

STATE OF HAWAII

Communications, Technical and Finance Meeting (Combined Meeting) Kalanimoku Bldg., Room 322B 1151 Punchbowl St., Honolulu Thursday, July 14, 2016 10:00 am - 12:00 pm

Agenda

- I. Call to Order, Public Notice, Quorum
- II. Public testimony on all agenda items
- III. Introductions
- IV. Review and Approval of Last Month's Meeting Minutes
- V. Committee Updates by Committee Chairs
 - a. Communications Committee Steven Schutte
 - i. 2017 Legislative Investigative Committee update Paul Ferreira
 - ii. Others
 - b. Technical Committee Thalia Burns
 - i. HawTel outage on June 22, 2016.
 - ii. New Technical Committee member Lt. Darren Horio (HiPD).
 - iii. Investigative Regulatory Committee update Davlynn Racadio
 - iv. FCC update
 - v. Text-to-911 update
 - vi. Request for approval:
 - 1. APCO Conference, August 14-17, 2016, Orlando, FL.
 - a. Board member (1) \$3,300.
 - b. Technical Committee Member (1) \$3,300.
 - c. Oahu DIT (1) \$3,300.
 - d. HFD (1) \$3,500.
 - 2. NASNA Conference, October 25-26, 2016, Kansas City, Mo.
 - a. Executive Director (1) \$1,800
 - 3. Colorado Chapter Conference, Oct. 6-7, 2016, Denver, CO.
 - a. HPD (2) \$5,000.
 - vii. Others.

- c. Finance Committee Kiman Wong
 - i. Review of Monthly Cash Flow & Budget Financial Reports.
 - ii. Request for funding approval:
 - 1. APCO Conference, August 14-17, 2016, Orlando, FL.
 - a. Board member (1) \$3,300.
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 - a. HPD (2) \$5,000.
 - iii. Others.

VI. PSAP Status Updates

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

VII. Items for Discussion, Consideration and Action

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

VIII. Announcements

- a. Meeting dates (10:00am 12:00noon):
 - i. Thursday, July, 14, 2016 (Combined meeting)
 - ii. Thursday, August 11, 2016 (Combined meeting)
 - iii. Thursday, September 15, 2016 (Combined meeting)(date change)
 - iv. Thursday, October 13, 2016 (Combined meeting)
- b. FirstNet Update Victoria Garcia
- c. Others

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

X. Adjournment



STATE OF HAWAII

Communications, Technical and Finance Meeting (Combined Meeting) Kalanimoku Bldg., Room 322B 1151 Punchbowl St., Honolulu Thursday, July 14, 2016 10:00 am - 12:00 pm

<u>Communications Committee members present:</u> Steven Schutte (Chair), Thalia Burns (HPD), Paul Ferreira (HiPD), Davlynn Racadio (MPD) and Lavina Taovao (KPD). <u>Communications Committee members absent</u>: None.

<u>Technical Committee members present</u>: Thalia Burns (Chair), Clement Chan (DIT), Robert Gausepohl (KPD), John Jakubczak (MPD), David Miyasaki (KPD), Eleni Papakiristis (Hawaiian Telcom), Antonio Ramirez (Akimeka), Jeff Riewer (AT&T Mobility), Steven Schutte (Verizon), Kenison Tejada (APCO/NENA Pacific Chapter) and Kiman Wong (Charter Communications).

<u>Technical Committee members absent</u>: Marshall Kanehailua (HiPD), Ah Lan Leong (HPD) and Gary Lum (HFD).

<u>Finance Committee members present</u>: Kiman Wong (Chair), Paul Ferreira (HiPD), Lisa Hiraoka (Consumer Advocate designee), Roy Irei (T-Mobile) and Randy Macadangdang (HPD).

Finance Committee members absent: None.

Staff Members Present: Stella Kam (AG), Courtney Tagupa (E911) and Kerry Yoneshige (DAGS).

<u>Guests</u>: Michael Contrades (KPD), Ryan Dunkle (Hitech Systems), Victoria Garcia (DoD), Roy Halterman (WEST), Darren Horio (HiPD), Arnold Kishi (ETS), Agnes Lee (WEST), Melodey Lewellen (HPD), Allan Nagata (HPD), Andy Nielsen (WEST), Tony Velasco (City & County of Honolulu) and Bonnie Young (MPD).

Minutes

I. Call to Order, Public Notice, Quorum

- a. The meeting was called to order at 10:00 am by Board Chairman Paul Ferreira.
- b. Public notice has been issued.
- c. Quorum was present for all Committees.

II. Public testimony on all agenda items

a. Chair Ferreira asked if anyone who wishes to provide testimony on any agenda

item to please come forward. No one came forward to testify.

III. Introductions

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

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

a. Mrs. Thalia Burns motioned to approve the June 2016 meeting minutes. The motion was seconded and approved by voice vote by all Committee members present.

V. Committee Updates by Committee Chairs

a. Communications Committee - Steven Schutte

Chair Schutte welcomed the newest Board member to the meeting, Deputy Chief Michael Contrades from Kauai Police Department and newly promoted Radio Chief Tony Velasco.

i. 2017 Legislative Investigative Committee update – Paul Ferreira We are looking at reintroducing prepaid for the upcoming 2017 session and keeping abreast of the new leadership that will be emerging after the election. There should be discussion among PSAPs in an attempt to involve legislators from all Counties and involving them in PSAP tours to understand what is going on at a local PSAP level. If we choose to move forward with introducing the prepaid bill this session, we need to do it very quickly because the bill needs to be submitted to DAGS by September. We are also looking at possibly introducing a percentage to be determined in lieu of the \$0.66 surcharge. We received feedback from the legislators that the percentage may be fairer than the flat fee. The justification sheet for the bill and/or the bill itself will require revision. The ED has sent an email to PSAPs asking for additional expenditure items such as equipment, total system replacement costs, software, etc. and details in order to ensure we will not have a budget deficit in 2025-26. The question was also raised about if we could put a minimum on collections from the Mom & Pops in order to ease the burden. Perhaps they could remit quarterly, semi-annual or annually like GE Tax. NH has a collection transaction threshold of >150 transactions/quarter. We are looking at a continued ceiling increase from 2018. Due to the \$9M ceiling constraint, PSAPs are having to parcel out replacement of CADs. If the ceiling increased to \$13M, we would be able to upgrade across the Board at all PSAPs that protect the interests of public safety. Mr. Irei also stated the PSAPs should factor in potential tech upgrades that will exist with NG911 (video and zaxis). Mr. Ramirez stated MLTS (Kari's law) has passed the Senate at the Federal level and is awaiting a calendar date for the House. On the issue of MLTS fees, Mr. Irei stated that voice calling is moving toward all fiber lines

and move away from trunk lines, so we should look at this for the future regarding MLTS legislation. Mr. Tejada stated the Roadmap for location accuracy in moving to NG911 could also be helpful for crafting legislation justification due to technology and costs.

<u>Action Item:</u> Decide whether to move forward with the prepaid bill, determine whether flat fee or percentage, transaction exemption for Mom & Pops, determine remittance schedule and revise the justification sheet and/or bill.

ii. Others

Chair Schutte had attendees share their feedback from the NENA conference held in June. Ms. Racadio stated it was a very informative conference and she had the opportunity to visit with her current vendors and also gain insight on new technology and products that may be beneficial to their PSAP. Mrs. Burns echoed Ms. Racadio's sentiments on the conference being informative and thanked the Committees and the Board for having the opportunity to attend. She visited with WEST and had the opportunity to see how Smart911's new features would impact their operations. She was also able to visit other vendors to see what CAD technology is available and upcoming because HPD will be looking for a new CAD vendor in future. She is also looking forward to see what technology will be on display at the APCO conference in August. Lt. Horio stated it was his first time in attendance and he was overwhelmed at the sheer volume of information presented but he was happy he had the opportunity to attend and is looking forward to future conferences.

b. Technical Committee – Thalia Burns

i. Hawaiian Telcom outage on June 22, 2016

Ms. Eleni Papakiristis prepared a reason for outage report and sent to the ED for distribution to members prior to today's meeting which discussed the 50% traffic impact that HT felt. The format structure not same in past for true 911 outages but this was not a genuine outage as this was a voice traffic outage on HT's voice network. Viper, connectivity to PSAP, 911 platform, mapping and positions – no impact to 911 as a system, only HT voice traffic was compromised. Any landline connectivity calls because traffic compromised would not reach the PSAP but it would not terminate to any user. Signal Transfer Points (STP's) electronically receive connectivity from SS7 links (industry best practice standard voice traffic pieces of telecommunications). The times of the outage vary with actual impact felt by few customers as early as 0300 and actual 50% of traffic compromised around 0600. They believe reason some felt it so early was because there were precursory hiccups in STP before the process went into hung state. The two routes on Oahu go through Punahou and Waipahu and the voice network links are structured so that they can fully

support each load but they are auto load balanced and both share the loads. At the Waipahu STP when people were trying to make calls, there is a process where SS7 links hand off to piece of equipment and it then transfers to the tandem out to terminate. The Process of STP appeared to be up and there were no alarms but when the voice call came in, it went into a hung state. There was no transmission and nothing to cause the call to return and failover to the backup link. If was truly a hard down, we would not have felt any impact because they have a full load balance ready to support statewide traffic. The reason could not identify this problem quickly was due to no alarms or identification. The way they identified the hung process was when they engaged their vendors. This particular piece of equipment is vendor supported and contracted and they identified the process failure due to the sheer size of the hung failure. They were able to reboot the STP and update software and everything went reverted to stable connectivity. From an identification standpoint, the STP's were all recently upgraded to a current software version. The recommendation from vendor following this outage is look at ways for more intelligent alarming and opportunities within the network where they can identify hung processes. They are presently testing network for alarm correlation and need to develop process and build in to alert if this should happen in future. They are fairly confident this type of outage should not happen again. Questions arose about PSAPs and carriers trying to contact their NOC during this outage and she stated a possible solution may be to acquire another cell phone with a dedicated line inside the NOC for PSAPs or carriers to contact NOC directly. Text-to-911 was also not impacted because it did not require a handoff to their voice network. The ED inquired if they were required to file outage report with FCC. Ms. Papakiristis is working with HT regulatory to see if they need to file a formal report but they have 30 days. They did open a preliminary report to the FCC filed a formal report with the PUC. If anyone would like any additional information regarding the outage, she is willing to share this and please contact her directly.

- ii. New Technical Committee member—Lt. Darren Horio (HiPD) Chair Burns stated that Lieutenant Darren Horio has been recommended as a replacement for Sergeant Travis Ing. Effective immediately, Lt. Horio is hereby confirmed as a new member to the Technical Committee.
- iii. Investigative Regulatory Committee update—Davlynn Racadio Chair Racadio stated there were no updates this month.
- iv. FCC update

Chair Burns asked the ED to provide some research on over the top applications. The ED provided a slide that showed two slides from Mr. Timothy May's presentation on 911 apps from the NASNA and NENA conferences. He noted Rapid SOS had a large presence at NENA and NASNA. As far as the FCC was concerned, there are different 911 apps being marketed. The ED reviewed Mr. May's slide on the types of 911 apps and their primary functions and potential FCC concerns. 1) to provide

911 calls and core function is to support direct dialing of 911, bypassing underlying carrier networks (Rapid SOS, Laaser, sirengps). Most 911 app providers make it a point not to charge the PSAPs, with Smart911 as the only exception. 2) apps designed to work around a 911 call and the core function is to bypass 911 call to reach specific PSAPs using 10 digit admin lines 3) panic button apps core function is to provide tracking and panic button support; 911 dump out (WatchMe911) 4) provide access to campus security and campus escort services (LiveSafe and Campus Safe) 5) Apps integrated into PSAPs - charged to PSAP being reimbursed by the Board (Smart911) and core function is the software is installed on PSAP CPE's can accept preregistered 911 caller information. The FCC has many concerns with the 911 apps which they are taking into consideration in developing future policies. Issues are 1) call may fail due to routing to proper PSAPs and the concerns are geographical limitations, reliance on Wi-Fi or wireless broadband internet connection and improper routing – last known GPS 2) call may fail to deliver appropriate information to PSAP and the concerns are difficulty displaying info in existing CAD and potential failure to provide callback number 3)app functionality may delay initiation of 911 call and the concerns are confusing user interfaces and data processing time 4) call may hinder PSAP operations and the concerns are accidental activation, location spoofing, PSAPs may need internet access to retrieve critical information and call takers may require training 5) pay to play and the concerns are that the app may require the consumer to pay for enhanced features (RapidSOS is heading this way) and may require PSAP install feebased functions (Smart911). They will evaluate these concerns and policies may be implemented in the future. The FCC will consider regulatory treatment, functionality, reliability, security issues and standardization and PSAP operations of 911 apps following public safety best practices and standards and what burdens are placed on the PSAPs as a result of these apps. If the FCC elects to institute regulations on these apps, we may have further reports and updates in the future.

v. Text-to-911update

A/C Jakubczak stated their text-to-911 contract has been signed. Chair Burns stated the next action item is to decide when a public announcement will be made. One of the suggestions was to launch at our next Board meeting when all of Counties are present. We would want to give some time to let respective Mayors and leadership know about the launch date and to coordinate a media blitz and public awareness campaign to say text-to-911 is live in PSAPs. Everyone was in agreement that the August 11 date would be the official launch date. Chair Burns asked the ED to coordinate with the Governor's office on behalf of the Board. Mr. Kerry Yoneshige inquired about coordinating tours to the PSAPs after the launch announcement as all of the leadership would be present. Ms. Papakiristis from HT stated she reached out to their communications director Ms. Su Shin and she has offered her assistance with the press release and ensuring we have the right amount of press. She has relationships with Office of the Governor and other leadership and if there is someone spearheading the campaign, she would love to

collaborate with them because it is a collective effort and a win for all involved (the Board, carriers and the PSAPs). Mr. Roy Irei asked Ms. Papakiristis if the carrier paperwork has been sent out and implementation completed. Mr. Riewer confirmed that AT&T has been completed and Mr. Schutte confirmed Verizon has been completed but she will inquire with the other carriers and confirm prior to launch.

<u>Action Item:</u> The ED will draft a press release and coordinate with DAGS and the Office of the Governor and Mayoral Offices for the official launch on behalf of the Board.

<u>Action Item:</u> Ms. Papakiristis will ensure that all HT carrier paperwork has been sent and implementation completed prior to the official announcement.

- vi. Request for approval:
 - 1. APCOConference, August 14-17, 2016, Orlando, FL
 - a. Board member (1) \$3,300
 - b. TechnicalCommitteeMember(1)-\$3,300

This request to attend has been withdrawn.

- c. OahuDIT(1)-\$3,300
- d. HFD (1) \$3,500

This request to attend has been withdrawn.

A/C John Jakubczak motioned to approve this request. The motion was seconded and approved by voice vote by all Committee members present.

Reminder: Chair Burns stated there had been previous discussions about posting conference funding requests to the agenda three months prior, and asked everyone to be diligent in submitting their requests within this time frame because it does make a difference in costs with last minute requests as usually the airfare amounts to a higher figure. The ED will provide advance notification on future agendas for this purpose.

- NASNA Conference, October 25-26, 2016, Kansas City, MO
 - a. Executive Director (1) \$1,800

A/C John Jakubczak motioned to approve this request. The motion was seconded and approved by voice vote by all Technical Committee members present.

APCO Colorado Chapter Conference, Oct. 6-7, 2016, Denver, CO
 a. HPD (2) - \$5,000

Chair Burns noted this particular conference is a best practices conference and consists of different topics than APCO's annual conference that is being held in Orlando in August. Not every state has a chapter conference and HPD selected this particular conference because the topics were of interest to have their staff educated on. A/C Robert Gausepohl motioned to approve

this request. The motion was seconded and approved by voice vote by all Technical Committee members present.

vii. Others

Mr. Ramirez announced that Akimeka and WEST are working on the text to 911 accuracy location service within the PSAPs. They have determined that they are receiving accurate readings from the device and they are receiving a very good radius. What is not coming across is the determination on what exactly is coming over on the lat/long and whether it is the device, cell tower or the centroid. They continue to have dispatchers query on location. He thanked WEST for their help and working with them on that issue. Regarding GIS, he issued a reminder that the lat/long that Akimeka provides in GIS products are specifically designed to work with 911 systems and HT format six. Akimeka's lat/long will go from decimal point out 6 digits only. When receiving anything in Viper with decimal points that exceed six digits on the lat/long, this is not coming from Akimeka GIS data it is something within the Viper tower 911 network. Akimeka configured their data to terminate at six digits because they are synchronizing data with CADs and all other layers they are creating. Ms. Racadio raised the issue regarding payphones that have lat/long data but is it really payphone or a VoIP phone. She sent copies to HT to investigate and she did receive response and will forward results to interested parties. If you enter into the DB query, it will give multiple locations where phone is and eliminates the lat/long. For the majority of ALI records within the State, there are no lat/longs on the ALI records. Ms. Lee stated where is no lat/long provided by any other source, the ALI will populate with GIS data. This format six is not an HT format, it is an ALI format that is used within State. They have had issues with Sandwich Isles payphones, but Steven told her he has seen this across board with BUSN (business) class of service specifically. Maui has a ticket open and they are in the process of scheduling an install very soon to fix the overwriting. Ms. Lee will look into the issue of the additional digits.

- c. Finance Committee-Kiman Wong
 - i. Review of Monthly Cash Flow & Budget Financial Reports

Monthly Receipts - \$840,385 Disbursements - \$2,816,959 Net Receipts - \$1,976,575

Net Bank Balance- \$19,469,440

Unencumbered Bank Balance- \$11,050,205

ii. Request for funding approval:

- 1. APCO Conference, August 14-17, 2016, Orlando, FL
 - a. Board member (1) \$3,300
 - b. TechnicalCommitteeMember(1)-\$3,300

This request to attend has been withdrawn.

- c. OahuDIT(1)-\$3,300
- d. HFD (1) \$3,500

This request to attend has been withdrawn.

Chair Ferreira motioned to approve this request. The motion was seconded and approved by voice vote by all Finance Committee members present.

- 2. NASNA Conference, October 25-26, 2016, Kansas City, MO
 - a. Executive Director (1) \$1,800

Chair Ferreira motioned to approve this request. The motion was seconded and approved by voice vote by all Finance Committee members present.

3. APCO Colorado Chapter Conference, Oct. 6-7, 2016, Denver, CO a. HPD (2) - \$5,000

Chair Ferreira motioned to approve this request. The motion was seconded and approved by voice vote by all Finance Committee members present.

iii. Others

Chair Wong acknowledged there were no other items for discussion.

