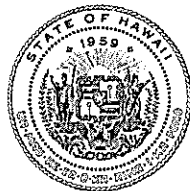


TWENTY-SIXTH LEGISLATURE
STATE OF HAWAII
2012 REGULAR SESSION

**Annual Report on the
Receipt and Expenditure of Federal Moneys
from the
American Recovery and Reinvestment Act (ARRA)**



CABLE TELEVISION DIVISION
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
STATE OF HAWAII

December 2011

Annual Report on the Receipt and Expenditure of Federal Moneys from the American Recovery and Reinvestment Act (ARRA)

This report is filed pursuant to section 440G-11.5, Hawaii Revised Statutes, which requires the Department of Commerce and Consumer Affairs (DCCA) to report annually to the legislature “on the receipt and expenditure of federal moneys from the American Recovery and Reinvestment Act of 2009, and moneys from other federal appropriation measures or applicable federal acts, for the purposes of purchasing broadband facilities, services, or equipment or for entering into contracts for broadband-related projects by all state agencies for all state agencies approval.”

Exhibit 1, attached hereto, lists the ARRA grants for broadband-related projects, brief descriptions of the grant projects, and a listing of the receipt and expenditure of federal moneys through the last reporting quarter ending September 30, 2011.

STATE ENTITY	AWARD NUMBER	PROJECT NAME OR PROGRAM TITLE	DATE AWARD CLOSES	AWARD AMOUNT	ARRA FUNDS RECEIVED	ARRA FUNDS EXPENDED
BUSINESS, ECONOMIC DEVELOPMENT & TOURISM	DE-OE0000110	<p>Enhancing State Government Energy Assurance Capabilities and Planning for Smart Grid Resiliency - The objectives of this initiative are to: 1) strengthen and expand State and local government energy assurance planning and resiliency efforts by incorporating response actions for new energy portfolios and Smart Grid applications; 2) create jobs, and 3) build in-house State and local government energy assurance expertise. The initiative focuses on building regional energy assurance capability to allow the State to better coordinate and communicate state-wide and with one another, on energy security, reliability, and emergency response issues. TASKS TO BE PERFORMED Task 1.0 - Project Management Plan A Project Management Plan (PMP) will be prepared in accordance with the provided PMP template that details the work elements required to manage and report on activities. Task 2.0. Workforce Development Plan The Recipient will prepare and follow a Workforce Development Plan that results in development of in-house expertise at the State level on energy assurance planning with an emphasis on Smart Grid applications and vulnerabilities, critical infrastructure interdependencies, cyber security, energy supply systems, energy data analysis, and communications.</p> <p>The Plan will address hiring, retaining, and training personnel in these areas. Task 3.0. Energy Assurance Planning The Recipient will develop a new, or substantially refine its existing, Energy Assurance Plan to incorporate response actions for new energy portfolios, including Smart Grid technologies. The Energy Assurance Plan shall address, at a minimum, Smart Grid applications and vulnerabilities, critical infrastructure interdependencies, cyber security, energy supply systems, energy data analysis, and communications. Task 4.0 - Energy Supply Disruption Tracking Process The Recipient will initiate a process or mechanism for tracking the duration, response, restoration and recovery time of energy supply disruption events. Task 5.0 - Energy Assurance Exercise The Recipient will develop a strategy to exercise its Energy Assurance Plan, simulating, through table-top exercises, energy emergency/disruptions, both within the state (including municipal and county governments as well as pertinent state agencies such as PUCs and EMOs) and on a multi-state or regional scale, incorporating local, state and federal agencies and industry as appropriate.</p>	8/14/2012	\$ 318,196	\$ 132,417	\$ 128,229
COMMERCE AND CONSUMER AFFAIRS	15-50-M09057	<p>State Broadband Data and Development Grant Program - This grant is to assist the State of HI in gathering and verifying state-specific data on the availability, speed, location, and technology type of broadband services. This activity is to be conducted on a semi-annual basis between 2010 and 2014, with the data to be presented in a clear and accessible format to the public, government, and the research community. The data collected and compiled will also be used to develop publicly available state-wide broadband maps and to inform the comprehensive, interactive, and searchable national broadband map. The Data Collection project was originally funded for 2 years, but has been amended to extend data collection activities for an additional 3 years and to add 2 planning projects: State Broadband Capacity Building and Technical Assistance.</p>	12/31/2014	\$ 4,349,940	\$ 1,564,657	\$ 1,564,657

