STATE OF HAWAII

DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

ANNUAL REPORT ON

THE ENHANCED 9-1-1 BOARD

FOR THE PERIOD OF

JULY 1, 2015 THROUGH JUNE 30, 2016

SUBMITTED TO

THE TWENTY-NINTH LEGISLATURE

IN RESPONSE TO SECTION 138-6, HAWAII REVISED STATUTES
Pursuant to Section 138-6, HRS, the Enhanced 9-1-1 (E911) Board (the Board) shall submit an annual report to the Legislature, including: the total aggregate surcharge collected by the State in the last fiscal year, the amount of disbursement from the fund, the receipt of each disbursement and a description of the project for which the money was disbursed; the conditions, if any, placed by the Board on disbursements from the fund; the planned expenditures from the fund in the next fiscal year; the amount of any unexpended funds carried forward for the next fiscal year; a cost study to guide the Legislature towards necessary adjustments to the fund and the monthly surcharge; and a status report of jurisdictional capabilities for the E911 services, including public safety answering points and communications service providers.

The E911 Fund receives monthly surcharges imposed on every commercial mobile radio and VoIP service connection. For the purposes of this report, the E911 Fund will be referred to as “the Fund”, the Public Safety Answering Points as “PSAPs”, the Wireless connection service providers as “WSPs”, and the Voice over Internet Protocol connection service providers as “VoIPs”.
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I. Executive Summary

Act 168, Session Laws of Hawaii (SLH) 2011, created an Enhanced 911 (E911) Board on June 27, 2011 that is administratively attached to Department of Accounting and General Services. This Board supersedes the Wireless Enhanced 911 Board created under Act 159, SLH 2004.

Under Act 159, SLH04, the “Enhanced 911 Services” program was established under Chapter 138, Hawaii Revised Statutes. Its definitions, the board membership and authority, the fund’s surcharge collections and disbursements, its reporting and annual audit, and other relevant program scope were enacted.

The main accomplishment for FY 2016 was the deployment of Text-to-911 in collaboration with the telecommunications service providers and the Public Safety Answering Points (PSAPs). This milestone event provides additional safety to the public through texting rather than a voice call in contacting the 911 Call Center for assistance. This lifesaving capability will enable victims of domestic violence or an active shooter, the means of texting the 911 call center to avoid detection from placing a voice call. Texting will also facilitate 911 calls by persons with speech or hearing disabilities as well as providing 911 access in some rural areas where mobile phone voice calls are not an option.

A Governor’s Press Conference was held on October 13, 2016 to acknowledge the statewide deployment of Text-to-911 to the public. Hawaii became the seventh state in the nation to deploy Text-to-911 statewide.

The E911 Board manages, administers, provides technical expertise and performs fiscal duties necessary for the collection of 9-1-1 surcharge revenue. The Board oversees the fund’s distribution to Hawaii’s eight primary and three secondary county public safety answering points (PSAPs) and to wireless carriers who provide service to the public. The E911 Fund is a special fund established outside the State Treasury.

The E911 Board is comprised of thirteen members appointed by the Governor. The members represent each county PSAP and representatives from three wireless service providers, Hawaiian Telcom, City & County of Honolulu and one VoIP representative; two permanent seats represent the State Department of Consumer Affairs Director and the State Chief Information Officer. The current board members are:

- Paul Ferreira, Deputy Chief, Hawaii County Police Department PSAP; Board Chair.
- John Jakubczak, Assistant Police Chief, Maui PSAP; Board Vice-Chair.
FY2016 Annual Report on the E911 Board

- Kiman Wong, Charter Communications; Finance Committee Chair.
- Thalia Burns, Honolulu Police Department PSAP; Technical Committee Chair.
- Steven Schutte, Verizon Wireless; Communications Committee Chair.
- Michael Conrades, Kauai County PSAP.
- Dean Rickard, Deputy Chief, Molokai PSAP.
- Mark Wong, City & County of Honolulu, Chief Information Officer.
- Dean Nishina, Executive Director, State of Hawaii, Department of Consumer Affairs.
- Todd Nacapuy, Chief Information Officer, State of Hawaii.
- Ben Morgan, Vice President, Hawaii Telcom; Board member.
- Roy Irei, General Manager T-Mobile, Board member.
- Jeffrey Riewer, AT&T Wireless Representative.
II. The Total Aggregate Surcharge collected by the Fund in FY 2016.

<table>
<thead>
<tr>
<th>Revenues Collected</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireless</td>
<td>$8,563,556</td>
<td>88.67%</td>
</tr>
<tr>
<td>VoIP</td>
<td>$1,071,346</td>
<td>11.09%</td>
</tr>
<tr>
<td>Interest</td>
<td>$22,381</td>
<td>0.23%</td>
</tr>
</tbody>
</table>

FY2016 Revenues Collected - $9,657,283
III. The Amount and Recipient of Disbursements from the Fund in FY2016.
IV. Projects for which monies were disbursed in FY2016.