VI. PSAP Status Updates

a. Kauai-Michael Contrades

Their PSAP has 20 dispatch positions with three grant funded positions. They had 17 positions filled but they recently lost one trainee and are now four personnel short. CAD Implementation continues to be on schedule and they had open house with Spillman on 28-30 June that was very successful. He thanked everyone for supporting the \$2.3M request for the new CAD system. The servers are online and software has been installed and so far so good. David – 911 outage – PSAP notified by 7:00 am by 911 by Steven – at 8:30 they did press release to notify the public of the outage. When the announcement went over the radio stations, everyone started calling 911 to see if was working. There were no complaints from the public that they could not get through. Ms. Taovao provided an update on text-to-911 that they are still continuing to receive accidental or pocket dials, none of which were true emergencies. Regarding the NENA conference, all dispatchers who attended found it an excellent training opportunity. Deputy Chief Contrades found it very beneficial to send dispatchers and will continue in future with Board support. He thanked everyone for the opportunity and funding

to send his personnel to NENA.

b. Oahu HPD - Allan Nagata

Smart911 has a total of 3200 accounts at this time with 97 accounts added last month. Brigham Young University has added the Guardian app and has partnered with Rave Mobile Safety so when students create a profile with the Guardian app, they simultaneously have a Smart911 account because they are from the same company. He welcomed EMS on board because they are working diligently with HT and Smart911 in moving forward. Police Radio Dispatcher Class 45 will commence on 10/10/16. Out of 83 applicants that passed the old testing process, 47 showed up for orientation and they are hopeful to select at least 10 to attend PRD 45. For PRD 46 that will commence in February 2017 this was part of the continuous recruitment process. Out of 425 applicants, 193 passed the performance exam, 79 failed and another 107 were a no show for the exam. Another 203 waiting on list to take the performance exam. Major Nagata extended thanks to SPRD Melodey Lewellen that gave a statement to Star Advertiser. Chief Ferreira stated that two gentlemen that presented at the law enforcement coalition breakfast were excellent. One of the individual named Taylor related a personal experience on the mainland and said he wished he had Smart911. Major will pass the feedback to the gentlemen.

c. Oahu HFD – Gary Lum

B/C Lum was not in attendance and no update was provided on behalf of HFD.

d. Molokai-Dean Rickard

Their PSAP is presently located at MFD and for the last two years they have been searching for a new location to build their new police station that will house EC and bring back dispatchers under their department's control. They identified a seven acre property on Molokai and they are in the process of negotiating. They are hopeful that by the next meeting they are able to say they have purchased the property and then can start the planning and designing process for the new station and PSAP. This looks very promising and will be very beneficial for the community. Ms. Young provided an update on text-to-911. They received their first text on 27 June that was an anonymous text requesting for them to perform a welfare check on a party who had suicidal tendencies. They were able to check on the individual and everything was ok and they were able to receive counseling. On 1 July they had an incident which was a failure of their admin lines. She checked with ENOC and they found out that it was a ShoreTel tail problem. All connectivity was good until it handed off to ShoreTel but 911 was not affected.

Maui – John Jakubczak

Wailuku PSAP is presently down to 21 dispatchers. One person is resigning in next few weeks and three trainees have resigned so they are down to four trainees. Two are in the classroom and two are doing on the job training. With the new fiscal year they have some plans with the PSAP. They are looking at renovations to make more efficient for workers there and also getting secondary site in Kihei together. Regarding the outage on Maui, Ms. Racadio stated she found out Ms. Young had contacted them about the outage. They were trying to call ENOC and

supervisor on duty and could not get through. She called cell phones and then she tried to legally call ENOC and call could not go through. She also called mini computer and line was dead and then disconnected. She kept Tracy on the phone but did not realize Tracy was on family leave. Had the ball rolling so started off rocky but their problem was only on Maui. They could not call off island or to Honolulu. Their phones rang continuously but there was no problem with 911 calls. They were getting updates from Steven regarding cell callers not being able to get through. They did have problems but not as bad as HNL. Rescue tubes -Kauai has had for guite a while but have people in private industry Kaanapali Association installed 28 of them at the beaches. Working with Akimeka on GPS coordinates and having installed into their CAD layers. To get into their MapFlex is something she is working on getting price quotes on – just got one from WEST and HT to create a layer for them. It is something they are thinking about doing once they get quotes. The Kihei Wailea Rotary Association purchased rescue tubes and working with county on MOU so we can place them on County and State beaches. It is just another tool that can be used by people on the beach to possibly assist someone in distress until rescue units arrive. They are on Kauai and have only had one incident of theft. Ocean Safety is being absorbed by Fire on Maui.

e. Hawaii-Paul Ferreira

Lt. Horio announced that their Asst. Chief Derek Pachecho has sadly passed away and services will be held next week. They are presently seven dispatchers short. They started with 24 and they are hoping to hire four shortly. They are in the midst of the Spillman implementation for their new CAD and RMS systems with server installation commencing this week. They are in meetings this week training on the various screens. He also thanked the Committees and the Board for the opportunity to attend the NENA conference. He attended basic GIS and NG911 sessions and is starting to understand acronyms. He attended hiring and retention classes and was surprised to learn that 75% of people in the class said they no longer use the civil service exam for recruitment. They are still receiving many non-emergency texts. They received one text last month that was a real request for help. It was a domestic situation which was in conjunction with a phone call from someone else in the household. Regarding the outage on June 22, they received no texts on that date, so people were not using the system as a backup.

VII. Items for Discussion, Consideration and Action

a. 911 Timeline update

i. Chair Ferreira requested that the PSAPs report any timeline updates to be posted on the 911 website to the Executive Director.

b. Others

i. Chair Ferreira acknowledged that there were no other items for discussion.

VIII. Announcements

a. Meetingdates (10:00am-12:00noon):

- i. Thursday, September 15, 2016 (Combined meeting)(date change)
- ii. Thursday, October 13, 2016 (Combined meeting)
- iii. Thursday, November 10, 2016 (Combined meeting)
- iv. Thursday, December 8, 2016 (Combined meeting)

b. FirstNet Update – Victoria Garcia

Organizationally from the TAG's perspective and in her role as SWIC, part of job beyond FirstNet is to try and educate stakeholders and executive level synergy between communications and responders on a day to day basis. 911 is part of that and this is becoming clearer nationally. There has to be an understanding and mutuality. Regarding the National Governor's Association Policy Academy on Interoperable Communications, Hawaii is one of five states that was selected to participate. Those mini funds are allowing us to try to set up governance over public safety communications. The biggest struggle is having executive level people understand the importance of mutuality and synergy. They need to understand if infrastructure capabilities go down or emergency responders are flooded with calls, cannot respond to bad things. Individuals at the executive level make decisions about personnel, monetary resources, transitions (no one being trained in radio anymore and radio going towards IP) in an attempt to get executives from Counties and State government to understand the importance of sustaining public safety communications. They need to understand what infrastructure looks like now and it is important that Board's voice is heard during these meetings. Chief Ferreira was invited to meeting next week but the ED will attend as the Board's representative. Mayors or Chiefs of Staff and Directors from State Agencies are attending as the meeting is limited. This initiative is coming from the Governor. This meeting is an attempt to set up governance on State and County level and how to formulate a plan and look at strategy for whole state that includes consensus. Her goal is to get seasoned people attending these meetings. Many people on the Board have 20+ years of experience in communications. She wants the executives to hear from these individuals on what may happen if radio communications go down. They will hold additional follow up meetings and will try and include Federal partners. The FCC is involved and they mentioned the 911 group and how robust it has been. They want to have communications involved including FEMA, DHS OEC and to come out and work with us or conference call and can see where synergies in an attempt to educate constituents better about our money and resources. Daylynn has been a part of her monthly SWIC meetings which primarily consist of communications, but now more administrators are coming. The meetings are every other month and trying to educate as first part and have technological individuals come in and explain what is going on. They do not want vendors to come in because if they do procurement in the future they do not want the appearance of impropriety. Regarding FirstNet, they've completed their RFP and it is closed. They are considering partners for delivery of service. There are a lot of action items and trying to develop policies going forward. For this month's SCIP meeting she has asked them to come in and ask for update of what they are doing with policy and state plans. She would like to extend invitations to Board members because normally limited to City and County and

State if is ok with the TAG and can have more in-depth dialogue. Perhaps this can take place in September. The Fusion Center is still available and just let her know when we would like to hold a meeting there. The Fusion Center director did resign and they are selecting a new person so she will let us know when that happens. The TAG is thrilled that he has come to understand the partnerships that the Board has and she thanks for the opportunity to attend the meetings.

c. Others

Chair Ferreira acknowledged that there were no other items for discussion.

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

 Chair Ferreira asked if there was anyone who wishes to comment on issues not on the agenda for consideration for the agenda at the next Committee meeting. No one came forward.

X. Adjournment

 Mrs. Thalia Burns motioned to adjourn the meeting. The motion was seconded and approved by voice vote by all Committee members present. The meeting was adjourned at 11:31 am.

	Budaet	Analysis		
	3 -3	Actuals	Annual	% of Budget
FY 2016-17	JULY	1ST MONTH	Budget	Expended
Receipts:				
Enhanced 911 Surcharge Collection		804,844	9,600,000	8%
Interest Income		3,501	36,000	10%
Receipts	-	808,344	9,636,000	8%
Disbursements:				
New & Emerging Tech. Training			(222,880)	0%
Non-Recurring Expenses			(3,096,200)	0%
Recurring Expenses:				
Administration		(9,654)	(973,510)	1%
Maintenance			(3,112,974)	0%
Telecommunications			(2,584,983)	0%
Other			(7,600)	0%
Disbursements	-	(9,654)	(9,998,147)	0%
Net Receipts/(Disbursements)	-	798,691	(362,147)	
	Cash Flo	w Analysis		
Net Receipts/(Disbursements)	-	798,691		
Encumbrance Paydowns:				Encumb. Bal.
FY 2011 (Kauai)				115,648
FY 2014		(494)		1,118,066
FY 2015				2,318,763
FY 2016		(1,026,759)		4,426,298
Net Encumbrance Adds/(Paydown)	-	(1,027,252)		
Net Cash Inflow/(Outflow)	-	(228,561)		
Bank Balance Analysis:				
ADD: July 1, 2016 Beginning Balance		19,469,440		
Net Bank Balance		19,240,879		
Outstanding Ecumb/Accruals		(7,978,774)		
Unencumbered Cash Balance		11,262,104		

MONTH OF JULY 2016	Kauai PSAP	Maui PSAP	Haw aii PSAP	Oahu PSAP	ADMIN	TOTAL
Total RECEIPTS:	-	-		ı	808,344	808,344
DISBURSEM ENTS:						
6200 New & Emerg. Tech Train.						
6203 APCO Emerg. Tech Forum						-
6206 Smart911 Conference						-
6214 Nena Conference						-
Total 6200 New & Emerg. Tech Train.	-	-		-	-	•
6400 RECURRING EXPENSES						
6401 ADMINISTRATION						
6401.01 Exec Dir. Services	-	-		-	9,655	9,655
6401.08 Board Member Travel	-	-		-		-
6401.09 DB&F Assessments						
6401.0101 DB&F Admin. Assess	-	-		-		-
6401.0102 DB&F Rev Assessment	-	-		-		-
Total 6401.09 DB&F Assessments		1		ı	-	ı
6401.11 Miscellaneous Expense	-	-		-		-
6401.15 WSP Cost Recovery						
6401.0101 Sprint/Nextel	-	-		•		•
Total 6401.15 WSP Cost Recovery	-	-		-	-	-
6402.21 Cell Phone Charges	-	-		-		-
6402.22 Office Supplies	-	-		-		-
Total 6401 ADMINISTRATION	-	-		-	9,655	9,655
6402 MAINTENANCE						
6402.07 0011 9-1-1MSAG Maint.	-				-	-
Total 6402 MAINTENANCE	-	-		-	-	-
6403 Other RECURRING						
6403.01 Telcom Charges						
6304.0118 KPD Viper					-	-
6403.0101 Alt. PSAP 9-1-1 Del					-	-
6403.0102 Long Distance					-	-
6403.0109 Telcom Trunk					-	-
6403.0112 HPD CML Viper-Kapolei					-	-
Total 6403.01 Telcom Charges	-	-		-	-	-
Total 6403 Other RECURRING	-	-		-	-	-
Total 6400 RECURRING EXPENSES	-	-		-	9,655	9,655
Total Expense	-	-		-	9,655	9,655
Net RECEIPTS/(DISBURSEMENTS)	_	_		_	798,690	798,690

ENCUMBRANCES	June 30, 2016
Total FY 2011 CAD Upgrade: Kauai PSAP	115,648
CAD Upgrade- Hawaii PSAP	1,102,944
AG Legal Expenses for IRC - ADMIN	15,122
Total FY 2014 Encumbrances	1,118,066
CAD Upgrade - Hawaii PSAP	2,300,000
HPD Smart911 S/W - HPD	14,280
Imagery License - Hawaii PSAP	4,383
Kauai ADC	100
Total FY 2015 Encumbrances	2,318,763
Total	3,552,477

FY 2016 Encumbrances	Oahu PSAP	Maui PSAP	Kauai PSAP	Hawaii PSAP	ADMIN	Total
CAD Upgrade	-	40,492.00	2,347,500.00	-	-	2,387,992.00
Exec Director Services	-	-				-
Alternate Dispatch Center	-	-				-
DB&F Admin Services	-	-				-
DB&F Revenue Assessment	-	-				-
Board member travel	-	-	-	-	3,120.99	3,120.99
NENA Conference	10,500.00	10,500.00		7,000.00	-	28,000.00
Smart911 Conference	2,981.72	-	-	-	-	2,981.72
APCO Conference West (Portland, OR)	-	-		-	-	-
HxGN Live Hexagon Conference	-	18,875.00	-	-	-	18,875.00
Emergency Svcs. Dispatcher CTO Train.	-	970.00	-	-	-	970.00
WSP Recovery-Sprint	-	-	-	-		-
MSAG & GIS			166,744.20	20,673.00	-	187,417.20
Integraph Maintenance	-	-	-	4,604.00	-	4,604.00
Public Education	-	-	-	-	1,279.00	1,279.00
Cell Phone Charges	-	-	-	-		-
Office Supplies	-	-	-	-		-
Power Phone	-	3,115.00	-	-	-	3,115.00
HawTelcom Long Distance	-	224.14	29.90	28.90	-	282.94
HawTelcom CML Positions Trunk Charges	-		18,565.85	25,528.66	-	44,094.51
HawTelcom Viper HPD	22,426.76	-	-	-	-	22,426.76
HawTelcom Viper OSL	2,973.00	-	-	-	-	2,973.00
HawTelcom Viper Maui	-	1,443,711.40	-	-	-	1,443,711.40
HawTelcom Viper KPD	-	-	9,746.60	-	-	9,746.60
So. Maui Buildout	-	32,907.00	-	-	-	32,907.00
HPD Electrical Consultant	20,000.00	-	-	-	-	20,000.00
HPD Computer & Related Equipment	36,541.50	-	-	-	-	36,541.50
HawTelcom Text-To-911	98,559.00	29,000.00	26,900.00	20,800.00	-	175,259.00
Imagery License Agreement	-	-	_	_	-	-
Total FY 2016 Encumbrances	193,981.98	1,579,794.54	2,569,486.55	78,634.56	4,399.99	4,426,297.62

FY 2016 STRATEGIC BUDGET PLAN	HAWAII PSAP	OAHU PSAP	MAUI PSAP	KAUAI PSAP	ADMIN	New & Emerging Technology Training	TOTAL	Board Approval Date
Approved FY 2017 Strategic Budget Plan	1,641,765	3,835,050	2,553,548	763,794	973,510	222,880	9,990,547	6/9/2016
APCO Conf. Aug. 14-17, 2016 (Orlando)		3,300			3,300		6,600	7/14/2016
NASNA Conf, Oct 25-26, 2016 (Kansas City)					1,800		1,800	7/14/2016
APCO Colorado Chapter Conference, Oct. 6- 7. 2016, Denver, CO		5,000			5,000		10,000	7/14/2016
							-	
Totals	1,641,765	3,843,350	2,553,548	763,794	983,610	222,880	10,008,947	

Checks that were paid with only one signatory

Month	Check #		PAYE	E		Amount	Reason			
July	2326	Director o	f Finance,	State of Ha	awaii	\$ 7,395.37	Payroll			
July	2329	Director o	f Finance,	State of Ha	awaii	\$ 385.41	Pcard Off	ice Supplies	5	
July	2333	Director o	f Finance,	State of Ha	awaii	\$ 7,586.69	Payroll			
Total						\$15,367.47				

July 1, 2016 - July 31, 2016



July 1, 2016 – July 31, 2016

AKIMEKA | HIGH PRIORITY, HIGH IMPACT.

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July 1, 2016 – July 31, 2016

1. PSAP OPERATIONS

9-1-1 CALL VOLUME HAWAII COUNTY PSAPS – JULY 2016

(Source: West Safety Services (Intrado) Viper system

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

	9-1-1 Call Volume																
HAWAII COUNTY PSAPs		Wire	eline	Wireless			VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls		
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	No. of Other Calls	% of Total Calls
JULY	17,869	3,330	18.64%	12,437	69.60%	40.69%	59.31%	737	4.12%	32	0.18%	0	0.00%	1,333	7.46%	0	0.00%

CALL VOLUME HAWAII COUNTY PSAP NOTES:

The percentage of Wireless Phase 2 calls (59.31%) has increased from the number of Wireless Phase 1 calls (40.69%) in July 2016.

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

9-1-1 CALL VOLUME - CALENDAR YEAR 2016

9-1-1 Call Volume																	
HAW	All COUNTY PSAPs	Wireline			Wireless			VOIP		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	No. of Other Calls	% of Total Calls
JAN	17,958	3,445	19.18%	12,221	68.05%	47.61%	52.39%	812	4.52%	27	0.15%	0	0.00%	1,453	8.09%	0	0.00%
FEB	16,976	3,046	17.94%	11,851	69.81%	48.47%	51.53%	707	4.16%	18	0.11%	0	0.00%	1,354	7.98%	0	0.00%
MAR	18,750	3,605	19.23%	12,790	68.21%	47.43%	52.57%	822	4.38%	12	0.06%	0	0.00%	1,521	8.11%	0	0.49%
APR	17,112	3,074	17.96%	12,026	70.28%	46.50%	53.50%	707	4.13%	21	0.12%	0	6.24%	1,284	7.50%	0	2.30%
MAY	17,343	3,048	17.57%	12,121	69.89%	45.67%	54.33%	798	4.60%	17	0.10%	0	0.05%	1,359	7.84%	0	2.30%
JUNE	17,176	3,148	18.33%	11,641	67.77%	45.00%	55.00%	755	4.40%	26	0.15%	0	0.00%	1,606	9.35%	0	0.00%
JULY	17,869	3,330	18.64%	12,437	69.60%	40.69%	59.31%	737	4.12%	32	0.18%	0	0.00%	1,333	7.46%	0	0.00%
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	123,184	22,696		85,087				5,338		153		0		9,910		0	
MON AVG	17,598	3,242	18.41%	12,155	69.09%	45.91%	54.09%	763	4.33%	22	0.12%	0	0.90%	1,416	8.05%	0	0.73%

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Hawaii County July 2016

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

				9-1-1 (Call Volui	me by Ag	ency				
2016		Hawaii	Police De	partment	Hawaii Fire Department						
2010	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls	
July	14,136	79.11%	0	1,296	0	2,400	13.43%	0	37	0	

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

		9-1-1 Call Volume by Agency								
2016	Hawaii Police Department				Hawaii Fire Department					
2016	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls	Number of Total Calls Received	% of Total Calls	Number of Admin Calls	Number of Abandoned Dropped Calls	Number of Other Calls
January	14,138	78.73%	0	1,427	0	2,367	13.18%	0	26	0
February	13,259	78.10%	0	1,331	0	2,363	13.92%	0	23	0
March	15,966	85.15%	0	1,461	0	2,784	14.85%	0	60	0
April	13,624	79.62%	0	1,243	0	2,204	12.88%	0	41	0
May	13,866	79.95%	0	1,333	0	2,118	12.21%	0	26	0
June	13,526	78.75%	0	1,576	0	2,044	11.90%	0	30	0
July	14,136	79.11%	0	1,296	0	2,400	13.43%	0	37	0
August										
September										
October										
November										
December										
YTD	98,515		0	9,667	0	16,280		0	243	0
MON AVG	14,074	79.92%	0	1,381	0	2,326	13.20%	0	35	0

PSAP OPERATION NOTES:

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

Hawaii County July 2016

July 1, 2016 – July 31, 2016

TEXT TO 911 - CURRENT MONTH - JULY 2016

NOTE:

- Hawaii County deployed a soft launch of Text to 911 on February 1, 2016.
- Sprint PCS conducted a Text to 911 test with the Hawaii Police 911 PSAP on February 1, 2016. During the test, the location received at the PSAP from the 911 texting device was a "Coarse Location" (centroid of a sector coverage area) plot, several miles away from the texter's actual location.
 - 911 Text message was transferred to the Hawaii Fire Department successfully as part of the test agenda. Additional Text to 911 tests were also performed internally with personal telephones of the other Wireless Service Providers. The results showed that T-Mobile's location of the Texter was similar to Sprint's "Coarse Location". The AT&T and Verizon tests revealed that the location of the texter sent to the PSAP was utilizing a Location Based Service (LBS) that plotted within 50 meters of the texter's location.
- Although there is a "Text to 911" plot on the MapFlex, the location of the plot is not reliable in some cases and pretty
 accurate in others. There are no indication on the Ali Screen to inform the Dispatcher on location accuracy. Text to 911
 Dispatchers should use their skills to ascertain the exact location of the emergency response.
- During the month of June, it was identified that the Text to 9-1-1 icon was missing on the MapFlex System when receiving Text to 9-1-1. Hawaiian Telcom and West Safety Solutions will look into the trouble and will schedule a statewide coordination call with all the PSAPs during early August 2016 after their investigation.

