | 11 | 0.1% | 6 | 0.1% | 13 | 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 July with a 99.8% Match Rate to a 99.9% Match Rate as of April 2018.**
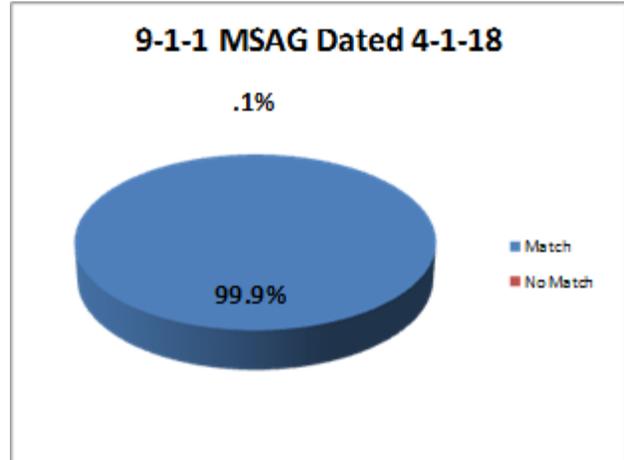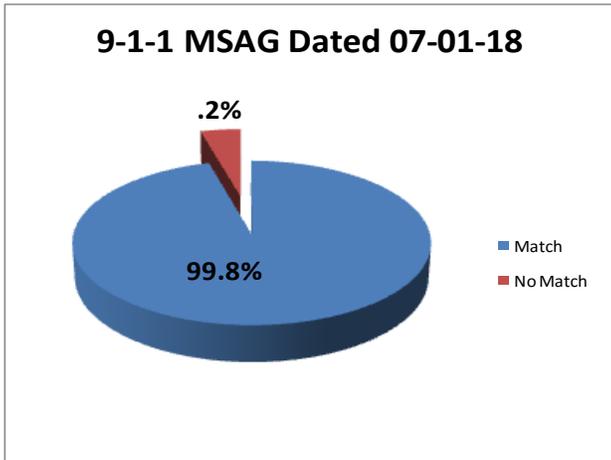
### NOTES:

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

- **(2) An MSAG Record that requires minor MSAG attention in 9-1-1Net to correct MSAG Records (i.e., Reassignment of an MSAG Community, modification of the Site Address Range, assignment of an ESN, performing a combine or insert of an existing MSAG Record, etc.).**

- **(3) An MSAG Record that does not have a corresponding GIS Record and will require additional research and validation.  The GIS Section will assist with this effort.**

# Oahu Civilian E9-1-1 Status Report

## July 1, 2018 - July 31, 2018

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



**9-1-1 MSAG Dated 07-01-18**

.2%
99.8%
■ Match
■ No Match



**9-1-1 MSAG Dated 4-1-18**

.1%
99.9%
■ Match
■ No Match

**Oahu Civilian's level of accuracy or 9-1-1 Match percentage remained consistent with a**

**99.8% as of July 1, 2018 compared to 99.9% as of April 1, 2018.**

❖ As agreed between HPD PMT and Akimeka, Akimeka would initially focus on the <u>existing</u> 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 <u>new</u> 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 (9 to11) from April 2018 to July 2018. 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

## July 1, 2018 - July 31, 2018

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

❖ MSAG Record with No GIS Record" increased (1 to 2) from April 2018 to July 2018. MSAG records with no matching record were due primarily to the verification of the MSAG records against multiple GIS databases to determine if the roads are existing within City and County Honolulu.

❖ "GIS MSAG Records with No Matching E9-1-1 MSAG Record" increased (1 to 6) from April 2018 to July 2018. Records with no matching record was due primarily to the verification of the MSAG records against the single source 9-1-1 GIS databases created by Akimeka from the multiple public safety agencies' databases to determine if the roads exist within City & County of Honolulu and Military bases GIS records.

❖ "GIS –Minor Corrections" increased (10 to 11) from April 2018 to July 2018. Low and high address ranges, street suffixes, and MSAG Community were adjusted in the GIS database to correspond with the MSAG record.  The non-match condition is also a result in which MSAG transactions were not completed prior to the running of the end of month report.

❖ 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

## July 1, 2018 - July 31, 2018

## 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 01-01-18 | | 9-1-1 MSAG Dated 04-01-18 | | 9-1-1 MSAG Dated 07-01-18 | |
| | Number of Records | % of Total Invalid MSAG Records | Number of Records | % of Total Invalid MSAG Records | # of Records | % of Total MSAG Records (Valid and Invalid) |
| ESN 199 | 12 | 0.2% | 7 | 0.1% | 8 | 0.1% |

These invalid MSAG records represent **0.1%** of the Total MSAG records for the City & County of Honolulu as of the July 1, 2018 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

## July 1, 2018 - July 31, 2018

### AUTOMATIC LOCATION IDENTIFICATION (ALI) DATABASE DISCREPANCIES

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 July 27, 2018, there are **5** ALI records with an assigned ESN of 199, representing **.1%** of the City & County of Honolulu (Oahu Civilian) total ALI records.

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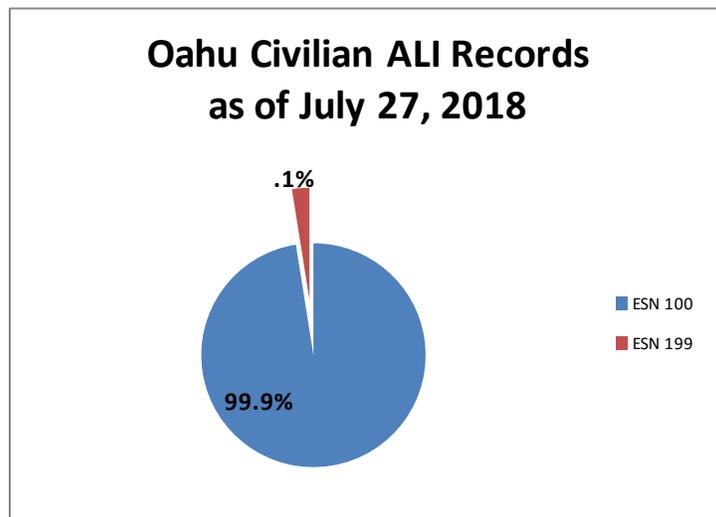


The number of Ali records with an ESN 199 records increased by **one** (7 to 8) from April 2018 to July 2018.  The increase was due primarily to Akimeka's effort to identify the invalid MSAG records and verify their correct locations against current County GIS data.

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".