

**AMERICAN RECOVERY AND REINVESTMENT ACT
OF 2009: INVESTMENT IN HAWAII**

HEARING

BEFORE THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

SECOND SESSION

SPECIAL HEARING

JULY 7, 2010—HONOLULU, HI

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**AMERICAN RECOVERY AND REINVESTMENT
ACT OF 2009: INVESTMENT IN HAWAII**

WEDNESDAY, JULY 7, 2010

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
Honolulu, HI.

The committee met at 9:35 a.m., in room 325, Hawaii State Capitol Building, Honolulu, Hawaii, Hon. Daniel K. Inouye (chairman) presiding.

Present: Senator Inouye.

Also present: Senator Akaka.

OPENING STATEMENT OF CHAIRMAN DANIEL K. INOUYE

Chairman INOUYE. The committee will come to order. Aloha.

AUDIENCE. Aloha.

Chairman INOUYE. Almost 1 year ago, we convened in this room to discuss the impact of the stimulus bill, the so-called American Recovery and Reinvestment Act of 2009 (ARRA). At that time, I promised to conduct a follow-up hearing to learn about the progress that was made in Hawaii by the investment that comes from this act.

I'm happy to report that this act continues to create and protect jobs and make investments in America's future. To date, more than \$1.8 billion has been awarded to projects in Hawaii, and this act is also delivering transparency, accountability to guarantee that all taxpayer money is invested wisely.

When the Congress passed this act, we recognized that recovery from the economic crisis we inherited would not happen overnight, and that the Recovery Act was just the beginning. And since that time, Congress has pursued additional measures to build upon this act and creates jobs, as this Nation continues to recover from the worse financial crisis since the Great Depression.

Today, I'm here to learn about how funds awarded to Hawaii have been spent. How many jobs have been created, or retained, and the successes and challenges along the way.

And we'll hear from five panels. The first panel will focus on investments on transportation, infrastructure, and Federal facilities. The second panel will discuss investments to improve delivery of health. The focus of the third will be the importance of investments in broadband infrastructure. The fourth will review investments in energy programs, and finally, investments in small businesses will be the topic of the fifth panel.

And I wish to thank all of the witnesses for taking time to share their progress and experiences with the committee, and without objection, your full statements will be made part of the record.

Before I call upon the panel, may I call upon my colleague, Senator Akaka, for his words of wisdom?

STATEMENT OF SENATOR DANIEL K. AKAKA

Senator AKAKA. Thank you very much, Mr. Chairman. I appreciate your conducting the hearing today and all of your extraordinary efforts to improve the lives of our constituents, and really the lives of all Americans.

While States' residents have suffered due to the difficult economic conditions, too many families have had their hours and pay reduced, suffered from a layoff, bankruptcy, and inability to obtain affordable credit, or the elimination of State funding for an important social service program.

The American Recovery and Reinvestment Act is helping to considerably improve the lives of working families in Hawaii. The stimulus has created jobs, strengthened infrastructure, encouraged innovation in the development of alternative energy resources and bolstered education, social services and healthcare programs.

This hearing will help provide a better understanding of how stimulus resources are being utilized in Hawaii and demonstrate the impact that these resources have had in our communities.

I welcome all of our witnesses and look forward to hearing your testimony.

Thank you, again, Mr. Chairman.

Chairman INOUE. I thank you very much.

Our first panel consists of Brigadier General Darrell Williams of the United States Army. Welcome, sir. Mr. Brennon Morioka of the Hawaii Department of Transportation; Mr. William Guerin—is that correct pronunciation?

Mr. GUERIN. Yes.

Chairman INOUE. Executive, Recovery Program Management Office, General Services Administration; and Mr. William Broglie, Chief Administrative Officer, National Oceanic and Atmospheric Administration.

And may I call upon General Williams.

STATEMENT OF BRIGADIER GENERAL DARRELL K. WILLIAMS, DIRECTOR, LOGISTICS, ENGINEERING AND SECURITY ASSISTANCE J4, U.S. PACIFIC COMMAND, DEPARTMENT OF DEFENSE

General WILLIAMS. Mr. Chairman, Senator Akaka. On behalf of United States Pacific Command, I am pleased to appear before you today to provide an overview of the Department of Defense support to the American Reinvestment and Recovery Act of 2009 in Hawaii.