TEXT TO 911 Hawaii County PSAPs 2016				
Month	Received at Police	Received at Fire		
January	39	20		
February	26	8		
March	31	5		
April	22	2		
May	13	3		
June	22	6		
July	22	1		
August				
September				
October				
November				
December				
YTD	175	45		
Monthly Avg.	25.00	6.43		

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

July 1, 2016 – July 31, 2016

WIRELESS PSAP TESTING – JULY 2016

	HAWAII COUNTY - JULY 2016					
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:
07/07/16	Verizon	5	15	Hawaii PSAP	Pass	2 Testers
07/12/16	AT&T	1	1	Hawaii PSAP	Pass	SoftCell

NOTES:

• There were three (3) scheduled Wireless 911 Tests for the month of July 2016.

FOR YOUR INFORMATION

FYI For Your Information MLTS (Multi Line Telephone System)

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

PRIMARY	MLTS/PBX 911 CALLS RECEIVED			
PSAPS*	July 2016	YEAR TO DATE 2016		
Oahu	4,507	25,262		
Hawaii	82	477		
Maui	114	690		
Molokai	0	1		
Kauai	25	154		
Total**	4,728	26,584		

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

Hawaii County

July 2016

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

July 1, 2016 – July 31, 2016

FOR YOUR INFORMATION

FYI	For Your Information
911 Calls Rece	eived From Payphones

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

PSAPS July 2016 Oahu 3,172	one
Oahu 3,172	
,	
Hawaii 453	
Maui 410	
Molokai 7	
Kauai 160	
Total** 4,202	

*PSAP totals does not include Military 911 calls.

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

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July 1, 2016 – July 31, 2016

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - JULY 2016

HAWAII	9-1-1 TRANSACTIONS								
COUNTY		MSAG	А	LI Submitte	ed	Discr	Open ALI epancy Re		Customer
2016	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Addresses Affected
JANUARY	293	22	262	8	1	1,924	1	1	282
FEBRUARY	270	41	228	1	0	2,154	1	0	425
MARCH	236	27	207	1	1	2,259	1	0	302
APRIL	336	129	201	6	0	1,965	2	0	945
MAY	218	134	79	5	0	1,504	2	0	613
JUNE	160	29	129	2	0	630	2	0	2,162
JULY	278	60	215	3	0	358	3	0	1,550
AUGUST									
SEPTEMBER									
OCTOBER									_
NOVEMBER									
DECEMBER									
TOTAL YTD	1,791	442	1,321	26	2				6,279
AVG PER MONTH	256	63	189	4	0				897

Definitions

- (A) Master Street Address Guide Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (B) **T**elephone **N**umber **C**hange **R**equest Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 299 attached to them which indicates the need for validation.
- (C) Automatic Location Information Discrepancy Record Represents an address discrepancy discovered during a live 9-1-1 call, from a landline. These record corrections are treated with a higher priority and should be processed within 48 hours as a general guideline.
- (D) Voice over Internet Protocol Discrepancy Record Represents an address discrepancy discovered during a live 9-1-1 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.



July 1, 2016 – July 31, 2016

MSAG CURRENT MONTH NOTES:

A total of **278** MSAG transactions were processed in 9-1-1 Net during the month of July 2016. **60** 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 1,550 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

215 Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 299 clean-up effort. ESN 299 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record. Three (3) ALI DRs were submitted as the result of 9-1-1 calls from businesses in Hilo and Kailua Kona, and a residence in Ocean View. Hawaii County Fire submitted this request to Akimeka to update the customer information and the discrepancy was corrected in 9-1-1 Net.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are 358 Open TN CR Transactions as of July 31, 2016.
- Refer to chart in the next section "TNCR Current Status"

355 Open TN CR transactions are a direct result of the ESN 299 clean-up and are awaiting approval from Hawaiian Telcom, Inc. 3 Open TN CR transactions are a result of the Dispatchable Location project submitted in September. (Refer to the "Dispatchable Location" chart below) Once a telephone number is submitted to West for correction, it is verified against HT records and/or by the customer. Intrado's internal process requires calling each telephone customer individually for verification to update an address in the 9-1-1 database. West Safety Services opened over 900 TN CR records for Hawaii County during the month of June 2016. Many of these records required more research by Akimeka in order to find their MSAG valid addresses, after West provided information available in HT records or driving directions per HT customer. Akimeka continues to monitor and track the progress of the remaining 358 Referred records.

There are three (3) Open ALI-DRs as of July 31, 2016

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

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Hawaii County

July 2016

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TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS – JUNE 2016

NOTE:

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

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)				
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS
HAWAII	358	129	172	57

STATUS

TOTAL TNCRs SUBMITTED - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.

PENDING STATUS - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and are pending investigation whether the request is valid or invalid, and/or whether the request requires additional information to validate.

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

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

Hawaii County July 2016



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DISPATCHABLE LOCATION - STATUS AS OF - JULY 2016

NARRATIVE:

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

During the month of September 2015, Akimeka started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically the **Kings Shops at 690250 Waikoloa Beach Dr., Waikoloa**. The "Dispatchable Location" data is entered into the "Driving Directions" field in the 9-1-1 Net system, and will display on the Viper Power 911 ALI Screen in the "Exact" field should a 911 call be received from that telephone number. Seventy-five (75) Telephone Number Change Requests (TN CR) transactions were processed as a result of the Dispatchable Location Project. These transactions have not been updated in 9-1-1 Net pending research by Hawaiian Tel and West Safety Services (Intrado) for providing an additional 60 character field in the ALI data stream to accommodate Dispatchable Location information as an alternative to using the "Driving Directions" field. Until this field is created, no further Dispatchable Location transactions will be submitted. However, present observations indicate that previous transactions that were submitted in 2015 are currently being processed.

Dispatchable Location					
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Submitted	Number of Transactions Processed**	
KINGS SHOPS	CARRY OVER	2015	75	0	
		Jan- June	0	70	
KINGS SHOPS	690250 WAIKOLOA BEACH DR, WAIKOLOA	July	100	102	
MAUNA LANI SHOPS	681330 MAUNA LANI DR, KAMUELA	July	25	25	
		Total	200	197	

Definition

Dispatchable Location is defined in the FCC 15-9 Docket as the verified or corroborated street address of the calling party plus additional information such as floor, suite, apartment or similar information that may be needed to adequately identify the location of the calling party.

TNCR* Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location in the Exact field on the ALI Screen.

Processed ** may include inactive telephone numbers that were removed from the ALI Database.

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CHARTER COMMUNICATIONS (TIME WARNER) VOIP DATABASE TNCR

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

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

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

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

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3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JULY 2016

MAPPING LAYERS UPDATED (PART I)

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

		HAV	VAII COUNTY
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
	CRITICAL 9-1-1	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
		(Listed	d Alphabetically)
	7/26/2016		Added two (2) address points (823130 Lilikoi Ln and 881548 Pikake Ave) in Captain Cook.
	7/26/2016		Added one (1) address point (550471 Hoea Rd) in Hawi.
	7/26/2016		Added fifteen (15) address points in Hilo.
	7/26/2016		Added four (4) address points in Holualoa.
	7/26/2016		Added one (1) address point (845023 Hawaii Belt Rd) in Honaunau.
	7/26/2016		Added two (2) address points (474633 Honokaa Waipio Rd C and 450643 Mauna Loa St) in Honokaa.
	7/26/2016		Added twenty-six (26) address points in Kailua Kona.
	7/26/2016		Added four (4) address points in Kamuela.
	7/26/2016		Added four (4) address points in Kapaau.
	7/26/2016		Added thirteen (13) address points in Keaau.
	7/26/2016		Added one (1) address point (816363 Keopuka PI) in Kealakekua.
	7/26/2016		Added eight (8) address points in Kurtistown.
	7/26/2016		Added one (1) address point (351805 Mauka Cross Rd) in Laupahoehoe.
	7/26/2016		Added eighteen (18) address points in Mountain View.
	7/26/2016		Added eight (8) address points in Ocean View.
Address Points	7/26/2016		Added thirteen (13) address points in Pahoa.
	7/26/2016		Added two (2) address points (272600 Hawaii Belt Rd and 282892 Kapehu Pl) in Pepeekeo.
	7/26/2016		Added fifteen (15) address points in Volcano.
	7/26/2016		Added one (1) address point (683609 Eleele St) in Waikoloa.
	7/26/2016		Completed monthly update on address points.
	7/25/2016		Corrected address to one (1) address point (253545 Pakelekia St) in Hilo.
	7/25/2016		Corrected address to two (2) address points (174590 South Rd and 174590 South Rd A) in Kurtistown.
	7/25/2016		Corrected address to one (1) address point (150944 Alaneo Rd) in Pahoa.
	7/25/2016		Corrected address to one (1) address point (112398 Kaleponi Dr) in Volcano.
		07/19/16	
	7/19/2016		Corrected address to one (1) address point (756081 Alii Dr A) in Kailua Kona.
	7/19/2016		Spatially corrected one (1) address point (756081 Alii Dr A) in Kailua Kona.
	7/19/2016		Added forty-one (41) address points in Kailua Kona.
	7/18/2016		Added three (3) address points (826065 Mamalahoa Hwy B and C, and 835750 Rabbit Hill Rd) in Captain Cook.

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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.

		HAV	VAII COUNTY
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
	CRITICAL 9-1-1	PUBLIC SAFET	TY LAYERS FOR DISPATCH & RESPONSE
		(Liste	d Alphabetically)
	7/18/2016		Corrected address to one (1) address point (826065 Mamalahoa Hwy A) in Captain Cook.
	7/18/2016		Spatially corrected six (6) address points in Captain Cook.
	7/18/2016		Corrected location name to one (1) address point (681025 N Kaniku Dr) in Kamuela.
	7/18/2016		Spatially corrected one (1) address point (681025 N Kaniku Dr) in Kamuela.
	7/18/2016		Added one hundred thirty (130) address points in Kamuela.
	7/15/2016		Corrected address to three (3) address points (1054 Laulima Way, 119 and 121 Wai Aiai Pl) in Hilo.
	7/15/2016		Corrected address to one (1) address point (450572 Pakalana St) in Honokaa.
	7/15/2016		Corrected address to two (2) address points (113739 Alaohia St A and B) in Volcano.
	7/14/2016		Corrected address to five (5) address points in Paauilo.
	7/14/2016		Spatially corrected twenty-two (22) address points in Paauilo.
Address Points	7/12/2016		Spatially corrected eighty-eight (88) address points in Keaau.
Address Polits	7/11/2016		Spatially corrected one hundred sixty-one (161) address points in Keaau.
	7/8/2016		Spatially corrected one hundred twelve (112) address points in Keaau.
	7/7/2016		Spatially corrected one hundred twenty-one (121) address points in Keaau.
	7/7/2016		Corrected location name to one (1) address point (681839 Kamakoa Dr) in Waikoloa.
		07/06/16	
	7/6/2016		Corrected location name to two (2) address points (681730 Hooko St and 681754 Melia St) in Waikoloa.
	7/6/2016		Spatially corrected one (1) address point (681754 Melia St) in Waikoloa.
	7/5/2016		Added two (2) address points (681820 Pua Melia St B and C) in Waikoloa.
	7/5/2016		Corrected location name to one (1) address point (681820 Pua Melia St A) in Waikoloa.
	7/5/2016		Corrected address to one (1) address point (681820 Pua Melia St A) in Waikoloa.
	7/5/2016		Spatially corrected one (1) address point (681820 Pua Melia St A) in Waikoloa.
Airports			
Bridges			
Building Footprints			
Bus Stops			



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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.

	HAWAII COUNTY						
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks				
	CRITICAL 9-1-1		Y LAYERS FOR DISPATCH & RESPONSE d Alphabetically)				
Churches							
Coastal Names							
Coastline							
Common Places							
Correctional Facilities							
Emergency Callboxes							
Emergency Operation Centers							
Emergency Shelters							
ESZ/ESN							
Fire Beats							
Fire Districts							
Fire Response Areas							
Fire Stations							
Food & Beverage							
Gas Stations							
Gate Codes							
Government Buildings							
Harbors							
Helipads							
Hiking Trails							
Hospitals							
Hydrants							
Hyrdology Layers							
Incident Response Areas							
Lodging							
Major Roads							
Medic Beats							
Medic Districts							
Medic Response Areas							
Medic Stations							
Medical Facilities							
Milepost Markers							
MSAG Communities							

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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.

	HAWAII COUNTY						
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks				
	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE						
	1	(Liste	d Alphabetically)				
Net Junctions							
Ocean Rescue Boundaries							
Ocean Safety							
Parcels							
Parks							
Parks Polygon							
		07/19/16					
		07/06/16					
Points of Interest	7/1/2016		Corrected address to three (3) points of interest (Laupahoehoe Point Gym, Papaaloa Gym and Playground, and Papaaloa Gym Shelter) in Laupahoehoe.				
	7/1/2016		Spatially corrected twenty-three (23) points of interest in Laupahoehoe.				
	7/1/2016		Corrected address to five (5) points of interest in Pahala.				
	7/1/2016		Spatially corrected twenty (20) points of interest in Pahala.				
Police Beats							
Police Districts							
Police Response Areas							
Police Stations							
Post Offices							
Schools							
	7/29/2016		Spatially corrected nine (9) streets in Kailua Kona.				
	7/28/2016		Spatially corrected thirty-eight (38) street centerlines in Kailua Kona.				
	7/26/2016		Corrected range to one (1) segment of Wai Aiai PI in Hilo.				
	7/26/2016		Flipped one (1) segment of Wai Aiai Pl in Hilo.				
	7/26/2016		Completed monthly update on street centerlines.				
	7/25/2016		Added two (2) segments of Kapiolani St in Hilo.				
	7/25/2016		Corrected range to eight (8) street segments in Hilo.				
Street Centerlines	7/25/2016		Split one (1) segment of Daniel K Inouye Hwy in Hilo.				
	7/25/2016		Spatially corrected four (4) street segments in Kailua Kona.				
	7/25/2016		Corrected range to one (1) segment of Daniel K Inouye Hwy in Paauilo.				
	7/25/2016		Corrected range to two (2) segments of Alaneo Rd in Hilo.				
	7/22/2016		Corrected street name to seventeen (17) street segments in Kamuela.				
	7/22/2016		Split one (1) segment of Road A in Kamuela.				
	7/22/2016		Split one (1) segment of Road B in Kamuela.				
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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.

	HAWAII COUNTY						
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks				
	CRITICAL 9-1-1		Y LAYERS FOR DISPATCH & RESPONSE				
		(Liste	d Alphabetically)				
	7/15/2016		Added one (1) street (Wai Aiai PI) in Hilo.				
	7/15/2016		Split one (1) segment of Manulele St in Hilo.				
	7/15/2016		Corrected range to one (1) segment of Laulima Way in Hilo.				
	7/15/2016		Spatially corrected one (1) segment of Laulima Way in Hilo.				
	7/15/2016		Deleted two (2) segments of Laulima Way in Hilo.				
	7/15/2016		Corrected name to two (2) segments of Kauhola Rd in Kapaau.				
	7/13/2016		Corrected range to three (3) street segments (two segments of Hawaii Belt Rd				
			and one segment of Kinoulu St) in Kailua Kona.				
	7/13/2016		Split one (1) segment of Hawaii Belt Rd in Kailua Kona.				
Street Centerlines	7/13/2016		Spatially corrected twenty-four (24) street segments in Kailua Kona.				
Street Gentermies	7/13/2016		Deleted one (1) segment of Kinoulu St in Kailua Kona.				
	7/7/2016		Added eight (8) streets in Waikoloa.				
	7/7/2016		Split two (2) segments of Kekumu PI in Waikoloa.				
	7/7/2016		Spatially corrected seven (7) streets in Waikoloa.				
		07/06/16					
	7/6/2016		Added eighteen (18) streets in Waikoloa.				
	7/6/2016		Split eight (8) streets in Waikoloa.				
	7/6/2016		Spatially corrected three (3) segments of Melia St in Waikoloa.				
	7/5/2016		Added thirty-seven (37) streets in Waikoloa.				
	7/5/2016		Split nine (9) streets in Waikoloa.				
Subdivisions							
Tow Jurisdictions							
Tsunami Evacuation Zones							
Tsunami Heights							
Waste Water Plants							
	7/20/2016		Per VZW CRS				
WSP Cell Sectors		07/19/16					
	7/11/2016		Per VZW CRS				
		07/06/16					
	7/20/2016		Per VZW CRS				
		07/19/16					
WSP Cell Towers	7/11/2016		Per VZW CRS				
		07/06/16					
	ı		1				

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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
7/19/2016	MapFlex deliverable which included the following updated layers: Address Points, Cell
	Sectors, Cell Towers, Common Places and Street Centerlines.
7/6/2016	MapFlex deliverable which included the following updated layers: Address Points, Cell
	Sectors, Cell Towers, Common Places and Street Centerlines.