FY 2016 Projects - $8,870,175

- Communications: $3,552,791 (40%)
- Maintenance: $1,765,757 (20%)
- CAD Upgrade/Replacement: $2,446,273 (28%)
- WSP Cost Recovery: $82,372 (1%)
- Other Board Expenses: $60,009 (0.68%)
- Conferences & Training: $168,942 (2%)
- DB&F Assessments: $618,255 (7%)
- Exec. Dir. & Staff: $136,119 (1%)
- Computer Equip: $39,657 (0%)
V. Project Descriptions
<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
<th>Description of Disbursements</th>
<th>Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Hardware and Software</td>
<td>$2,485,930</td>
<td>Hawaii, Kauai and Honolulu Counties are undergoing modernization of its CAD systems for its PSAP to continue to provide first responders with the services necessary to assist in the rescue of its endangered citizens and visitors.</td>
<td>Hawaii PSAP, Kauai, PSAP and Oahu PSAP</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$1,259,325</td>
<td>Akimeka, LLC provides continued Enhanced 911 Program Management Services and Geographic Information Systems Services for the counties of Hawaii, Maui, Honolulu and Kauai. The services rendered include: 1. Program mgt support 2. PSAP Day-to-Day Operational support 3. Geographic Information System (GIS) services 4. Master Street Address Guide (MSAG) services 5. Database synchronization. Benefits include: 1. Up-to-date location information on emergency calls received by the respective dispatch center. 2. Current GIS information. 3. Coordination for implementation and testing of new additions to the network with wireline, wireless, VoIP and Telemetric service providers. 4. Dealing with only one company with which to coordinate activities and issues.</td>
<td>Hawaii, Maui, Kauai and Oahu PSAPs</td>
</tr>
<tr>
<td>Logging Recorder</td>
<td>$60,775</td>
<td>Logging recorders seamlessly retrieve audio and data from radio and telephony communications recreating communications around an incident just as it happens.</td>
<td>Oahu PSAP</td>
</tr>
<tr>
<td>Computer Hardware and Software Maintenance</td>
<td>$445,657</td>
<td>Maintenance support from vendors is essential to keep hardware and software running efficiently and provide immediate troubleshooting support.</td>
<td>Hawaii, Maui, Kauai and Oahu PSAPs</td>
</tr>
<tr>
<td></td>
<td>$1,765,757</td>
<td>Subtotal Maintenance</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Amount</td>
<td>Communications</td>
<td>Recipient</td>
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<td>-------------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Telecom Service Connections</td>
<td>$3,545,591</td>
<td>Hawaiian Telcom tariff, network and equipment costs necessary for PSAPs to receive Enhanced 911 calls.</td>
<td>Hawaii, Maui, Kauai and Oahu PSAPs</td>
</tr>
<tr>
<td>EMS Tower Lease</td>
<td>$7,200</td>
<td>EMS tower lease and network connection between EMS facility at the airport to the City’s data center at the FASI Municipal Building to connect the EMS PSAP with other Oahu PSAPs in order to share data and information.</td>
<td>Oahu PSAP</td>
</tr>
<tr>
<td></td>
<td>$3,552,791</td>
<td>Subtotal Communications</td>
<td></td>
</tr>
<tr>
<td>Conferences &amp; Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New &amp; Emerging Technology Training</td>
<td>$134,246</td>
<td>Conferences &amp; Training attended by PSAPs offers an effective opportunity to stay abreast of national standardization efforts and receive training in day-to-day operational 9-1-1 issues impacting their PSAPs, specifically in regards to new and emerging technologies. In addition, it provides networking opportunities with subject matter experts and with fellow PSAPs in the US and worldwide.</td>
<td>Hawaii, Maui, Molokai, Kauai, and Oahu PSAPs</td>
</tr>
<tr>
<td></td>
<td>$7,938,724</td>
<td>Subtotal PSAP Expenses</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Amount</td>
<td>E911 Board Administrative Expenses</td>
<td>Recipient</td>
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<td><strong>Revenue Assessment</strong></td>
<td>$ 480,000</td>
<td>Dept of Budget &amp; Finance Revenue Assessment: Authorized under §36-27, HRS; 5% of total revenue.</td>
<td>State of Hawaii General Fund</td>
</tr>
<tr>
<td><strong>Administrative Assessment</strong></td>
<td>$ 138,255</td>
<td>Dept of Budget &amp; Finance Administrative Assessment: Authorized under §36-30, HRS; 1.95% of total E911 Fund disbursements.</td>
<td>State of Hawaii General Fund</td>
</tr>
<tr>
<td><strong>E911 Executive Director &amp; Staff</strong></td>
<td>$ 136,119</td>
<td>The Executive Director and Staff positions provide essential support to the Board which includes: 1. to carry legislative agenda, policy and regulatory support to PSAPs. 2. Lead the statewide initiative on new and emerging 911 technologies. 3. Accounting. 4. Surcharge revenue collection services. 5. Banking relations. 6. Drafting Legislation. 7. Board &amp; Committee Agendas and Minutes. 8. Supervision of Audits. 9. Cash Disbursements. 10. Record keeping. 11. Provide expert counsel on E911 issues. 12. Budget &amp; Planning. 13. Strategic Planning.</td>
<td>State of Hawaii Payroll</td>
</tr>
<tr>
<td><strong>WSP Cost Recovery</strong></td>
<td>$ 82,372</td>
<td>WSP Cost Recovery: Authorized under §138-5 HRS, requires that 1/3rd of the net proceeds of the WSP surcharge revenue (after Board administrative expenses) are to be set aside for potential cost recovery claims by the WSPs and VoIP service providers.</td>
<td>Sprint</td>
</tr>
<tr>
<td><strong>Board &amp; Committee Member Travel Expenses</strong></td>
<td>$ 35,126</td>
<td>Board &amp; Committee Member Travel Expenses (interisland) for required attendance of neighbor island PSAPs at the Board and sub Committee meetings held in Honolulu.</td>
<td>Hawaii, Maui, Molokai, Kauai PSAPs</td>
</tr>
<tr>
<td><strong>Independent CPA Audit services to perform an annual audit in accordance with generally acceptable accounting principles (GAAP).</strong></td>
<td>$ 13,000</td>
<td>EGAMI &amp; ICHIKAWA, CPAs, Inc.</td>
<td></td>
</tr>
<tr>
<td><strong>Miscellaneous items</strong></td>
<td>$ 11,201</td>
<td>Misc. Vendors</td>
<td>Misc. Vendors</td>
</tr>
<tr>
<td><strong>New &amp; Emerging Technologies Conference expenses necessary to keep administrative personnel abreast of current and future issues regarding public safety and administration.</strong></td>
<td>$ 34,696</td>
<td>NENA, APCO, NASNA</td>
<td></td>
</tr>
<tr>
<td><strong>Parking permits for Board and Committee members to attend meetings at State buildings.</strong></td>
<td>$ 400</td>
<td>Automotive Div., State of Hawaii</td>
<td></td>
</tr>
<tr>
<td><strong>Electronic Signature Software to allow Board authorized signatories to approve disbursements or other documents remotely.</strong></td>
<td>$ 240</td>
<td>Docusign</td>
<td></td>
</tr>
<tr>
<td><strong>E911 Fund Bank Charges for additional services.</strong></td>
<td>$ 43</td>
<td>First Hawaiian Bank</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Board Administrative Expenses</strong></td>
<td>$ 931,452</td>
<td></td>
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</tr>
<tr>
<td><strong>Total Disbursements</strong></td>
<td>$ 8,870,176</td>
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</tbody>
</table>
VI. The conditions, if any, placed by the Board on disbursements from the Fund.