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UNIVERSITY OF HAWAII SYSTEMS	963566	<p>Under the State Broadband Capacity Building project, funding will support a broadband capacity building planning committee to augment the data findings and infrastructure analysis detailed in the broadband strategic plan developed in the first two years of the initial planning project. The committee will advise and assist other agencies, prioritize implementation, and recommend programs to establish affordable service to unserved and underserved communities. Also the DCCA will establish a working group that will address flexible, timely and responsible access to public rights-of-way and the streamlining of permitting functions. Under the Technical Assistance project, funding will support the creation of a Technical Assistance Committee, which will serve as a public-private organization assisted by UH and the Pacific Disaster Center. The Committee will support local technology planning teams to coordinate resources, planning efforts, promote broadband awareness and adoption, provide technical expertise to local institutions, non-profits and governments, and develop or sustain deployment and adoption related initiatives.</p> <p>Enabling Hawaii to COMPETE: Seizing the Opportunity for Equitable Connectivity - Research has become progressively more data-intensive, highlighting a need for higher bandwidth network connections between Hawaii and the mainland to support the transfer of input and output datasets of increasing size, as well as the use of interactive visualization and computational steering. Collaborative research: UH researchers play an important role in a number of research collaborations. One example is the Science and Technology Center for Microbial Oceanography--Research and Education (C-MORE). This consists of six partner institutes (UH and five on the mainland) collaborating on research in ocean microbiology, including the ocean's microbial biogeochemistry-energy web. One of the tools used is called the OptiPortal, a bandwidth-hungry, advanced visualization and collaboration tool that will expand understanding of the biogeochemical cycling of the ocean by bringing together a variety of data sets from the institutional partners onto one "canvas" for analysis. The project's broader impacts include the provision of infrastructure for research and education in science and engineering, with an impact both in the U.S. and internationally. For example, enhanced connectivity will not only promote research in the U.S. but also strengthen astronomical research in a number of countries around the world.</p> <p>The proposed infrastructure provides opportunities for the closer integration of research and education. NSF's investments in tools for cyber-enhanced education have resulted in a variety of educational tools that are intended for online use. The ability of the over 250 public schools and campuses of higher education on Hawaii, to make use of the proposed network connectivity will make it easier for these educational tools, hosted at sites across the U.S., to be used in education on Hawaii itself. Examples include the resources of the academic Open Courseware Consortium. Federal agencies and federally funded projects also make large volumes of data available online that become the grist for research and learning. Federally supported online collections of data critical for contemporary research cover a wide range of fields and include GenBank, the Protein Data Bank, the Entrez cross-database search engine, the environmental science data holdings of the Federation of Earth Science Information Partners, the Earth System Grid's climate model output holdings, the National Center for Atmospheric Research's Research Data Archive, the Sloan Digital Sky Survey, the Hubble Space Telescope Science Data Archive, and the output from the Large Hadron Collider.</p>	8/31/2012	\$ 9,838,151	\$ 520,224	\$ 5,020,224

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UNIVERSITY OF HAWAII SYSTEMS	1007033	Connecting the Islands: Cyber Connectivity for Science and Technology in Hawaii - This RII Inter- and Intra-Campus Cyber Connectivity (RII C2) award focuses on inter-campus and inter-island connectivity and seeks to provide new 10 Gbps connections among 4 specific locations. These connections are most critical to Hawaii's thriving EPSCoR program as well as to the overall Science and Technology (S&T) research and STEM education agendas in HI. The project will provide a ten-fold increase in capability among these key locations, and the design will be extensible in the future to all public higher ed. institutions in HI and other key S&T locations. The connectivity among campuses will enable essential access to high performance computing facilities at the Maui High Performance Computing Center (MHPCC), the new mass storage at UH-Manoa, the new visualization and modeling capacity at UH-Hilo (UHH), and STEM initiatives at Kapiolani Community College. It will also enhance more effective collaboration through emerging high definition videoconferencing among researchers across campuses and across disciplines throughout the state and beyond. The 4 initial locations were selected specifically to highlight the intellectual merit of new cyberinfrastructure-empowered methodologies within HI and beyond.	8/31/2012	\$ 1,176,475	\$ 149,418	\$ 150,465
UNIVERSITY OF HAWAII SYSTEMS	90EC0012	The MHPCC is one of the six major U.S. Dept. of Defense (DoD) supercomputer facilities. Under the terms of an Educational Partnership Agreement, UH and the DoD have agreed to establish a complementary HI Open Supercomputing Center at the MHPCC facility that will leverage the data center and operational support to provide High Performance Computing (HPC) resources for academic, governmental and commercial science and technology within HI. The project will support a broad range of world-class programs focused particularly in areas where HI is viewed as having a competitive advantage: astronomy, oceanography, marine studies, geology & geophysics, climate studies, and evolutionary biology. The island of Hawaii has significant environmental diversity, thus UHH has made it a strategic priority to leverage its island-wide living laboratory in its research and education programs. The network enhancements will facilitate connectivity across HI and to the rest of the world by providing more access to national and global networks, data collection and management tools, high performance computing, modeling, visualization, and virtual organizations. In addition, the improved cyber connectivity will help open HI-based science to increased involvement from mainland based students and scholars which could facilitate greater intellectual innovation.	3/31/2013	\$ 16,091,390	\$ 1,103,670	\$ 1,169,035
UNIVERSITY OF HAWAII SYSTEMS	NT10BIX6570140	Hawaii County Beacon Community Consortium - Health Information Technology in Hawaii County: The mission of the Hawaii County Beacon Community Consortium (HCBC) is to strengthen and use Health Information Technology (HIT) to continuously improve healthcare quality, cost-efficiency, and population health in Hawaii County. The vision of HCBC is a community where HIT is optimally used by all residents to make healthy choices and by all healthcare providers and organizations to provide evidence-based, appropriate, timely, accessible, cost-effective care.	8/31/2013	\$ 33,972,800	\$ 6,402,739	\$ 6,406,634
UNIVERSITY OF HAWAII SYSTEMS		Kae Ala 'Ike: Connecting Hawaii's Public Schools, Community Colleges, Universities and Libraries - Provide/upgrade fiber optic connections and associated networking equipment at all University of Hawaii Community colleges, universities and educational centers, all Hawaii Public Schools and all Hawaii Public Libraries.		\$ 65,746,952	\$ 9,873,125	\$ 14,439,245