ADDRESS POINTS AND STREET CENTERLINES UPDATE COMPARISON

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

The Address Points and Street Centerlines layer comparative analysis was completed on the updates received from the Hawai'i County Planning Department on **July 26, 2016**. Results are as follows:

HAWAII COUNTY	Address Points Layer	Street Centerlines Layer
New Addresses Added	139	
Addresses Removed	0	
Address Street Name Changes	3	
Address Street Number Changes	4	
New Street Segments Added		2
Street Segments Removed		0
Street Segment Range Changes		7
Street Segment Name Changes		0

NOTE:

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



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POLICE BEAT REVIEW

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

- To better service the public safety needs of Hawaii County, Akimeka compared the written descriptions of the Hawaii Police
 Beats as recorded in Document Number GO 204 with an effective date of June 27, 2011, and made corrections to the Police
 Beats GIS layer where needed. In addition, Akimeka has been documenting any recommendations for document description
 updates.
 - a. Akimeka reviewed the written descriptions for the Hawaii Police Beats and cross referenced it to the Police Beats GIS layer. The boundaries to all seventy-six police beats as well as the area falling within the jurisdiction of the Hawaii Volcanoes National Park were edited for greater accuracy.
 - b. Akimeka has documented all potential discrepancies between the written descriptions and GIS layer for a thorough review upon completion. Akimeka has also produced several maps to better illustrate some of the larger discrepancies.
 - c. Upon completion of the GIS editing procedures, Akimeka will participate in a Police Beat review process with the Hawaii Police Department to further refine the boundaries to the Police Beats GIS layer and the written descriptions for those boundaries. This process will finalize the synchronization between the GIS layer and the written descriptions; provide additional precision and accuracy to both the GIS layer and written descriptions; and eliminate all discrepancies so that confusion and/or misinterpretation of those boundaries do not hinder public safety needs.
 - d. During the month of February 2016, Akimeka corrected the boundaries to the GIS layers that are associated with the Police Beats so that proper alignment would occur between the associated layers. This included correcting boundaries to six ESNs and three Police Districts. Those corrected layers were delivered to MapFlex and made available to the dispatchers on February 17th.
 - e. During the month of March 2016, Akimeka corrected the boundaries to the Police Response Areas so they would be aligned properly with the Police Beats and be topologically error free. This included correcting the boundaries to all seventy-six police response areas as well as the area falling within the jurisdiction of the Hawaii Volcanoes National Park.
 - f. During the month of July 2016, Akimeka is awaiting the final review process of the Police Beat layer with the Hawaii Police Department. Besides the Police Beat layer, the review process with the Hawaii Police Department will also likely include a review process of the Police Districts layer as well as the Police Response Areas layer.

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CAD SYSTEM DEPLOYMENT

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

- 1. The Hawaii Police Department, Akimeka, and Spillman Technologies have begun introductory coordination and information sharing to ensure a successful deployment of the new CAD system, which will improve dispatch efficiency.
 - a. On January 15, 2016, Spillman Technologies held a webinar and discussion on their Geobase process which HPD, Spillman Technologies, and Akimeka were in attendance. The discussion was high-level and pertaining to the GIS database and how it is integrated within the Spillman Technologies CAD architecture.
 - b. In February 2016, Spillman Technologies was on-site at the Hawaii Police Department to host an official kick-off meeting and technical discussion which Akimeka was also in attendance. During the meeting Akimeka presented the entire GIS dataset via webinar. Spillman Technologies was impressed with the quality of the GIS data and is looking forward to the project.
 - c. In May 2016, the final NDA were completed with Akimeka, Spillman Technologies, and the Hawaii Police Department.
 - d. On May 31, 2016, Akimeka's GIS Manager and two representatives from the Spillman Technologies team met to discuss the timeline, requirements, and where they can work together to make this a successful project and on schedule.
 - i. Spillman Technologies is currently in the process of getting the server(s) packaged/shipped on site. Once these are in place, more timeline milestones will be established with preparing the data for configuration on the server, etc.

MILE MARKER PROJECT

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

- 1. On March 16, 2016, Hawaii County Fire Department requested Akimeka to furnish mile markers for the new section of Daniel K Inouye Highway (Route 200), opened to the public since September 2013, so that mile markers would be both visible and query able to the dispatchers for both the new and old sections of the Highway.
 - a. Akimeka immediately began researching for any available updates to the mile markers and it was discovered that there was no current data available via Hawaii Department of Transportation's website or any other reputable organization's website.
 - b. On March 21, 2016, Akimeka contacted Hawaii Department of Transportation via email to inquire if there were any new mile markers in place for the new stretch of Route 200, and if so if we could acquire the necessary data from them to include in our current mile marker spatial dataset that we provide to the PSAPs. We also inquired if the mile markers for the old section of Route 200 were still in place, and if so if the old stretch of Route 200 had a different route number now, so that confusion would not arise between the mile markers of the new and old routes. In order to

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clarify and expedite our request for information, Akimeka created a map illustrating the new and old sections of Route 200 for Hawaii Department of Transportation's perusal.

- c. As of March 28, 2016, Akimeka still had not heard back from Hawaii Department of Transportation regarding the request for updated mile marker information, so we proceeded to phone the organization to check on the status of our request. They informed us that they are processing the request and will get back to us with the information as soon as possible.
- d. On April 21, 2016, Akimeka received a map from Hawaii Department of Transportation, detailing the location of the ten mile markers for the new section of Route 200. The new mile markers were then digitized into the necessary file format and incorporated into the Milepost Markers layer. This updated layer was delivered to MapFlex and made available to the dispatchers on April 26th.
- e. On April 28, 2016, Akimeka received a request from Hawaii County Fire Department for the mile markers to be query able to the dispatchers in the same manner as the common places.
- f. On April 28, 2016, Akimeka promptly proceeded with this request by first modifying the naming of fifty-seven of the mile markers in order to differentiate the mile markers of the new section of Route 200 from the mile markers of the old section of Route 200. Then forty-seven of the mile markers were assigned aliases to help ensure they would be located by dispatchers when queried since the name of those particular mile markers might be confused with their historical name. The five hundred nineteen mile markers were then incorporated into the Common Places layer to ensure that dispatchers would be able to correctly and efficiently query them from the spatial dataset.
- g. On April 29, 2016, Akimeka performed an additional MapFlex deliverable, which included the Common Places and the Milepost Markers layers, thereby making the mile markers query able to the dispatchers. Detailed instructions were also given to the PSAPs on how to query the mile markers correctly so that time would not be wasted trying to figure it out during an emergency situation.
- h. On Friday, May 6, 2016, Akimeka was notified by Hawaii County Fire Department that their MapFlex's Milepost Marker search now had a dropdown selection indicating multiple options.
- i. On Monday, May 9, 2016, Akimeka contacted West (formerly Intrado) to verify if this was occurring due to there being more than one GIS layer (Milepost Markers and Common Places) in MapFlex configured for the search.
- j. On May 26, 2016, Akimeka received confirmation from West that multiple options were in fact being produced while searching because Milepost Markers and Common Places are both configured for querying. Akimeka immediately proceeded by recommending the opening of a trouble ticket with Hawaiian Tel to correct this issue.
- k. On June 24, 2016, West made the necessary configuration correction to prevent the dropdown selection from appearing in MapFlex while querying the Milepost Markers.
- 1. On June 27, 2016, the dispatchers at the Hawaii County Fire Department confirmed that the issue with the Milepost Marker search format had been resolved resulting in a single option for each unique Milepost Marker search.
- m. During the month of July 2016, no activity took place with the milepost markers.

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MAPFLEX SYSTEM

During the month of July 2016, the MapFlex system received updates without any issues and deliverables continued on schedule.

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

During the month of July 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in July 2016
 - a. Hawaii County July 5th and July 19th
 - b. **Maui County** July 6th and July 20th
 - c. **Kauai County** July 7th and July 21st
 - d. Honolulu July 8th and July 22nd

MAPFLEX ISSUE

During the June 2016 State of Hawaii 9-1-1 Board Meeting, an issue was identified by several of the PSAPs with the MapFlex system displaying non- Ali formatted Latitude and Longitude location points from an unknown origin for 9-1-1 calls received from payphones. Hawaiian Telcom and West Safety Solutions will look into the trouble and will schedule a statewide coordination call with all the PSAPs during early August 2016 after their investigation.

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4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – JULY 2016

#	Date	Ticket #	Description	PSAP	Urgency	Comments
1	08/19/14	716	Updated Address	FIRE	Normal	TN has been referred to telco via email by West Safety Services (Intrado). RMS
2	04/28/16	844	Updated Address	FIRE	Normal	TN has been referred to telco via email by West Safety Services (Intrado). RMS
3	07/13/16	856	Updated Address	FIRE	Normal	TN has been referred to telco via email by West Safety Services (Intrado). RMS

Note* There are three (3) opened service request pending for July 2016.

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

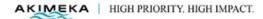
HAWAII COUNTY				MSAG SERVICE REQUEST CATEGORIES					
2046	TOTAL		0	WIRE	WIRELINE		WIRELESS		ΙP
2016	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed
2015 Carryover*			3						
January	9	10	2	8	8	0	1*	1	1
February	1	2	1	1	1	0	0	0	1*
March	2	2	1	1	1	0	0	1	1
April	6	5	2	6	5	0	0	0	0
May	5	5	2	5	5	0	0	0	0
June	2	2	2	2	2	0	0	0	0
July	3	2	3	3	2	0	0	0	0
August									
September									
October									
November									·
December									_
TOTAL	28	28	3	26	24	0	1	2	3

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

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

Hawaii County

July 2016



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5. E9-1-1 DATABASE SYNCHRONIZATION

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

Next Database Synchronization August 2016

AUDIT SUMMARY RESULTS - AUGUST 2016 -- TBA

AUDIT SUMMARY RESULTS - CONTINUED

AUDIT SUMMARY RESULTS COMPARISION - AUGUST 1, 2016 VS MAY 1, 2016 -- TBA

AUDIT SUMMARY RESULTS -- TBA

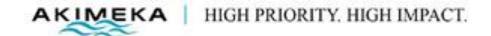
INVALID MSAG STREETS AND ADDRESS RANGES - ESN X99 RECORDS -- TBA

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA

Hawaii County July 2016

July 1, 2016 - July 31, 2016





July 1, 2016 - July 31, 2016

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1. PSAP OPERATIONS

9-1-1 CALL VOLUME - JULY 2016

(Source: West Safety Services (Intrado) Viper system

	9-1-1 Call Volume																
KAUA	I PSAP	Wire	eline		Wire	eless		VC)IP	Calls V	Vith No LI	Admir	Calls	Aband Ca	doned Ills	Other	Calls
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	Wireless	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other	% of Total Calls
JULY	4,757	697	14.65%	3,194	67.14%	45.77%	54.23%	144	3.03%	11	0.23%	0	0.00%	711	14.95%	0	0.00%

9-1-1 CALL VOLUME - CALENDAR YEAR 2016

	9-1-1 Call Volume								Volum	ie							
KAUA	KAUAI PSAP Wireline Wireless		VOIP Calls with No		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		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other	% of Total Calls
JAN	4,281	637	14.88%	2,816	65.78%	46.27%	53.73%	153	3.57%	10	0.23%	0	0.00%	665	15.53%	0	0.00%
FEB	4,090	609	14.89%	2,690	65.77%	46.02%	53.98%	116	2.84%	16	0.39%	0	0.00%	659	16.11%	0	0.00%
MAR	4,638	742	16.00%	2,986	64.38%	46.28%	53.72%	133	2.87%	15	0.32%	0	0.00%	762	16.43%	0	0.00%
APR	4,447	673	15.13%	2,944	66.20%	47.52%	52.48%	131	2.95%	12	0.27%	0	0.00%	687	15.45%	0	0.00%
MAY	4,177	580	13.89%	2,861	68.49%	45.51%	54.49%	131	3.14%	9	0.22%	0	0.00%	596	14.27%	0	0.00%
JUNE	4,020	605	15.05%	2,681	66.69%	42.15%	57.85%	129	3.21%	10	0.25%	0	0.00%	595	14.80%	0	0.00%
JULY	4,757	697	14.65%	3,194	67.14%	45.77%	54.23%	144	3.03%	11	0.23%	0	0.00%	711	14.95%	0	0.00%
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	30,410	4,543		20,172				937		83		0		4,675		0	
MON AVG	4,344	649	14.93%	2,882	66.35%	45.65%	54.35%	134	3.09%	12	0.27%	0	0.00%	668	15.36%	0	0.00%

PSAP OPERATION NOTES:

- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Dropped Calls are hang ups after transfers.
- Abandoned Calls are not included in the total Wireline and Wireless counts respectively.
- All VoIP (Voice over Internet Protocol) type of 911 calls is combined in the Call Volume statistic.
- *911 Calls with no Ali 0.23% Statewide average = 0.18% Year 2015

July 1, 2016 - July 31, 2016

TEXT TO 911 - CURRENT MONTH - JULY 2016

NOTE:

- Kauai County has deployed a soft launch for Text to 911 on December 21, 2015.
- During this soft launch period, internal testing and training will be conducted.
- Although there is a "Text to 911" plot on the MapFlex, the location of the plot is not reliable. Text to 911 Dispatchers should use their skills to ascertain the exact location of the emergency response.
- During the month of June, it was identified that the Text to 9-1-1 icon was missing on the MapFlex System when receiving Text to 9-1-1. Hawaiian Telcom and West Safety Solutions will look into the trouble and will schedule a statewide coordination call with all the PSAPs during early August 2016 after their investigation.

TEXT TO 911 Kau	ai County
Month	Total received
January	23
February	11
March	22
April	4
May	2
June	11
July	26
August	
September	
October	
November	
December	
YTD	99
Monthly Avg.	14.1

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WIRELESS PSAP TESTING - JULY 2016

	KAUAI COUNTY - JULY 2016						
Date	WSP	Sites Tested	Sectors Tested	Tested By:	Test Pass/Fail	Comments:	
7/21/2016	Verizon	1	6	Kauai PSAP	Pass		

NOTES:

• There was one (1) scheduled Wireless 911 test for the month of July, 2106.

FOR YOUR INFORMATION

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

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

PRIMARY	MLTS/PBX	911 CALLS RECEIVED
PSAPS*	July 2016	YEAR TO DATE 2016
Oahu	4,507	25,262
Hawaii	82	477
Maui	114	690
Molokai	0	1
Kauai	25	154
Total**	4,728	26,584

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

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

July 1, 2016 - July 31, 2016

FOR YOUR INFORMATION

FYI	For Your Information
911 Calls Rec	eived From Payphones

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

PRIMARY	911 CALLS RECEIVED via Payhone
PSAPS	July 2016
Oahu	3,172
Hawaii	453
Maui	410
Molokai	7
Kauai	160
Total**	4,202

*PSAP totals does not include Military 911 calls.

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



July 1, 2016 - July 31, 2016

2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - JULY 2016

KAUAI	9-1-1 TRANSACTIONS								
COUNTY		MSAG	ALI Submitted			Discr	Customer		
2016	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Addresses Affected
JANUARY	14	14	0	0	0	198	0	0	70
FEBRUARY	83	53	30	0	0	217	0	0	60
MARCH	30	8	22	0	0	232	0	0	9
APRIL	25	21	4	0	0	234	0	0	19
MAY	37	30	7	0	0	208	0	0	78
JUNE	14	9	5	0	0	125	0	0	89
JULY	23	8	15	0	0	119	0	0	63
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	226	143	83	0	0				388
AVG PER MONTH	32	20	12	0	0				55

Definitions

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

- (B) **T**elephone **N**umber **C**hange **R**equest Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 499 attached to them which indicates the need for validation.
- (C) Automatic Location Information Discrepancy Record Represents an address discrepancy discovered during a live 9-1-1 call, from a landline. These record corrections are treated with a higher priority and should be processed within 48 hours as a general guideline.
- (D) **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 twenty-three (23) MSAG transactions were processed in 9-1-1 Net during the month of July 2016. Eight (8) 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 63 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

All Kauai Telephone Number Change Requests (TN CR) transactions have been processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 499 clean-up effort. ESN 499 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record. Akimeka is awaiting feedback from Intrado on the TN CRs that have been submitted for correction. In June 2016 there were sixty-three (63) TN CRs completed and as a result, six (6) ESN 499 street records were deleted from the MSAG database.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are 119 Open TN CR Transactions as of July 31, 2016.
- Please refer to "TNCR Current Status" chart in the next section.

97 Open TN CR transactions are a direct result of the ESN 499 clean-up and are awaiting approval from Hawaiian Telcom, Inc. 22 Open TN CR transactions are a result of the Dispatchable Location project submitted in September (refer to the "Dispatchable Location" chart below). Akimeka continues to monitor and track the progress of the Referred records. Once a telephone number is submitted to Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado's internal process requires calling each telephone customer individually for approval to update an address in the 9-1-1 database.

- There are no Open ALI-DRs as of July 31, 2016
- There are no Open VoIP DRs as of July 31, 2016

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

NOTE:

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

	PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)							
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS				
KAUAI	119	20	48	51				

STATUS

TOTAL TNCRs SUBMITTED - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.

<u>PENDING STATUS</u> - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and are pending investigation whether the request is valid or invalid, and/or whether the request requires additional information to validate.

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

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



July 1, 2016 - July 31, 2016

DISPATCHABLE LOCATION - STATUS AS OF - JULY 2016 - PENDING

NARRATIVE:

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

During the month of August 2015, Akimeka started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically the **Kukui Grove Center at 302600 Kaumualii Hwy, Lihue**. The "Dispatchable Location" data is entered into the "Driving Directions" field in the 9-1-1 Net system, and will display on the Viper Power 911 ALI Screen in the "Exact" field should a 911 call be received from that telephone number. Sixty two **(62)** Telephone Number Change Requests (TN CR) transactions were processed as a result of the Dispatchable Location Project. These transactions have not been updated in 9-1-1 Net pending research by Hawaiian Tel and West Safety Services (Intrado) for providing an additional 60 character field in the ALI data stream to accommodate Dispatchable Location information as an alternative to using the "Driving Directions" field. Until this field is created, no further Dispatchable Location transactions will be submitted. During the months of November, December, and January as Akimeka awaits for the notice to proceed, Akimeka has continued to research and prepare "Driving Instructions" for other shopping malls that will assist the Kauai Dispatchers with their 911 calls for service. A total of 991 telephone records are complete and ready for submittal, and transactions that were submitted in 2015 are now being processed.

	Dispatchable Location							
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Prepared	Number of TNCR* Transactions Submitted	Number of Transactions Processed**			
	2015 Carryover	2015	286	62	0			
*Common Name Place and MSAG Add	*Common Name Place and MSAG Addresses available upon request				0			
		Apr	0	0	0			
		May	0	0	2			
Kukuiula Shopping Center	2829 Ala Kalanikaumaka, Kukuiula	June	87	0	56			
Kukui Grove Center	302600 Kaumualii Hwy, Lihue	July	74	44	26			
			201	100				
		Total	991	106	84			

Definition

Dispatchable Location is defined in the FCC 15-9 Docket as the verified or corroborated street address of the calling party plus additional information such as floor, suite, apartment or similar information that may be needed to adequately identify the location of the calling party.

TNCR* Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location

in the Exact field on the ALI Screen.

Processed** may include inactive telephone numbers that were removed from the ALI Database.