The Board has implemented policies and procedures for the PSAPs, WSPs, VoIPs, and approved vendors seeking reimbursement from the Fund. The Board requires the following for disbursements:

1. Be permitted under Hawaii State statute.
2. Have sufficient funds available for disbursement.
3. Be reviewed and approved by the Technical and/or Finance Committee(s), subject to final approval by the Board.
4. Receive final approval by the E911 Board.
5. Approval for payment by the Board Chair, Finance Committee Chair and an approved Board member. Signed approval from two of the three individuals mentioned.
6. A valid invoice or receipt of payment approved by the appropriate PSAP authorized official(s).
7. The disbursement check must be signed by two Board approved signatories.
8. All disbursements are subject to audit.
VII. The planned expenditures from the Fund for FY2017.
VIII. The planned recipients of disbursements from the E911 Fund in FY2017.
IX. The amount of any unexpended funds carried forward for FY2017.

<table>
<thead>
<tr>
<th>Cash Flow:</th>
<th>FY2016 Actuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Cash</td>
<td>$16,789,216</td>
</tr>
<tr>
<td>Cash Receipts</td>
<td>9,657,283</td>
</tr>
<tr>
<td>Cash Disbursements</td>
<td>(6,977,059)</td>
</tr>
<tr>
<td>Ending Cash</td>
<td>19,469,440</td>
</tr>
<tr>
<td>Total Encumbrances Outstanding</td>
<td>(8,424,412)</td>
</tr>
<tr>
<td>Total Unencumbered Cash</td>
<td>$11,045,028</td>
</tr>
</tbody>
</table>

The total amount of unexpended E9-1-1 Funds carried forward for FY2016 was $19,469,440. However, unexpired encumbrances at the end of FY2016 amounted to $8,424,412 which reduced the unencumbered cash amount to be carried forward to FY2017 to $11,045,028.