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CHARTER COMMUNICATIONS (TIME WARNER) VOIP DATABASE TNCR

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

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

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

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

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3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JULY 2016

MAPPING LAYERS UPDATED (PART I)

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

	KAUAI COUNTY								
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks						
			TY LAYERS FOR DISPATCH & RESPONSE						
			d Alphabetically)						
		07/21/16							
	7/20/2016		Spatially corrected one (1) address point in Eleele						
Address Points	7/14/2016		Spatially corrected one hundred twenty-four (124) address points in Eleele						
	7/14/2016		Spatially corrected one hundred sixty-nine (169) address points in Hanapepe						
		07/07/16							
Airports									
Bridges									
Building Footprints									
Bus Stops									
Churches									
Coastal Names									
Coastline									
Common Places									
Correctional Facilities									
Emergency Callboxes									
Emergency Operation Centers									
Emergency Shelters									
ESZ/ESN									
Fire Beats									
Fire Districts									
Fire Response Areas									
Fire Stations									
Food & Beverage									
Gas Stations									
Gate Codes									
Government Buildings									
Harbors									
Helipads									
Hiking Trails									
Hospitals									
Hydrants									
Hyrdology Layers									
Incident Response Areas									
Lodging									



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MAPPING LAYERS UPDATED (PART II)

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

	KAUAI COUNTY								
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks						
CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)									
Major Roads									
Medic Beats									
Medic Districts									
Medic Response Areas									
Medic Stations									
Medical Facilities									
Milepost Markers									
MSAG Communities	7/0/0040	07/21/16							
	7/8/2016		Modified boundary between Port Allen and Eleele						
Net Junctions									
Ocean Rescue Boundaries									
Ocean Safety									
Parcels									
Parks									
Parks Polygon									
Points of Interest		07/07/16							
	7/7/2016		Added thirty-three (33) POI in Kukuiula						
Police Beats									
Police Districts									
Police Response Areas									
Police Stations									
Post Offices									
Schools									
	7/22/2016		Spatially corrected seven (7) street centerline segments in Eleele						
	7/22/2016		Spatially corrected nine (9) street centerline segments in Hanapepe						
		07/21/16							
	7/21/2016		Spatially corrected four (4) street centerline segments in Eleele						
Street Centerlines	7/21/2016		Spatially corrected one (1) street centerline segment in Hanapepe						
Street Centernies	7/21/2016		Spatially corrected eleven (11) street centerline segments in Port Allen						
	7/20/2016		Spatially corrected twenty-three (23) street centerline segments in Eleele						
	7/15/2016		Spatially corrected twelve (12) street centerline segments in Eleele						
	7/14/2016		Spatially corrected four (4) street centerline segments in Eleele						
	7/14/2016		Spatially corrected two (2) street centerlines in Hanapepe						



July 1, 2016 - July 31, 2016

MAPPING LAYERS UPDATED (PART III)

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

KAUAI COUNTY								
m 4.v	Akimeka GIS Server	Date GIS						
Type of Layer	Date Created/ Edits Performed	Delivered	Other/Remarks					
	CRITICAL 9-1-1	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE					
		(Listee	d Alphabetically)					
	7/8/2016		Spatially corrected nine (9) street centerline segments in Port Allen					
Street Centerlines		07/07/16						
Street Centerniles	7/7/2016		Spatially corrected two (2) street centerlines in Eleele					
	7/7/2016		Spatially corrected one (1) street centerline in Hanapepe					
Subdivisions								
Tow Jurisdictions								
Tsunami Evacuation Zones								
Tsunami Heights								
Waste Water Plants								
WSP Cell Sectors								
WSP Cell Towers								

NOTE:

 The Parcels layer is provided by Kauai County. Akimeka performs edits on the spatial information of the layer for 9-1-1 purposes. Changes to the attribute table are made when needed. The Parcels layer uploaded to the PSAP GIS server is intended for 9-1-1 purposes only and should not be disseminated to other county agencies.

GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVES



July 1, 2016 - July 31, 2016

GIS KEY ACTIVITIES/UPDATES

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

Date	Key Activities/Updates
7/21/2016	Delivered updated Address Points, MSAG Communities, Points of Interest, Street Centerlines, WSP Cell Sectors, WSP Cell Towers, GEO.xml and LANDMARK.xml for GeoComm
7/21/2016	Delivered updated Address Points, MSAG Communities, Points of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers for MapFlex
7/7/2016	Delivered updated Address Points, MSAG Communities, Points of Interest, Street Centerlines, WSP Cell Sectors, WSP Cell Towers, GEO.xml and LANDMARK.xml for GeoComm
7/7/2016	Delivered updated Address Points, MSAG Communities, Points of Interest, Street Centerlines, WSP Cell Sectors and WSP Cell Towers for MapFlex

MAPFLEX SYSTEM

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

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

During the month of July 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in July 2016
 - a. Hawaii County July 5th and July 19th
 - b. **Maui County** July 6th and July 20th
 - c. **Kauai County** July 7th and July 21st
 - d. **Honolulu** July 8th and July 22nd

PMRF PROJECT



July 1, 2016 - July 31, 2016

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

The PMRF updates were tracked and recorded in April's MSR as this was an ongoing project until all updates were incorporated. In addition, all subsequent changes to the MSAG database were coordinated by Akimeka's MSAG Coordinators.

Akimeka completed this project on May 19th, 2016.

SPILLMAN PROJECT

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

- 1. At the end of May 2016, Akimeka started preparing GIS data for Kauai's Spillman CAD system.
 - a. Akimeka configured the Spillman Toolbox to process GIS data into Spillman's data specifications.
- 2. During June 2016, an initial data deliverable included Address Points, MSAG Communities, Street Centerlines, Fire Response Areas, Medic Beats, Police Response Areas, Points of Interest and Street Centerline Alternate Names.
- 3. On June 30, 2016, Akimeka delivered this data to Spillman Technologies and worked with Spillman Technologies to stand up data on Kauai's server.
 - a. The GIS data was copied over into the Kauai Spillman server and loaded into file designation used for staging.
- 4. On July 20, 2016, Akimeka met with Spillman via teleconference.
 - a. Reviewed pinmaps
 - b. Discussed closest route module
 - i. Akimeka will be sending data to support this module once Spillman is ready

MAPFLEX ISSUES

On July, 24, 2016, Hawaiian Telcom sent an email to Akimeka notifying them to stop all GIS updates for Kauai County. The email stated that it was their belief that issues will occur again July 25, 2016.

- 1. According to HT, the issues started on July 23, 2016 after the 3:00 AM daily GIS update. Incoming 911 calls were not plotting in MapFlex and an error message was displayed. When the P911 application was restarted, MapFlex displayed a blank, white screen.
 - a. During their investigation of the issue, the following MapFlex services were stopped:
 - i. Composite Geocode Service
 - ii. Street Locator Geocode Service

July 1, 2016 - July 31, 2016

iii. Street Name Geocode Service

- b. These services could not be restarted until the data was reverted to the previous update.
- 2. Akimeka replied back to HT after investigating the data which was delivered previously.
 - a. Akimeka clarified that the deliverable had taken place on July 21, 2016 so it went 2 days without issue.
 - b. The data was reviewed by Akimeka for file names, content, structure, schema, etc. and there were no identified issues.
 - c. Akimeka also advised that the error messages are pertaining after the data is uploaded. It has nothing to do with the data and it is the process which takes place on the MapFlex server that builds the locators and publishes those services out to dispatch. The error is considered post update and indicates the data sent by Akimeka does not have issues.
- 3. On July 27, 2016 during the PSAP, HT, West meeting Akimeka brought up the issue. West confirmed during the call that it has nothing to do with the data sent by Akimeka. It is due to a process deficiency on the MapFlex. The original process for publishing the service to dispatch, built the map data into a package and sent out to all of the workstations. There tends to be issues with this process and there is not a production server for publishing updates.
- 4. During the June 2016 State of Hawaii 9-1-1 Board Meeting, an issue was identified by several of the PSAPs with the MapFlex system displaying non- Ali formatted Latitude and Longitude location points from an unknown origin for 9-1-1 calls received from payphones. Hawaiian Telcom and West Safety Solutions will look into the trouble and will schedule a statewide coordination call with all the PSAPs during early August 2016 after their investigation.

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July 1, 2016 - July 31, 2016

OPEN SERVICE REQUESTS – JULY 2016

#	Date	Ticket #	Description	Category	Urgency	Comments
			None			

NOTE:

There are no open service requests for July 2016.

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

K	KAUAI COUNTY					MSAG SERVICE REQUEST CATEGORIES						
2016	TO	TAL	Onon	WIRE	LINE	WIRE	LESS	VolP				
2016	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed			
2015 Carryover*			0									
January	0	0	0	0	0	0	0	0	0			
February	0	0	0	0	0	0	0	0	0			
March	0	0	0	0	0	0	0	0	0			
April	0	0	0	0	0	0	0	0	0			
May	0	0	0	0	0	0	0	0	0			
June	0	0	0	0	0	0	0	0	0			
July	0	0	0	0	0	0	0	0	0			
August												
September												
October												
November	·											
December												
TOTAL	0	0	0	0	0	0	0	0	0			

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

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

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5. E9-1-1 DATABASE SYNCHRONIZATION

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

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

The database synchronization effort included comparing Kauai County's 9-1-1 MSAG received from the 911 Database provider, Intrado on July 1, 2016, against its 9-1-1 GIS Street Centerline data. A total number of 1,337 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on July 1, 2016 for Kauai County are reported below.

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

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

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AUDIT SUMMARY RESULTS - 2016

		As of Octol	per 1 , 2015	As of January 1, 2016		As of April 1 , 2016		As of July 1 , 2016	
9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	9-1-1 MSAG Dated 10-01-15		9-1-1 MSAG Dated 1-01-15		9-1-1 MSAG Dated 4-01-16		9-1-1 MSAG Dated 7-01-16	
		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		1,297		1,300		1,331		1,337	
Less: 9-1-1 MSAG Exception Records	(1)	66	5.1%	72	5.5%	77	5.8%	84	6.3%
Net 9-1-1 MSAG Records Eligible for Comparison		1,231		1,228		1,254		1,253	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG GIS Match No Corrections Required)		1,231	100.0%	1,223	99.6%	1,249	99.6%	1,249	99.7%
9-1-1 MSAG GIS No Match - Minor Correction Required	(2)	0	0.0%	5	0.4%	4	0.3%	2	0.2%
9-1-1 MSAG Record With No GIS Record	(3)	0	0.0%	0	0.0%	1	0.1%	2	0.2%
Total 9-1-1 MSAG Records No Match	·	0	0.0%	5	0.4%	5	0.4%	4	0.3%

Objective: NENA Recommended Match Rate = 98%

The two-way (MSAG – GIS) database synchronization audit for the Kauai County was completed as scheduled. The match rate remained consistent from April 2016 with a 99.6% Match Rate to a 99.7% Match Rate as of July 2016.

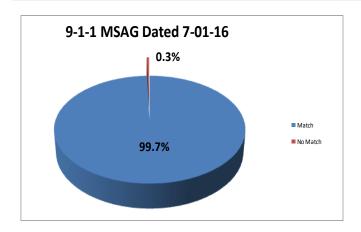
NOTES:

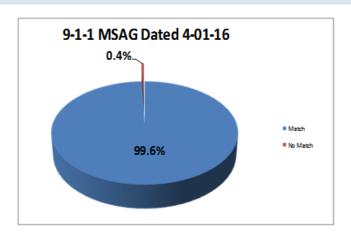
- An MSAG Record that will not have a corresponding GIS Street Centerline Record but is required for the routing of E9-1-1 calls (i.e., Emergency Call Box, Foreign Exchange Records, Wireless Shell Records, etc.). No further action is required.
- An MSAG Record that requires minor MSAG attention in 9-1-1Net to correct MSAG Records (i.e., Reassignment of an MSAG Community, modification of the Site Address Range, assignment of an ESN, performing a combine or insert of an existing MSAG Record, etc.).
- An MSAG Record that does not have a corresponding GIS Record and will require additional research and validation. The GIS Section will assist with this effort.



July 1, 2016 - July 31, 2016

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





Kauai County level of accuracy for 9-1-1 Match percentage remained consistent with a

99.7% as of July 1, 2016 compared to 99.6% as of April 1, 2016

The NENA recommended minimum match rate of 98% has been met

consistently in 2013 and continues in 2016.

- Akimeka continues to work with Kauai County GIS and Planning departments to validate streets and communities.
- ❖ In achieving and exceeding the NENA minimum match rate of 98% for data accuracy, Kauai County is ready for Next Generation 9-1-1 (NG9-1-1) from a database perspective.
- A constant effort to keep the databases synchronized and maintained are required to ensure the level of accuracy of the E9-1-1 databases each time an MSAG or GIS record is "last modified".
- * "MSAG record that doesn't match the GIS" decreased (4 to 2) from April 2016 to June 2016. This is a result in which MSAG records submitted in 9-1-1 Net were not completed prior to the end of the month.
- * "MSAG record with no GIS record" increased (1 to 2) from April 2016 to June 2016. MSAG records with no matching record were due primarily to the verification of the MSAG records against multiple GIS databases to determine if the roads are existing within Kauai County. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the October 2016 re-analysis.
- * "MSAG Records Corrections Required" decreased (3 to 0) from April 2016 to June 2016 respectively. MSAG records have been combined, split, and high/low ranges have been changed, to match the Street Centerlines.
- Accurate location and GIS information will ensure proper dispatching and response in a timely manner for all Public Safety agencies.
- All the hard work to maintain and synchronize the E9-1-1 databases is validated when a life and/or property is saved.
- Coordinating the clean-up of the ALI discrepancy records associated with an assigned ESN of 499 with the respective Service Providers is needed to ensure all records are MSAG valid.

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INVALID MSAG STREETS AND ADDRESS RANGES – ESN X99 RECORDS

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

Results of the data provided are as follows:

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

These invalid MSAG records represent **2.6%** of the Total MSAG records for Kauai County as of the July 1, 2016 MSAG as compared to **2.8%** as of the April 1, 2016 MSAG. The individual ALI records associated with these records are provided below.

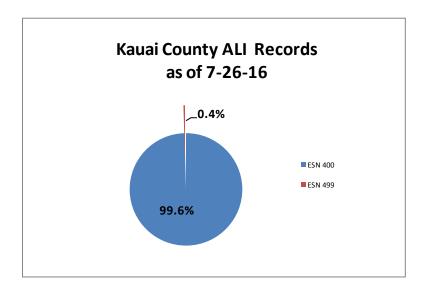
The decrease in the number of invalid MSAG records is a result of Akimeka's research and validation of telephone numbers (TNs) assigned an invalid MSAG address. In order for a TN to be corrected, Akimeka submits the update to the Service Provider via Intrado for approval.

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AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT

As part of Akimeka's ongoing database synchronization efforts, Akimeka reviewed and summarized the ALI discrepancies by community in 9-1-1Net for Kauai County. As of June 27, 2016, there are **108** ESN 499 ALI records, representing **0.4%** of Kauai County's Total ALI records. The number of ESN 499 ALI records was further reduced by **20%** (135 to 108) from April 27, 2016 to July 27, 2016 respectively.



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

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

July 1, 2016 - July 31, 2016







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1. PSAP OPERATIONS

9-1-1 CALL VOLUME MAUI PSAP – JULY 2016

(Source: West Safety Services (Intrado) Viper system

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

	9-1-1 Call Volume																
MA	MAUI PSAP Wireline Wireless			VOIP		Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls					
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls		No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JULY	12,362	2,216	17.93%	8,304	67.17%	54.29%	45.71%	328	2.65%	21	0.17%	0	0.00%	1,493	12.08%	0	0.00%

CALL VOLUME MAUI PSAP NOTES:

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

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

							9-1-	-1 Call V	olume								
MA	UI PSAP	Wi	reline		Wir	eless		VO		Calls v		Admin Calls		Abandoned Calls		Other Calls	
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	11,627	2,130	18.32%	7,796	67.05%	60.31%	39.69%	334	2.87%	19	0.16%	0	0.00%	1,348	11.59%	0	0.00%
FEB	9,968	1,941	19.47%	6,639	66.60%	56.64%	43.36%	263	2.64%	7	0.07%	0	0.00%	1,118	11.22%	0	0.00%
MAR	11,240	2,216	19.72%	7,452	66.30%	57.11%	42.89%	262	2.33%	12	0.11%	0	0.00%	1,298	11.55%	0	0.00%
APR	11,162	2,180	19.53%	7,376	66.08%	57.57%	42.43%	249	2.23%	19	0.17%	0	0.00%	1,338	11.99%	0	0.00%
MAY	11,672	2,012	17.24%	7,929	67.93%	57.94%	42.06%	295	2.53%	17	0.15%	0	0.00%	1,419	12.16%	0	0.00%
JUNE	11,010	1,910	17.35%	7,470	67.85%	56.83%	43.17%	297	2.70%	7	0.06%	0	0.00%	1,326	12.04%	0	0.00%
JULY	12,362	2,216	17.93%	8,304	67.17%	54.29%	45.71%	328	2.65%	21	0.17%	0	0.00%	1,493	12.08%	0	0.00%
AUG																	
SEPT																	
ост																	
NOV																	
DEC																	
YTD	79,041	14,605		52,966				2,028		102		0		9,340		0	
MON AVG	11,292	2,086	18.51%	7,567	67.00%	57.24%	42.76%	290	2.56%	15	0.13%	0	0.00%	1,334	11.80%	0.00	0.00%

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Maui County July 2016

July 2016



Maui County E9-1-1 Status Report

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

	9-1-1 Call Volume																
		reline	Wireless			vo	IP	Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls			
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls		No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JULY	398	125	31.41%	229	57.54%	60.70%	39.30%	1	0.25%	0	0.00%	0	0.00%	43	10.80%	0	0.00%

CALL VOLUME MOLOKAI PSAP NOTES:

*Calls with no Ali 0.00% - Statewide average = 0.18% Year 2015

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

							9-1-	-1 Call V	olume								
MOLO	KAI PSAP	Wi	reline	Wireless			vo	IP	Calls w		Admin Calls		Abandoned Calls		Other Calls		
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	371	109	29.38%	210	56.60%	58.57%	41.43%	6	1.62%	2	0.54%	0	0.00%	44	11.86%	0	0.00%
FEB	337	126	37.39%	178	52.82%	54.49%	45.51%	3	0.89%	2	0.59%	0	0.00%	28	8.31%	0	0.00%
MAR	355	106	29.86%	205	57.75%	45.85%	54.15%	3	0.85%	2	0.56%	0	0.00%	39	10.99%	0	0.00%
APR	435	153	35.17%	232	53.33%	51.29%	48.71%	1	0.23%	2	0.46%	0	0.00%	47	10.80%	0	0.00%
MAY	360	141	39.17%	182	50.56%	52.75%	47.25%	0	0.00%	2	0.56%	0	0.00%	35	9.72%	0	0.00%
JUNE	505	114	22.57%	317	62.77%	62.46%	37.54%	0	0.00%	2	0.40%	0	0.00%	72	14.26%	0	0.00%
JULY	398	125	31.41%	229	57.54%	60.70%	39.30%	1	0.25%	0	0.00%	0	0.00%	43	10.80%	0	0.00%
AUG																	
SEPT																	
ОСТ																	
NOV																	
DEC																	
YTD	2,761	874		1,553				14		12		0		308		0	
MON AVG	394	125	32.14%	222	55.91%	55.16%	44.84%	2.00	0.55%	2	0.44%	0	0.00%	44	10.96%	0	0.00%

Maui County

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

	9-1-1 Call Volume																
MAUI COUNTY PSAPs Wireline		Wireless				VOIP Calls		Calls W		Admin Calls		Abandoned Calls		Other Calls			
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls		No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JULY	12,760	2,341	18.35%	8,533	66.87%	54.46%	45.54%	329	2.58%	21	0.16%	0	0.00%	1,536	12.04%	0	0.00%

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

	9-1-1 Call Volume																
	COUNTY SAPs	Wireline		Wireless			VO	IP	Calls v	vith No LI	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		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	Other Calls	% of Total Calls
JAN	11,998	2,239	18.66%	8,006	66.73%	60.27%	39.73%	340	2.83%	21	0.18%	0	0.00%	1,392	11.60%	0	0.00%
FEB	10,305	2,067	20.06%	6,817	66.15%	56.58%	43.42%	266	2.58%	9	0.09%	0	0.00%	1,146	11.12%	0	0.00%
MAR	11,595	2,322	20.03%	7,657	66.04%	56.81%	43.19%	265	2.29%	14	0.12%	0	0.00%	1,337	11.53%	0	0.00%
APR	11,597	2,333	20.12%	7,608	65.60%	57.37%	42.63%	250	2.16%	21	0.18%	0	0.00%	1,385	11.94%	0	0.00%
MAY	12,032	2,153	17.89%	8,111	67.41%	57.82%	42.18%	295	2.45%	19	0.16%	0	0.00%	1,454	12.08%	0	0.00%
JUNE	11,515	2,024	17.58%	7,787	67.62%	57.06%	42.94%	297	2.58%	9	0.08%	0	0.00%	1,398	12.14%	0	0.00%
JULY	12,760	2,341	18.35%	8,533	66.87%	54.46%	45.54%	329	2.58%	21	0.16%	0	0.00%	1,536	12.04%	0	0.00%
AUG																	
SEPT																	
ост																	
NOV																	
DEC																	
YTD	81,802	15,479		54,519				2,042		114		0		9,648		0	
MON AVG	11,686	2,211	18.95%	7,788	66.63%	57.20%	42.80%	292	2.50%	16	0.14%	0.00	0.00%	1,378	11.78%	0	0.00%

PSAP OPERATION NOTES:

- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Dropped Calls are hang ups after transfers.
- Abandoned Calls are not included in the Wireline and Wireless total counts respectively.
- All VoIP (Voice over Internet Protocol) 911 calls are combined in the Call Volume statistic.
- Outgoing 911 calls are included in the totals. These are ringback or callback 911calls made from the Viper System.