A significant part of the $11,045,028 unencumbered cash will be used for the CAD upgrades for the Maui and Oahu PSAPs scheduled for FY 2018. Each CAD upgrade is estimated to amount to $4.0 million each for a total of $8.0 million.

X. A cost study to guide the legislature towards necessary adjustments to the fund and the monthly surcharge.

A majority of the E911 strategic budget plan funding is necessary to modernize the current voice-based 911 systems’ aging equipment and software in order to meet or exceed the PSAP public safety goals and continue the PSAPs’ training needs in order that they keep abreast of technological changes.

The State of Hawaii is part of the national movement to transition to the Next Generation 911 (NG911) system to significantly improve emergency response, save lives and reduce property damage. NG911 enables the public to send texts, photos, videos, and other data to 911 centers in the same manner that the public uses today. Consequently the Board has chosen to reserve cash in
anticipation of this cash outflow to support the transition to NG911. Due to the uncertainties associated with transition costs for this new emergency response system and with the reliability of increased revenue collections resulting from Act 168, SLH2011, we continue to recommend that the existing rate remain at the current level for the next fiscal year.

XI. **A status report of jurisdictional capabilities for enhanced 9-1-1 services, including public safety answering points and communications service providers.**

All requirements of FCC Order 94-102 have been met by the Public Safety Answering Point (PSAPs), Wireless Service Providers (WSPs) and the Local Exchange Carrier (LEC). The State of Hawaii is currently Phase II capable throughout the state and each PSAP has the capability to make useful the data elements being transmitted by the WSPs and delivered by the LEC. All WSPs (AT&T, Mobi-PCS, Sprint, T-Mobile, and Verizon) are providing Phase II services in all counties and jurisdictions and are only limited by coverage, RF interference, and terrain anomalies. The WSPs continue to expand their existing networks at a steady pace with additional sites in each of the jurisdictions. Some of the WSPs have tripled the number of communications sites and sectors on the Neighbor Islands since the original deployment of the Phase II service. The technology advancements in the wireless industry have also placed demands on the PSAPs as WSPs deploy new and improved networks that support broadband capabilities such as the wireless 3G, 4G, and LTE Wireless technology networks.

The State of Hawaii Wireless 911 service has graduated from Wireless Phase II maintenance to Wireless Phase II expansion and New Wireless Technology implementation phases. This wireless expansion phase has opened the door for the PSAPs to start receiving New and Emerging Technology 911 services such as Voice over Internet Protocol (VoIP) and Telemetric emergency services. These new 911 services are already being delivered to one of the PSAPs and being introduced to others within the State.

The PSAPs have responded in an expeditious manner to keep pace with the demands of New Technologies. Their primary activities undertaken have been concentrated on bringing all their 911 databases into compliance for new Next Generation 911 service implementation. The PSAPs perform database
synchronizations and GIS improvements in order to improve location accuracy and dispatch 911 resources efficiently and effectively.

In 2011, Act 168 established the Enhanced 911 Board as the single statewide entity who administers enhanced 911 services for the State through its expanded board membership. The E911 Board’s broadened scope and responsibilities provide the leadership to improve and modernize the current 911 system improving emergency response, saving lives, and reducing property damage. The E911 Board has undertaken responsibilities associated preparing the State of Hawaii Strategic Plan for the migration of the State of Hawaii’s E911 resources into the futuristic New and Emerging Technology 911 services referred to as NG 911 through its investigations and recommendations.

XII. FY2016 Independent Audit Report Summary.

The E911 Fund has completed the transition from cash basis accounting to generally acceptable accounting principles (GAAP) or accrual basis accounting for audit purposes. In addition, the E911 Board elected to undergo an annual independent CPA audit rather than a biennial audit as required by §138-7(b), HRS.

The next audit report was completed on November 10, 2016 and covered the period from July 1, 2015 through June 30, 2016. The auditor issued a “clean opinion” with no issues to report. Current and past audit reports are posted on the E911 website (http://ags.hawaii.gov/hawaii-enhanced-9-1-1-board/).
Glossary of Terms

ALI – Automatic Location Identification
CAD- Computer Assisted Dispatch
CDMA-Code Division Multiple Access
GIS-Geographic Information Systems
GSM-Global System for Mobile
iDEN-Integrated Digital Enhanced Network
LEC-Local Exchange Carrier
NG9-1-1-Next Generation 9-1-1
PSAP-Public Safety Answering Point
VoIP-Voice over Internet Protocol
WBB-Wireless Broadband
WSP-Wireless Connection Service Provider
VoIP – Voice over Internet Protocol Connection Service Provider