Maui County

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TEXT TO 911 - CURRENT MONTH - JULY 2016

NOTE:

- Maui County initiated a soft launch of the Text to 911 service on March 15, 2016.
- Although there is a "Text to 911" plot on the MapFlex, the location of the plot is not reliable. Text to 911 Dispatchers should use their skills to ascertain the exact location of the emergency response.
- Text to 911 Chart also includes internal testing of Text to 911 for training purposes.
- On July 15, 2016 it was identified that the Text to 9-1-1 icon was missing on the MapFlex System when receiving Text to 9-1-1. This causes the MapFlex not to refresh the map view, and remains at the previous 911 caller's location. Hawaiian Telcom and West Safety Solutions will look into the trouble and will schedule a statewide coordination call with all the PSAPs during early August 2016 after their investigation.
- On July 27, 2016, Maui 911 center received a bounce back message while testing text to 911 that read, "Please make a voice call to 911, there is no text service available at this time". This issue was later identified to be a statewide problem.

TEXT TO 911 Maui County PSAPs 2016									
Month	Received at Maui	Received at Molokai							
January	1	0							
February	0	0							
March	38	5							
April	12	2							
May	25	3							
June	19	4							
July	43	4							
August									
September									
October									
November									
December									
YTD	138	18							
Monthly Avg.	19.71	2.57							

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WIRELESS PSAP TESTING - JULY 2016

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

NOTES:

There were no (0) scheduled Wireless tests conducted in July, 2016 for the Maui and Molokai PSAP

FOR YOUR INFORMTION

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

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

PRIMARY	MLTS/PBX	911 CALLS RECEIVED
PSAPS*	July 2016	YEAR TO DATE 2016
Oahu	4,507	25,262
Hawaii	82	477
Maui	114	690
Molokai	0	1
Kauai	25	154
Total**	4,728	26,584

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

Maui County

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

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FOR YOUR INFORMTION

FYI	For Your Information
911 Calls Reco	eived From Payphones

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

PRIMARY	911 CALLS RECEIVED via Payhone
PSAPS	July 2016
Oahu	3,172
Hawaii	453
Maui	410
Molokai	7
Kauai	160
Total**	4,202
1.DG 1.D 1. 1. 1.	

*PSAP totals does not include Military 911 calls.

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

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – JULY 2016

MAUI			9-1-1 TRANSACTIONS						
COUNTY	MSAG		ALI Submitted			Open ALI Discrepancy Records			Customer
2016	Total	MSAG (A)	TN CR (B)	ALI DR (C)	VoIP (D)	TNCR	ALI DR	VoIP DR	Addresses Affected
JANUARY	176	8	167	0	1	1,893	0	0	173
FEBRUARY	148	13	135	0	0	2,026	0	0	158
MARCH	79	14	65	0	0	1,938	0	0	170
APRIL	132	25	107	0	0	1,795	0	0	895
MAY	79	45	31	3	0	1,281	0	0	726
JUNE	60	38	21	1	0	823	0	0	608
JULY	37	16	20	1	0	467	0	0	402
AUGUST									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER									
TOTAL YTD	711	159	546	5	1				3,132
AVG PER MONTH	102	8	167	0	1				173

Definitions

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

- (B) **T**elephone **N**umber **C**hange **R**equest Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 399/359 attached to them which indicates the need for validation.
- (C) **A**utomatic **L**ocation **I**nformation **D**iscrepancy **R**ecord Represents an address discrepancy discovered during a live 9-1-1 call, from a landline. These record corrections are treated with a higher priority and should be processed within 48 hours as a general guideline.
- (D) Voice over Internet Protocol Discrepancy Record Represents an address discrepancy discovered during a live 9-1-1 call, from a VoIP phone. These record corrections are treated with a higher priority and should be processed within 72 hours as a general guideline per Time Warner Operations Center. MSR tracking effective April 2014.



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MSAG CURRENT MONTH NOTES:

A total of **37** MSAG transactions were processed in 9-1-1 Net during the month of July 2016. Sixteen (**16**) requests were processed relating to the MSAG database changes which include: changes to high – low street ranges, combining street records, deletion of invalid records, splitting street records to align with Police, Fire, EMS, and inserting new MSAG records.

There were 402 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

20 Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 399 clean-up effort. ESN 399 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record. Akimeka is awaiting feedback from Intrado on the TN CRs that have been submitted for correction. In June 2016, there were 376 TN CRs completed and as a result, eight (8) ESN 399/359 street records were deleted from the MSAG database. One (1) ALI DR was submitted as the result of a 9-1-1 call from a residence on Molokai. Maui PSAP submitted the request to Akimeka to update the customer information and the discrepancies were corrected in 9-1-1 Net.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are 467 Open TN CR Transactions as of July 31, 2016.
- Refer to chart in the next section "TNCR Current Status"

419 Open TN CR transactions are a direct result of the ESN 399 clean-up and are awaiting approval from Hawaiian Telcom, Inc. **48** Open TN CR transactions are a result of the Dispatchable Location project submitted in September. (Refer to the "Dispatchable Location" chart below) Akimeka continues to monitor and track the progress of the Referred records. Once a telephone number is submitted to Intrado for correction, it must be verified against HT records and/or approved by the customer. Intrado's internal process requires calling each telephone customer individually for approval to update an address in the 9-1-1 database.

- There are no ALI DRs Open as of July 31, 2016
- There are no VoIP DRs Open as of July 31, 2016

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

NOTE:

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

PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)						
County	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO) OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO) TNCR RECORDS					
MAUI	366	82	173	111		
MOLOKAI	101	22	58	21		
TOTAL	467	104	231	132		

STATUS

TOTAL TNCRs SUBMITTED - The total number of TNCR requests for modification that have been submitted in 9-1-1 NET.

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 (Intrado) Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.

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

Maui County July 2016



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DISPATCHABLE LOCATION - STATUS AS OF - JULY 2016 - PENDING

NARRATIVE:

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

During the month of August 2015, Akimeka started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically the Queen Kaahumanu Shopping Center at 275 Kaahumanu Ave. The "Dispatchable Location" data is entered into the "Driving Directions" field in the 9-1-1 Net system, and will display on the Viper Power 911 ALI Screen in the "Exact" field should a 911 call be received from that telephone number. Screen shots of the "Before" ALI screen, and the "After" ALI screen with the updated "Dispatchable Location" information visible, were presented to the Dispatch Supervisors. Akimeka received positive feedback from the 911 Dispatch Personnel because the information that the 911 Call Takers will receive, will certainly cut down on the process of determining the exact location of the 911 caller. In addition to this, Akimeka was informed that the Mobile Dispatch Terminals (MDTs) in the Police Vehicles, also are able to view this "Dispatchable Location" information which will reduce the response times for Public Safety. In September, the Dispatchable Location transactions have been temporarily stopped. Transactions have not been updated in 9-1-1 Net pending research by Hawaiian Tel and West Safety Services (Intrado) for providing an additional 60 character field in the ALI data stream to accommodate Dispatchable Location information as an alternative to using the "Driving Directions" field. Until this field is created, no further Dispatchable Location transactions will be submitted. There are currently 877 transactions prepared for submission. However, present observations indicate that previous transactions that were submitted in 2015 are currently being processed.

	Dispatchable Location							
Common Name Place	MSAG Address	2016	Number of TNCR* Transactions Prepared	Number of TNCR* Transactions Submitted	Number of Transactions Processed**			
Queen Kaahumanu Center	Carryover from 2015	2015		368	299			
Lahaina Outlets	900 Front St, Lahaina	Jan-	155	0	6			
Maui Mall	70 E Kaahumanu Ave, Kahului		88	0	Ü			
Shops at Wailea	3750 Wailea Alanui Dr, Wailea	Apr- May	432	0	8			
Azeka Kihei	1279 S. Kihei Rd, Kihei	June	73	0	0			
Queen Kaahumanu Center	275 Kaahumanu Ave, Kahului	July		6	13			
Azeka Kihei	1280 S Kihei Rd, Kihei	July	129	0	0			
		Total	877	374	326			

Definition

Dispatchable Location is defined in the FCC 15-9 Docket as the verified or corroborated street address of the calling party plus additional information such as floor, suite, apartment or similar information that may be needed to adequately identify the location of the calling party.

TNCR* Telephone Number Change Request - Transactions submitted to Intrado to update/edit Dispatchable Location in the Exact field on the ALI Screen.

Processed** may include inactive telephone numbers that were removed from the ALI Database.

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CHARTER COMMUNICATIONS (TIME WARNER) VOIP DATABASE TNCR

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

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

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

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

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3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JULY 2016

MAPPING LAYERS UPDATED (PART I)

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

	MAUI COUNTY				
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks		
	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE				
		(Listee	d Alphabetically)		
	7/28/2016		Added Location Name to two (2) addresses in Kihei		
	7/28/2016		Spatially corrected one (1) address point in Kihei		
	7/28/2016		Added one (1) address in Kihei		
	7/28/2016		Added two (2) addresses in Kula		
	7/27/2016		Spatially corrected two (2) address points in Makawao		
	7/25/2016		Added one (1) address in Kualapuu		
	7/25/2016		Added one (1) address in Kaluakoi		
	7/25/2016		Added one (1) address in Hana		
	7/25/2016		Added one (1) address in Kaunakakai		
	7/25/2016		Added one (1) address in Wailuku		
	7/25/2016		Spatially corrected one (1) address in Haiku		
	7/25/2016		Spatially corrected seventy-six (76) address points in Wailuku		
		07/20/16			
	7/19/2016		Added one (1) address in Haiku		
	7/19/2016		Spatially corrected one (1) address point in Kahului		
	7/19/2016		Spatially corrected eighty-three (83) address points in Makawao		
All Div	7/18/2016		Spatially corrected eighty-seven (87) address points in Makawao		
Address Points	7/13/2016		Added two (2) addresses in Makawao		
	7/13/2016		Spatially corrected one hundred fifteen (115) address points in Makawao		
	7/12/2016		Added five (5) addresses in Makawao		
	7/12/2016		Added one (1) address in Paia		
	7/12/2016		Added one (1) address in Kahului		
	7/12/2016		Assigned one (1) address in Lanai		
	7/12/2016		Spatially corrected one (1) address point in Kahului		
	7/12/2016		Spatially corrected sixty-one (61) address points in Makawao		
	7/11/2016		Spatially corrected one hundred sixty-nine (169) address points in Makawao		
		07/06/16			
	7/5/2016		Added one (1) address in Makawao		
	7/5/2016		Spatially corrected one (1) address point in Makawao		
	7/1/2016		Spatially corrected one (1) address in Kahului		
	7/1/2016		Added one (1) address in Kahului		
	7/1/2016		Added one (1) address in Kaunakakai		
	7/1/2016		Added two (2) addresses in Napili		
	7/1/2016		Spatially corrected one (1) address point in Napili		

Maui County July 2016



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MAPPING LAYERS UPDATED (PART II)

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

	MAUI COUNTY			
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks	
	CRITICAL 9-1-1		IY LAYERS FOR DISPATCH & RESPONSE	
		(Liste	ed Alphabetically)	
	7/1/2016		Spatially corrected one (1) address point in Paia	
Address Points	7/1/2016		Added one (1) address in Wailea	
	7/1/2016		Spatially corrected two (2) address points in Wailea	
Airports				
Bridges				
Building Footprints				
Bus Stops				
Churches				
Coastal Names				
Coastline				
Common Places				
Correctional Facilities				
Emergency Callboxes				
Emergency Operation Centers				
Emergency Shelters				
ESZ/ESN				
Fire Beats				
Fire Districts				
Fire Response Areas				
Fire Stations				
Food & Beverage				
Gas Stations				
		07/20/16		
	7/19/2016		Added one (1) gate code in Kula	
Gate Codes		07/06/16		
	7/1/2016		Added one (1) gate code in Kaanapali and changed three (3) gate codes in Kaanapali per Maui Dispatch	
Government Buildings				
Harbors				
Helipads				
Hiking Trails				
Hospitals				
Hydrants				
Hyrdology Layers				



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MAPPING LAYERS UPDATED (PART III)

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

	MAUI COUNTY			
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks	
	CRITICAL 9-1-1		TY LAYERS FOR DISPATCH & RESPONSE d 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				
	7/28/2016		Added six (6) POI in Kihei	
	7/28/2016		Spatially corrected one (1) POI in Kihei	
	7/28/2016		Changed business name for one (1) POI in Kihei	
Points of Interest		07/20/16		
Foints of Interest	7/19/2016		Added seven (7) POI in Kahului	
	7/19/2016		Spatially corrected one (1) POI in Kahului	
	7/19/2016		Changed one (1) POI Name in Kahului	
		07/06/16		
Police Beats	7/28/2016		Modified boundary between Beat 1-31 & 1-32 to match spatially corrected street centerlines	
		07/20/16		
Police Districts				
Police Response Areas				
Police Stations				
Post Offices				
Schools				
	7/29/2016		Spatially corrected six (6) street centerline segments in Makawao	
Street Centerlines	7/29/2016		Spatially corrected one (1) street centerline segment in Haiku	
	7/28/2016		Spatially corrected nine (9) street centerline segments in Kihei	

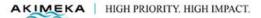


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MAPPING LAYERS UPDATED (PART IV)

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

	MAUI COUNTY				
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks		
	CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE (Listed Alphabetically)				
	7/28/2016 7/27/2016		Spatially corrected six (6) street centerline segments in Makawao Spatially corrected nineteen (19) street centerline segments in Makawao		
	7/26/2016	07/20/16	Spatially corrected thirty-four (34) street centerline segments in Makawao		
	7/19/2016 7/18/2016 7/12/2016		Spatially corrected seven (7) street centerline segments in Kahului Spatially corrected nineteen (19) street centerlines segments in Makawao Spatially corrected six (6) street centerline segments in Makawao		
Street Centerlines	7/12/2016 7/12/2016 7/11/2016		Removed MSAG Exception for Manele Rd, Lanai Spatially corrected twenty-three (23) street centerline segments in Makawao		
	7/8/2016	07/06/16	Removed MSAG Exception for one (1) street centerline segment in Lahaina		
	7/6/2016 7/5/2016	07700/10	Spatially corrected one (1) street centerline segment in Makawao Spatially corrected five (5) street centerline segments in Makawao		
	7/1/2016		Spatially corrected two (2) street centerline segments in Makawao		
Subdivisions Tow Jurisdictions	7/25/2016		Added 808 Towing to Kihei district		
Tsunami Evacuation Zones					
Tsunami Heights Waste Water Plants					
	7/28/2016	07/20/16	Per VZW CRS		
WSP Cell Sectors	7/20/2016 7/14/2016		Per VZW CRS Per ATT CRS		
	7/5/2016	07/06/16	Per VZW CRS		
	7/28/2016	07/20/16	Per VZW CRS		
WSP Cell Towers	7/20/2016 7/14/2016		Per VZW CRS Per ATT CRS		
	7/5/2016	07/06/16	Per VZW CRS		



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NOTE:

• The Parcels layer is provided by Maui County. Akimeka performs edits on the spatial information of the layer for 9-1-1 purposes. Changes to the attribute table are made when needed. The Parcels layer uploaded to the PSAP GIS server is intended for 9-1-1 purposes only and should not be disseminated to other county agencies.

GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVES

GIS KEY ACTIVITIES/UPDATES

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

Date	Key Activities/Updates
7/20/2016	Delivered updated Address Points, Points of Interest, Street Centerlines, WSP Cell
	Sectors and WSP Cell Towers for a MapFlex update
7/20/2016	Delivered .map, .str, rte. and Maui Cell Coverage.cvs which included updated Address
	Points, Common Places Lookup Table, Gate Codes, Points of Interest, Street
	Centerlines and WSP Cell Towers for Intergraph CAD Map
7/6/2016	Delivered updated Address Points, Points of Interest, Street Centerlines, WSP Cell
	Sectors and WSP Cell Towers for a MapFlex update
7/6/2016	Delivered .map, .str, rte. and Maui Cell Coverage.cvs which included updated Address
	Points, Common Places Lookup Table, Gate Codes, Points of Interest, Street
	Centerlines and WSP Cell Towers for Intergraph CAD Map

July 1, 2016 - July 31, 2016

From April through June 2014, the Maui Police Department worked to upgrade their Intergraph CAD system to the more recent 2014 version. Through this upgrade process, new improvements were identified and the overall functionality of the system from the Map Build process to the Production workstation made significant enhancements in order to streamline the deliverables and continue providing accurate data to the PSAP.

- 1. On July 6, 2016, the following data was delivered for an Intergraph CAD Map update:
 - a. Address Points, Common Places Lookup Table, Gate Codes, Street Centerlines and WSP Cell Towers.
 - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv
- 2. Akimeka delivered an updated Intergraph CAD map on July 20, 2016 which included:
 - a. Address Points, Common Places Lookup Table, Gate Codes, Street Centerlines and WSP Cell Towers.
 - b. .map, .str, .rte, CAD Map Build database and Cell Coverage.csv

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

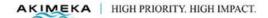
MAPFLEX SYSTEM

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

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

During the month of July 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in July 2016
 - a. **Hawaii County** July 5th and July 19th
 - b. **Maui County** July 6th and July 20th
 - c. Kauai County July 7th and July 21st
 - d. **Honolulu** July 8th and July 22nd



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MAPFLEX SYSTEM ISSUES

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

- 1. On July 9th, 2016, Maui Dispatch confirmed that the delivery of updated data from Akimeka on July 6th, 2016 was successfully updated.
- 2. During the June 2016 State of Hawaii 9-1-1 Board Meeting, an issue was identified by several of the PSAPs with the MapFlex system displaying non- Ali formatted Latitude and Longitude location points from an unknown origin for 9-1-1 calls received from payphones. Hawaiian Telcom and West Safety Solutions will look into the trouble and will schedule a statewide coordination call with all the PSAPs during early August 2016 after their investigation.

RESCUE TUBES

On April 18th, 2016 Akimeka created a Rescue Tubes layer as requested by the Maui Police Dispatch Center. The data was provided by Kaanapali Operations Association. The data provided included Rescue Tube number, latitude and longitude and a physical location for each tube. There are twenty-seven rescue tube locations in the Lahaina and Kaanapali area. This layer was included in the Intergraph CAD map with the April 27th, 2016 deliverable. There were no further updates in July, 2016.

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4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – MAUI COUNTY PSAPS - JULY 2016

	MAUI COUNTY												
#													
			NONE										

NOTE:

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

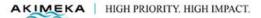
MAUI PSAP SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY - 2016

	MAUI COU	NTY		MSAG SERVICE REQUEST CATEGORIES								
2016	TO	ΓAL	Onon	WIRE	LINE	WIRE	LESS	VolP				
2016	Created	Closed	Open	Created	Closed	Created	Closed	Created	Closed			
2015 Carryover*			0									
January	1	1	0	0	0	0	0	1	1			
February	0	0	0	0	0	0	0	0	0			
March	0	0	0	0	0	0	0	0	0			
April	1	1	0	1	1	0	0	0	0			
May	3	3	0	3	3	0	0	0	0			
June	1	1	0	1	1	0	0	0	0			
July	1	1	0	1	1	0	0	0	0			
August												
September												
October												
November												
December	_	_			_		_		_			
TOTAL	7	7	0	6	6	0	0	1	1			

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

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

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1. 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 September 2016

AUDIT SUMMARY RESULTS - 2015-2016 -- TBA

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

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

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA

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	Note:	
	Note:	
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	Notes:	
	For your information	
	For your information	
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1. PSAP OPERATIONS

9-1-1 CALL VOLUME - JULY 2016

(Source: West Safety Services (Intrado) Viper system

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

	9-1-1 Primary PSAP Call Volume																
Honolulu City & County PSAPs		Wireline Wireless			eless	VOIP			Calls With No ALI		Admin Calls		Abandoned Calls		Other Calls		
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI		No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	No. of Other Calls	% of Total Calls
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%

9-1-1 CALL VOLUME - CALENDAR YEAR 2016

	9-1-1 Primary PSAP Call Volume																
Honolu	lu City & County PSAPs	Wireline		Wireless			VOIP Calls		Calls with No ALI		Admin Calls		Abandoned Calls		Other Calls		
2016	Total 9-1-1 Calls Processed	No. of Wireline Calls	% of Total Calls	No. of Wireless Calls	% of Total Calls	% of Wireless WPH1 Calls	% of Wireless WPH2 Calls	No. of VoIP Calls	% of Total Calls	No. of Calls with No ALI	% of Total Calls	No. of Admin Calls	% of Total Calls	No. of 9-1-1 Abandoned	% of Total Calls	No. of Total Call Received	% of Total Calls
JAN	88,400	20,120	22.76%	64,868	73.38%	51.49%	21.89%	3,359	3.80%	53	0.06%	2,193	2.48%	12,706	14.37%	2,249	2.54%
FEB	81,812	19,079	23.32%	59,641	72.90%	50.74%	22.16%	3,043	3.72%	49	0.06%	1,950	2.38%	11,815	14.44%	611	0.75%
MAR	86,041	19,385	22.53%	63,498	73.80%	50.08%	23.72%	3,097	3.60%	60	0.07%	1,482	1.72%	13,099	15.22%	642	0.75%
APR	85,009	19,510	22.95%	62,431	73.44%	49.70%	23.74%	3,026	3.56%	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																	
SEPT																	
ост																	
NOV																	
DEC																	
YTD	595,110	135,135		437,475				22,126		373		14,222		84,940		6,263	
MON AVG	85,016	19,305	22.71%	62,496	73.50%	49.98%	23.52%	3,161	3.72%	53	0.06%	2,032	2.39%	12,134	14.27%	895	1.04%

NOTE:

• *Calls with no Ali 0.07% - Statewide average = 0.18% Year 2015

July 2016



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9-1-1 CALL VOLUME BY AGENCY – JULY 2016

		9-1-1 Call Volume by Agency													
2016		Hon	olulu Polic	ce Departn		Honolulu Fire Department									
2010	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	74,558	86.11%	20,966	40,311	1,282	11,999	2,750	3.18%	93	0					

			9	-1-1 Call Volu	me by Ageno	;y					
2016	E	mergency Me	edical Service	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			
July	8,693	10.04%	837	116	73	0.08%	69	19			

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

								9-1-1 C	all Volu	me by A	Agency								
2016		Honol	ulu Poli	ce Depa	rtment		Hono	lulu Fire	Depart	tment	Emerg	ency Me	edical S	ervices		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																			
SEPT																			
ост																			
NOV																			
DEC																			
YTD	514,380		137,447	283,447	8,546	84,940	17,311		626	0	56,693		4,628	849	463		422	67	
MON AVG	73,483	86.44%	19,635	40,492	1,221	12,134	2,473	2.90%	89	0	8,099	9.54%	661	121	66	0.08%	60	10	

Oahu Civilian



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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 - JULY 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.
- During the month of June, it was identified that the Text to 9-1-1 icon was missing on the MapFlex System when receiving Text to 9-1-1. Hawaiian Telcom and West Safety Solutions will look into the trouble and will schedule a statewide coordination call with all the PSAPs during early August 2016 after their investigation.

	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												
September												
October												
November												
December												
YTD	947	814	34	10	0	89						
Monthly Avg.	135.3	116.3	4.9	1.4	0.0	12.7						

NOTE:

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

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WIRELESS PSAP TESTING - JULY 2016

	OAHU CIVILIAN - JULY 2016							
Date WSP Sites Tested			Sectors Tested	Tested By:	Test Pass/Fail	Comments:		
7/1/2016	AT&T	1	6	Oahu PSAP	Pass	Waikiki COW		
7/19/16	Verizon	2	9	Oahu PSAP	Pass	2 testers		
7/27/16	Verizon	1	6	Oahu PSAP	Pass			

NOTES:

There were four (4) scheduled Wireless 911 Tests for the Oahu Civilian PSAP in July, 2016.

FOR YOUR INFORMATION

FYI	For Your Information
MLTS (Multi 1	Line Telephone System)

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

PRIMARY	MLTS/PBX	911 CALLS RECEIVED		
PSAPS*	July 2016	YEAR TO DATE 2016		
Oahu	4,507	25,262		
Hawaii	82	477		
Maui	114	690		
Molokai	0	1		
Kauai	25	154		
Total**	4,728	26,584		

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

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

July 1, 2016 - July 31, 2016

FOR YOUR INFORMATION

FYI	For Your Information
911 Calls Reco	eived From Payphones

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

PRIMARY	911 CALLS RECEIVED via Payhone
PSAPS	July 2016
Oahu	3,172
Hawaii	453
Maui	410
Molokai	7
Kauai	160
Total**	4,202

*PSAP totals does not include Military 911 calls.

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

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2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR - JULY 2016

OAHU CIVILIAN 2016	9-1-1 TRANSACTIONS								
	Total	MSAG	ALI Submitted			Open ALI Discrepancy Records			Customer
		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									
SEPTEMBER									
OCTOBER									
NOVEMBER									
DECEMBER						_			
TOTAL YTD	817	193	614	9	1				8,819
AVG PER MONTH	117	28	88	1	0				1,260

Definitions

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

- (B) **T**elephone **N**umber **C**hange **R**equest Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 199 attached to them which indicates the need for validation.
- (C) **A**utomatic **L**ocation **I**nformation **D**iscrepancy **R**ecord Represents an address discrepancy discovered during a live 9-1-1 call, from a landline. These record corrections are treated with a higher priority and should be processed within 48 hours as a general guideline.
- (D) Voice over Internet Protocol Discrepancy Record Represents an address discrepancy discovered during a live 9-1-1 call, from a VoIP phone. These record corrections are treated with a higher priority and should be processed within 72 hours as a general guideline per Time Warner Operations Center. MSR tracking effective April 2014.



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MSAG CURRENT MONTH NOTES:

A total of **117** MSAG transactions were processed in 9-1-1 Net during the month of July 2016. Twenty-nine (**29**) requests were processed relating to the MSAG database, and two (**2**) requests relating to the ALI 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 2,561 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

There was two (2) ALI Discrepancy Request (ALI DR) processed in 9-1-1 Net, one as the result of a 911 call from a business in Pearl City and the other for a payphone located in a residential area. Akimeka verified the address provided by the caller and verified the correct location. The address has been updated in the GIS and in 9-1-1 Net and is now MSAG valid.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

86 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 208 Open TN CR Transactions as of July 31, 2016.
- Refer to chart in the next section "TNCR Current Status"

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

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

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

NOTE:

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

	PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)							
PSAP	TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA	OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO)	TOTAL UNOPENED TNCR RECORDS					
OAHU CIVILIAN	208	4	198	6				

STATUS

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

<u>REFERRED STATUS</u> - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and the request requires additional information to validate. The West Safety Services (Intrado) 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.

July 1, 2016 - July 31, 2016

CHARTER COMMUNICATIONS (TIME WARNER) VOIP DATABASE TNCR

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

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

Charter Communications 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status)							
PSAP	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.
Akimeka was not able to determine an MSAG valid address with the information provided. Chart advised to contact customer and provide Akimeka with a TMK or driving directions.		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.

July 1, 2016 - July 31, 2016

MSAG COMMUNITIES PROJECT

MSAG COMMUNITY AND STREET SEGMENT SWEEP - PHASE VII

MSAG Community and Street Segment Sweep - Phase VII

Subsequent to the completion of the MSAG Community and Street Segment Sweep - Phase V work on **June 27, 2014**, and the Database Synchronization Phase VI in **July 2014**, a project plan for Phase VII, with regards to the spatial accuracy of Street Centerlines, was approved by the Honolulu Police Department on **July 31, 2014**. The MSAG Community and Street Segment Sweep - Phase VII project is aimed to identify and correct the spatial accuracy of Street Centerlines throughout the island of Oahu, through a methodical 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 July 31, 2016:

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



July 1, 2016 - July 31, 2016

MSAG Community and Street Segment Sweep – Phase VII continued

WSAG Community and	MSAG COMMUNITY AND STREET SEGMENT SWEEP PHASE VII GIS UPDATES								
MSAG COMMUNITY (In Order of Effort)	TARGET START DATE	TARGET COMPLETION DATE	AKIMEKA COMPLETION DATE	NOTES/COMMENTS	DATE GIS DELIVERED TO HPD	DATE GIS LOADED TO CAD BY HPD			
Kalaeloa	05/22/15	06/08/15	06/08/15		06/12/15	06/25/15			
Ewa Beach	06/09/15	07/27/15	07/24/15		06/26/15	07/13/15			
Iroquois	07/28/15	08/03/15	07/27/15		07/10/15	07/14/15			
Waipahu	08/04/15	09/07/15	08/25/15		08/7/15,				
Kunia	09/08/15	09/11/15	08/26/15		08/21/15				
Waipio	09/14/15	09/29/15	09/18/15		09/18/15	10/12/15			
Mililani	09/30/15	11/19/15	11/10/15		11/10/15	12/14/16			
Pearl City	11/20/15	12/17/15	12/02/16		12/11/16				
Aiea	12/18/15	01/26/16	01/19/16		12/23/16	01/14/16			
PC PEN	01/27/16	02/02/16	01/19/16		01/08/16	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	AraCIC Liganes Issues at	01/22/16				
Moanalua T	02/18/16	02/23/16	01/26/16	ArcGIS License Issues at HPD on workstation	01/22/10				
Hale Moku	02/24/16	02/29/16	01/26/16	TIFD OII 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	. 000	02/19/16				
Airport	03/11/16	03/25/16	02/12/16	ArcGIS License Item was		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	Uploads at HPD in progress					
Kakaako	08/03/16	08/08/16	07/20/16		07/22/16				
Ala Moana	08/09/16	08/11/16	07/26/16						
Honolulu	08/12/16	08/29/16							
Makiki	08/30/16	09/07/16							
Manoa	09/08/16	09/27/16							

July 1, 2016 - July 31, 2016

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – JULY 2016

MAPPING LAYERS UPDATED (PART I)

		OAl	HU 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)						
	7/07/0040	(Liste)	•				
	7/27/2016		Added seven (7) location names in Honolulu				
	7/27/2016		Deleted three (3) address points in Honolulu				
	7/27/2016		Deleted two (2) location names in Honolulu				
	7/27/2016		Corrected four (4) TMK in Honolulu				
	7/27/2016		Corrected one (1) address in Honolulu				
	7/27/2016		Added one (1) address point in Honolulu				
	7/27/2016		Spatially corrected two hundred sixty-one (261) address points in Honolulu				
	7/25/2016		Added sixteen (16) location names in Honolulu				
	7/25/2016		Deleted six (6) location names in Honolulu				
	7/25/2016		Added one (1) alias in Honolulu				
	7/25/2016		Corrected one (1) address in Honolulu				
	7/25/2016		Added five (5) address points in Honolulu				
	7/25/2016		Deleted twenty-eight (28) address points in Honolulu				
	7/25/2016		Corrected one (1) TMK in Honolulu				
	7/25/2016		Spatially corrected three hundred seven (307) address points in Honolulu				
		07/22/16					
	7/22/2016		Added four (4) location names in Honolulu				
Address Points	7/22/2016		Corrected two (2) TMK in Honolulu				
	7/22/2016		Corrected one (1) location name in Honolulu				
	7/22/2016		Deleted two (2) address points in Honolulu				
	7/22/2016		Added nineteen (19) address points in Honolulu				
	7/22/2016		Added one (1) building number in Honolulu				
	7/22/2016		Spatially corrected two hundred twenty-eight (228) address points in Honolulu				
	7/20/2016		Deleted nineteen (19) address points in Honolulu				
	7/20/2016		Added twelve (12) address points in Honolulu				
	7/20/2016		Added one (1) apartment number in Honolulu				
	7/20/2016		Added two (2) building numbers in Honolulu				
	7/20/2016		Deleted two (2) location names in Honolulu				
	7/20/2016		Added two (2) routing ids in Honolulu				
	7/20/2016		Added twenty (20) location names in Honolulu				
	7/20/2016		Spatially corrected three hundred thirty (330) address points in Honolulu				
	7/19/2016		Added twelve (12) routing ids in Downtown				
	7/18/2016		Added forty-four (44) location names in Honolulu				
	7/18/2016		Deleted four (4) address points in Honolulu				

July 1, 2016 - July 31, 2016

MAPPING LAYERS UPDATED (PART II)

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

	OAHU CIVILIAN								
Type of Layer	Akimeka GIS Server Date GIS Date Created/ Edits Performed		Other/Remarks						
	CRITICAL 9-1-1		TY LAYERS FOR DISPATCH & RESPONSE						
	(Listed Alphabetically)								
	7/18/2016		Added three (3) address points in Honolulu						
	7/18/2016		Corrected two (2) location names in Honolulu						
	7/18/2016		Added one (1) apartment number in Honolulu						
	7/18/2016		Spatially corrected two hundred seventy-three (273) address points in Honolulu						
	7/15/2016		Added fourteen (14) location names in Honolulu						
	7/15/2016		Deleted two (2) address points in Honolulu						
	7/15/2016		Added four (4) address points in Honolulu						
	7/15/2016		Corrected two (2) TMK in Honolulu						
	7/15/2016		Corrected one (1) address in Honolulu						
	7/15/2016		Corrected one (1) location name in Honolulu						
	7/15/2016		Spatially corrected ninety-eight (98) address points in Honolulu						
	7/13/2016		Deleted nineteen (19) address points in Ala Moana						
	7/13/2016		Added twenty-four (24) location names in Honolulu						
	7/13/2016		Deleted one (1) location name in Honolulu						
	7/13/2016		Deleted one (1) address point in Honolulu						
	7/13/2016		Corrected one (1) location name in Honolulu						
Address Points	7/13/2016		Added three (3) address points in Honolulu						
	7/13/2016		Spatially corrected two hundred eighteen (218) address points in Honolulu						
	7/13/2016		Corrected two (2) TMK in Honolulu						
	7/11/2016		Deleted two (2) location names in Ala Moana						
	7/11/2016		Corrected one (1) location name in Ala Moana						
	7/11/2016		Added nine (9) location names in Ala Moana						
	7/11/2016		Added fourteen (14) address points in Ala Moana						
	7/11/2016		Added ten (10) floor numbers in Ala Moana						
	7/11/2016		Spatially corrected thirty-five (35) address points in Ala Moana						
	7/11/2016		Added nine (9) location names in Honolulu						
	7/11/2016		Corrected one (1) location name in Honolulu						
	7/11/2016		Deleted three (3) address points in Honolulu						
	7/11/2016		Added three (3) address points in Honolulu						
	7/11/2016		Added six (6) routing ids in Honolulu						
	7/11/2016		Spatially corrected one hundred fifty-two (152) address points in Honolulu						
		07/08/16							
	7/8/2016		Corrected one (1) address in Kakaako						
	7/8/2016		Corrected one (1) TMK in Kakaako						

Oahu Civilian



July 1, 2016 - July 31, 2016

MAPPING LAYERS UPDATED (PART III)

	OAHU CIVILIAN						
Type of Layer	Akimeka GIS Server Date GIS Date Created/ Delivered Edits Performed		Other/Remarks				
	CRITICAL 9-1-1	PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE				
			l Alphabetically)				
	7/8/2016		Added eight (8) location names in Kakaako				
	7/8/2016		Deleted one (1) location name in Kakaako				
	7/8/2016		Corrected one (1) location name in Kakaako				
	7/8/2016		Added one (1) address point in Kakaako				
	7/8/2016		Spatially corrected thirty-three (33) address points in Kakaako				
	7/8/2016		Added three (3) location names in Ala Moana				
	7/8/2016		Corrected two (2) location names in Ala Moana				
	7/8/2016		Deleted two (2) address points in Ala Moana				
	7/8/2016		Corrected one (1) TMK in Ala Moana				
	7/8/2016		Corrected one (1) address in Ala Moana				
	7/8/2016		Added one (1) address point in Ala Moana				
	7/8/2016		Spatially corrected eighty-eight (88) address points in Ala Moana				
	7/5/2016		Added six (6) location names in Downtown				
	7/5/2016		Added ten (10) address points in Downtown				
Address Points	7/5/2016		Corrected two (2) TMK in Downtown				
	7/5/2016		Spatially corrected twenty-one (21) address points in Downtown				
	7/5/2016		Deleted three (3) address points in Kakaako				
	7/5/2016		Deleted two (2) location names in Kakaako				
	7/5/2016		Added three (3) location names in Kakaako				
	7/5/2016		Corrected four (4) location names in Kakaako				
	7/5/2016		Added thirty-four (34) building numbers in Kakaako				
	7/5/2016		Corrected one (1) TMK in Kakaako				
	7/5/2016		Spatially corrected one hundred four (104) address points in Kakaako				
	7/1/2016		Added two (2) location names in Downtown				
	7/1/2016		Corrected one (1) TMK in Downtown				
	7/1/2016		Added one (1) address point in Downtown				
	7/1/2016		Deleted two (2) address points in Downtown				
	7/1/2016		Deleted one (1) location name in Downtown				
	7/1/2016		Spatially corrected sixty-eight (68) address points in Downtown				
Airports							
Bridges							
Building Footprints							
Bus Stops							
Churches							



July 1, 2016 - July 31, 2016

MAPPING LAYERS UPDATED (PART IV)

	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)								
Coastal Names		(Liste	u Aiphaocucany)					
Coastline								
Coastinic	7/27/2016		Spatially corrected seventeen (17) locations in Honolulu					
	7/25/2016		Spatially corrected thirty-two (32) locations in Honolulu					
	1720/2010	07/22/16	Character and two (62) locations in Floridian					
	7/22/2016	0112210	Spatially corrected eight (8) locations in Honolulu					
	7/20/2016		Spatially corrected forty (40) locations in Honolulu					
	7/18/2016		Spatially corrected forty-six (46) locations in Honolulu					
	7/15/2016		Spatially corrected sixteen (16) locations in Honolulu					
	7/13/2016		Spatially corrected thirty-two (32) locations in Honolulu					
Common Places	7/11/2016		Spatially corrected twenty-two (22) locations in Ala Moana					
	7/11/2016		Spatially corrected twenty-six (26) locations in Honolulu					
		07/08/16						
	7/8/2016		Spatially corrected seven (7) locations in Kakaako					
	7/8/2016		Spatially corrected nineteen (19) locations in Ala Moana					
	7/5/2016		Spatially corrected nineteen (19) locations in Downtown					
	7/5/2016		Spatially corrected eight (8) locations in Kakaako					
	7/1/2016		Spatially corrected twenty-nine (29) locations in Downtown					
Correctional Facilities								
Emergency Callboxes								
Emergency Operation Centers								
Emergency Shelters								
, , , , , , , , , , , , , , , , , , ,	7/28/2016		Corrected boundary for ESN 108					
ESZ/ESN	7/21/2016		Corrected boundary for ESN 156					
	7/5/2016		Corrected boundary for ESN 116					
Fire Beats								
Fire Districts								
Ein- D A		07/08/16						
Fire Response Areas	7/6/2016		Corrected boundary for STA2					
Fire Stations								
Food & Beverage								
Gas Stations								
Gate Codes								
Government Buildings								



July 1, 2016 - July 31, 2016

MAPPING LAYERS UPDATED (PART V)

	OAHU CIVILIAN						
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks				
	CRITICAL 9-1-1		TY LAYERS FOR DISPATCH & RESPONSE ed Alphabetically)				
Harbors							
Helipads							
Hiking Trails							
Hospitals							
Hydrants							
Hyrdology Layers							
Incident Response Areas							
Lodging							
Major Roads							
Medic Beats							
Medic Districts							
Madia Paspansa Araga		07/22/16					
Medic Response Areas	7/21/2016		Corrected boundary for MED12				
Medic Stations							
Medical Facilities							
Milepost Markers							
MSAG Communities							
Net Junctions							
Ocean Rescue Boundaries							
Ocean Safety							
Parcels							
Parks							
Parks Polygon							
Points of Interest							
	7/28/2016		Corrected police beat 659, 660, and 661 according to HPD written policies and procedures				
	7/27/2016		Corrected police beat 656, 657, and 658 according to HPD written policies and procedures				
Police Beats		07/22/16					
	7/22/2016		Corrected police beat 654 and 655 according to HPD written policies and procedures and began correcting police beat 656				
	7/15/2016		Corrected police beat 650, 651, and 652 according to HPD written policies and procedures				



July 1, 2016 - July 31, 2016

MAPPING LAYERS UPDATED (PART VI)

	OAHU CIVILIAN						
Type of Layer	Akimeka GIS Server Date GIS Date Created/ Delivered Edits Performed		Other/Remarks				
	CRITICAL 9-1-1		TY LAYERS FOR DISPATCH & RESPONSE d Alphabetically)				
		07/08/16	d Alphabeticany)				
Police Beats	7/8/2016	01700/10	Corrected police beat 179 and 180 according to HPD written policies and procedures				
	7/5/2016		Corrected police beat 178 according to HPD written policies and procedures				
Police Districts							
Police Response Areas							
Police Stations							
Post Offices							
Schools	7/00/0040						
	7/29/2016		Spatially corrected twenty-one (21) street segments in Honolulu				
	7/29/2016		Spatially corrected twenty-six (26) street segments in Makiki				
	7/28/2016		Spatially corrected twenty-seven (27) street segments in Waikiki				
	7/28/2016		Spatially corrected sixty-nine (69) street segments in Honolulu				
	7/28/2016		Corrected police attributes for one (1) street segment in Waikiki				
	7/27/2016		Spatially corrected twelve (12) street segments in Waikiki				
	7/26/2016		Added one (1) street segment in Honolulu				
	7/26/2016		Split one (1) street segment in Honolulu				
	7/26/2016		Spatially corrected one hundred forty-eight (148) street segments in Honolulu				
	7/26/2016	0=100110	Spatially corrected one (1) street segment in McCully				
	-//	07/22/16					
	7/22/2016		Split one (1) street segment in Ala Moana				
Street Centerlines	7/22/2016		Split one (1) street segment in Downtown				
	7/22/2016		Spatially corrected twenty-four (24) street segments in Waikiki				
	7/21/2016		Added two (2) street segments in Ala Moana				
	7/21/2016		Split four (4) street segments in Ala Moana				
	7/21/2016		Spatially corrected ten (10) street segments in Ala Moana				
	7/21/2016		Spatially corrected forty-seven (47) street segments in Honolulu				
	7/19/2016		Split fifteen (15) street segments in Downtown				
	7/19/2016		Added four (4) street segments in Downtown				
	7/19/2016		Deleted one (1) street segment in Downtown				
	7/19/2016		Spatially corrected twelve (12) street segments in Downtown				
	7/19/2016		Added four (4) street segments in Kakaako				
	7/19/2016		Spatially corrected thirty-four (34) street segments in Kakaako				
	7/19/2016		Spatially corrected twenty-two (22) street segments in Ala Moana				
	7/15/2016		Deleted one (1) street segment in Downtown				



July 1, 2016 - July 31, 2016

MAPPING LAYERS UPDATED (PART VII)

		OA	HU CIVILIAN
Type of Layer	Akimeka GIS Server Date Created/ Edits Performed	Date GIS Delivered	Other/Remarks
	CRITICAL 9-1-1		TY LAYERS FOR DISPATCH & RESPONSE
	7/45/2040	(Liste	d Alphabetically)
	7/15/2016		Spatially corrected eighteen (18) street segments in Waikiki
	7/14/2016		Deleted two (2) street segments in Downtown
	7/14/2016		Added four (4) street segments in Downtown
	7/14/2016		Split three (3) street segments in Downtown
	7/14/2016		Spatially corrected one hundred thirteen (113) street segments in Downtown
	7/12/2016		Spatially corrected seventy-nine (79) street segments in Downtown
	7/12/2016		Added twenty-eight (28) street segments in Kunia
	7/12/2016		Split one (1) street segment in Kunia
	7/11/2016		Corrected range to one (1) street segment in Kapolei
		07/08/16	
Street Centerlines	7/8/2016		Spatially corrected fourteen (14) street segments in Ala Moana
	7/8/2016		Spatially corrected one (1) street segment in Waikiki
	7/7/2016		Added four (4) street segments in Punchbowl
	7/7/2016		Split five (5) street segments in Punchbowl
	7/7/2016		Spatially corrected sixty-one (61) street segments in Punchbowl
	7/6/2016		Deleted one (1) street segment in Punchbowl
	7/6/2016		Corrected range to three (3) street segments in Punchbowl
	7/6/2016		Spatially corrected seventy-two (72) street segments in Punchbowl
	7/5/2016		Spatially corrected three (3) street segments in McCully
	7/5/2016		Spatially corrected three (3) street segments in Honolulu
	7/1/2016		Spatially corrected twenty-two (22) street segments in Punchbowl
Subdivisions			
Tow Jurisdictions			
Tsunami Evacuation Zones			
Tsunami Heights			
Waste Water Plants			
	7/28/2016		Per VZW CRS
	7/27/2016		Per VZW CRS
		07/22/16	
	7/21/2016		Per ATT CRS
WICD C 11 C	7/20/2016		Per ATT CRS
WSP Cell Sectors	7/20/2016		Per VZW CRS
	7/19/2016		Per VZW CRS
	7/11/2016		Per ATT CRS
		07/08/16	
	7/5/2016		Per VZW CRS

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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.

		OAI	HU CIVILIAN
Type of Layer	Akimeka GIS Server Date GIS Date Created/ Delivered Edits Performed		Other/Remarks
		PUBLIC SAFET	Y LAYERS FOR DISPATCH & RESPONSE
		(Liste)	l Alphabetically)
	7/28/2016		Per VZW CRS
	7/27/2016		Per VZW CRS
		07/22/16	
	7/21/2016		Per ATT CRS
W/CD C 11 T	7/20/2016		Per ATT CRS
WSP Cell Towers	7/20/2016		Per VZW CRS
	7/19/2016		Per VZW CRS
	7/11/2016		Per ATT CRS
		07/08/16	
	7/5/2016		Per VZW CRS

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GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVES

GIS KEY ACTIVITIES/UPDATES

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

Date	Key Activities/Updates
7/25/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
7/22/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
7/22/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
7/22/2016	Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety
7/18/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
7/18/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
7/11/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS
7/8/2016	Street Centerlines, Common Places, Police Beats, MSAG Communities to HPD for Motorola CAD
7/8/2016	Street Centerlines, Address Points, Fire Response Areas, Medic Response Areas, and Display Address Points to HFD, EMS, and Ocean Safety for TriTech CAD
7/8/2016	Address Points, Common Places, Street Centerlines, Police Response Areas, Fire Response Areas, Medic Response Areas, Ocean Safety Response Areas, ESN, MSAG Communities, Cell Towers, Cell Sectors to the Honolulu MapFlex system for HPD, HFD, EMS, and Ocean Safety
7/5/2016	Cell Towers and Cell Sectors for GeoComm at HPD, HFD and EMS



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POLICE BEATS CORRECTIONS

Background

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

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

Status to Date

Based on HPD PMT's confirmation, Akimeka continued to make corrections to the Police Beats during the month of July 2016 and has corrected fourteen (14) Police Beats (178, 179, 180, 650, 651, 652, 654, 655, 656, 657, 658, 659, 660, and 661) according to the HPD written Policies and Procedures.

Upload Process

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

MAPFLEX SYSTEM

During the month of July 2016, the MapFlex system received updates without any issues and deliverables continued on schedule.

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

During the month of July 2016, there were continued GIS deliverables into the MapFlex system for Hawaii County, Maui County, Kauai County, and Honolulu Civilian PSAPs. The MapFlex deployment has been concluded and is now considered a running system capable of receiving updates regularly.

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in July 2016
 - a. **Hawaii County** July 5th and July 19th
 - b. **Maui County** July 6th and July 20th
 - c. Kauai County July 7th and July 21st
 - d. **Honolulu** July 8th and July 22nd

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MAPFLEX ISSUE

During the June 2016 State of Hawaii 9-1-1 Board Meeting, an issue was identified by several of the PSAPs with the MapFlex system displaying non- Ali formatted Latitude and Longitude location points from an unknown origin for 9-1-1 calls received from payphones. Hawaiian Telcom and West Safety Solutions will look into the trouble and will schedule a statewide coordination call with all the PSAPs during early August 2016 after their investigation.

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 13, 2016 and July 5, 2016.

Street Utility Check									
	First Report 06/01/13	6/13/2016	7/5/2016	Improvements/Corrections					
Total Number of GIS Records	26,602	29,394	29,408	Increased by 14 records					
	Errors Identified								
Zero Errors	5,112	18	25	Increased by 7 errors					
Low > High Errors	3	0	0	No Change					
Mixed Parity Errors	1	0	0	No Change					
Changed Parity Errors	105	0	0	No Change					
Address Gap Errors	2,629	3	0	Decreased by 3 errors					
Address Overlap Errors	423	2	2	No Change					
Flipped Link Errors	1,030	592	596	Increased by 4 errors					
Total Errors	9,303	617	623	Increased by 6 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

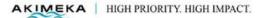
(<u>Reference:</u> NENA 71-501, Version 1.1 – NENA Information Document for Synchronizing Geographic Information System databases with MSAG & ALI)

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

The database synchronization effort included comparing Oahu Civilian's 9-1-1 MSAG received from the 911 Database provider, Intrado on July 1, 2016, against the PSAP's 911 GIS Street Centerline data. A total number of **7,755** 9-1-1 MSAG records were reviewed in the audit and analyzed. Results of the database synchronization audit completed on April 1, 2016 for the Oahu Civilian PSAP are reported below.

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

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



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AUDIT SUMMARY RESULTS - 2016

		As of October 1, 2015		As of January 1, 2016		As of April 1, 2016		As of July 1, 2016	
9-1-1 MSAG TO GIS STREET CENTERLINE AUDIT COMPARISON RESULTS	Notes	9-1-1 MSAG Dated 10-01-15		9-1-1 MSAG Dated 1-01-16		9-1-1 MSAG Dated 4-01-16		9-1-1 MSAG Dated 7-01-16	
AUDIT COM ANION NEGOTIO		# of Records	%	# of Records	%	# of Records	%	# of Records	%
Total 9-1-1 MSAG Records Reviewed		7,749		7,752		7,766		7,755	
Less: 9-1-1 MSAG Exception Records	(1)	35	0.5%	30	0.4%	33	0.4%	33	0.4%
Net 9-1-1 MSAG Records Eligible for Comparison		7,714		7,722		7,733		7,722	
Total 9-1-1 MSAG Records Match (9-1-1 MSAG GIS Match No Corrections Required)		7,694	99.7%	7,710	99.8%	7,719	99.8%	7,718	99.9%
9-1-1 MSAG GIS No Match - Minor Correction Required	(2)	16	0.2%	11	0.1%	13	0.2%	3	0.0%
9-1-1 MSAG Record With No Matching GIS Record	(3)	4	0.1%	1	0.0%	1	0.0%	1	0.0%
Total 9-1-1 MSAG Records No Match		20	0.3%	12	0.2%	14	0.2%	4	0.1%

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 April 2016 with a 99.8% Match Rate to a 99.9% Match Rate as of July 2016

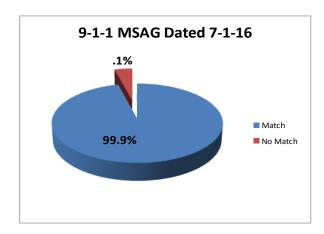
NOTES:

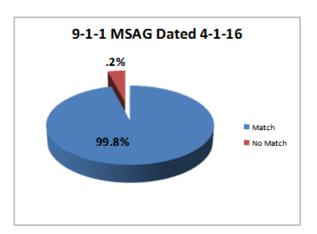
- An MSAG Record that will not have a corresponding GIS Street Centerline Record but is required for the routing of E9-1-1 calls (i.e., Emergency Call Box, Foreign Exchange Records, Wireless Shell Records, etc.). No further action is required.
- An MSAG Record that requires minor MSAG attention in 9-1-1Net to correct MSAG
 Records (i.e., Reassignment of an MSAG Community, modification of the Site Address
 Range, assignment of an ESN, performing a combine or insert of an existing MSAG
 Record, etc.).
- An MSAG Record that does not have a corresponding GIS Record and will require additional research and validation. The GIS Section will assist with this effort.



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





Oahu Civilian's level of accuracy or 9-1-1 Match percentage remained consistent with a 99.9% as of July 1, 2016 compared to 99.8% as of April 1, 2016.

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

- As agreed between HPD PMT and Akimeka, Akimeka would initially focus on the <u>existing MSAG</u> and GIS records to produce a match which will benefit the PSAP in the interim.
- This effort would not include the MSAG Communities project to implement the <u>new MSAG Communities</u> and associated GIS Street Centerlines. This would be handled as a separate project as identified and agreed to.
- As a result of the MSAG Community and Street Segment Sweep project, the majority of the remaining discrepancies resides in the Honolulu MSAG Community and will be addressed during the Phase V effort.
- The previously completed MSAG Communities as a result of the MSAG Community and Street Segment Sweep project are now considered part of ongoing maintenance.
- * "MSAG GIS Minor Corrections" decreased (13 to 3) from April 2016 to July 2016. Low and high address ranges, odd/even combines, and street suffixes were adjusted in the MSAG to correspond with the GIS record. Although identified as a minor correction, customer telephone numbers (TNs) must be validated in 9-1-1Net prior to correcting the MSAG record to ensure the correction will not result in an orphan ALI Record or TN Fall-out.

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AUDIT SUMMARY RESULTS - JULY 1, 2016 MSAG VS. APRIL 1, 2016 MSAG CONTIUNED

- * "MSAG Record with No GIS Record" remained the same (1 to 1) from April 2016 to July 2016. MSAG records with no matching record were due primarily to the verification of the MSAG records against multiple GIS databases to determine if the roads are existing within City and County Honolulu. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the October 2016 re-analysis.
- "GIS MSAG Records with No Matching E9-1-1 MSAG Record" decreased (4 to 3) from April 2016 to July 2016. Records with no matching record was due primarily to the verification of the MSAG records against the single source 9-1-1 GIS databases created by Akimeka from the multiple public safety agencies' databases to determine if the roads exist within City & County of Honolulu and Military bases GIS records. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the October 2016 re-analysis.
- GIS –Minor Corrections" decreased (8 to 5) from April 2016 to July 2016. Low and high address ranges, street suffixes, and MSAG Community were adjusted in the GIS database to correspond with the MSAG record. Akimeka will research the discrepancy and ensure they are processed in 9-1-1Net prior to the July 2016 re-analysis.
- A constant effort to keep the databases synchronized and maintained are required to improve the level of accuracy of the E9-1-1 databases each time an MSAG or GIS record is "last modified".
- Accurate location and GIS information will ensure proper dispatching and response in a timely manner for all Public Safety agencies.

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

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INVALID MSAG STREETS AND ADDRESS RANGES – ESN X99 RECORDS

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

Results of the Oahu Civilian data provided are as follows:

OAHU CIVILIAN	Invalid MSAG Records					
	9-1-1 MSAG Dated 01-01-16		9-1-1 MSAG Dated 04-01-16		9-1-1 MSAG Dated 07-01-15	
	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	122	1.5%	114	1.4%	72	0.9%

These invalid MSAG records represent **0.9%** of the Total MSAG records for the City & County of Honolulu as of the July 1, 2016 MSAG. The individual ALI records associated with these records are provided below.

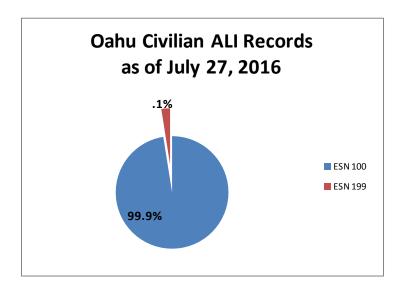
TN CRs are submitted by Akimeka when valid MSAG addresses are identified and validated against the GIS data. Akimeka will continue to investigate and report on these ESN 199 MSAG records as a separate project and add-on to the Database Synchronization quarterly report.

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AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT

As part of Akimeka's ongoing database synchronization efforts, Akimeka reviewed and summarized the ALI discrepancies by community in 9-1-1Net for the City & County of Honolulu (Oahu Civilian). As of July 1, 2016, there are 542 ALI records with an assigned ESN of 199, representing .1% of the City & County of Honolulu (Oahu Civilian) total ALI records.

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



The number of Ali records with an ESN 199 records decreased by 28% (752 to 542) from April 2016 to July 2016 respectively. The decrease was due primarily to Akimeka's effort to identify the invalid MSAG records and verify their correct locations against current County GIS data.

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

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

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