The Department of Defense (DOD) received approximately \$208 million in ARRA funds for 112 projects in the State of Hawaii. All DOD projects have been awarded and 42 projects are completed. DOD has also received more than \$110 million to award for four non-DOD projects. Three projects have been awarded, with one project completed. The last project will be awarded by September 2010.

Overall, the Department of Defense will award more than \$318 million in ARRA funds in the State of Hawaii. As a result of the AARA funds, contractors have identified more than 400 recovery-funded jobs, according to the most recent reporting period, ending March 31, 2010.

I will now provide a summary of the ARRA program, based upon funds received by each service, to include the non-Department of Defense contracts being executed by the Navy and the Army.

Now, on the Department of the Navy. The Department received approximately \$77 million of the \$208 million of ARRA funds for five projects on Oahu and two projects on Kauai. All seven projects have been awarded. Projects included \$22 million to repair wharfs at Joint Base Pearl Harbor Hickam, \$20.7 million to repair the runway at Pacific Missile Range Facility in Kauai, \$21.9 million to install photovoltaic, or solar energy systems in Oahu and Kauai, and a new \$9.6 million child development center at Marine Corps Base Hawaii.

Naval Facilities Engineering Command, Pacific, or NAVFAC also administers non-Department of Defense projects located on Navy property. The Department awarded a \$6.2 million visitor parking center at the Arizona Memorial for the Department of the Interior. No later than September 2010 NAVFAC Pacific is projecting to award a research lab and regional headquarters for the National Oceanic and Atmospheric Administration (NOAA), which is part of the Department of Commerce. That project is over \$100 million, and my colleague from NOAA will discuss that project, in detail.

Overall, the Navy awarded \$83.1 million in projects, which account for 128 recovery-funded jobs to date, and all but one project was awarded to companies headquartered in Hawaii.

ARRA FUNDS

For the Department of the Army. The Army Corps of Engineers, Honolulu District received approximately \$36.6 million of the \$208 million of ARRA funds for 24 facilities sustainment, restoration and modernization projects. All 24 projects have been awarded. Army projects include \$9.9 million for projects to install photovoltaic cells and \$2.9 million to repair various bridges. All of the projects were awarded to small businesses.

The Director of Public Works, U.S. Army Garrison Hawaii received approximately \$34.6 million of the \$208 million for 35 projects. All 35 projects have been awarded.

Projects include \$10.4 million for road repairs, \$3.4 million for roof repairs on six buildings, and \$6.7 million for runway and apron repair. These Army projects accounted for 164 recovery jobs to date, and all but four projects were awarded to Hawaii-based companies.

Under the category of ARRA civil works projects in Hawaii, the Corps of Engineers also executes non-Department of Defense work under their civil works authorities to develop, manage, protect and enhance our Nation's water and related land resources for commercial navigation, flood risk management, ecosystem restoration, and allied purposes. Through the civil works authorities, the Department also provides emergency services for disaster relief and administers the Army's regulatory program.

The Honolulu District received \$825,000 in ARRA funds for two operations and maintenance projects and funding for their regulatory program. Both projects have been awarded, including \$700,000 for maintenance dredging of the Haleiwa Harbor, which was completed in January 2010. The regulatory program obligated approximately \$70,000 in ARRA funds. These projects accounted for an additional four jobs.

For the Department of the Air Force. The Department received approximately \$49.6 million of the \$208 million for 36 projects at Joint Base Pearl Harbor Hickam and Kaena Point. All projects have been awarded.

Projects include \$30 million in renovations for a new headquarters facility, \$4 million for utility infrastructure upgrades and \$8 million in pavement and building exterior improvements. Overall, the Air Force projects account for 100 recovery-funded jobs to date. All but one of the Air Force projects was awarded to Hawaii-based companies.

Under the category Department of Defense, except for military departments, Tripler Army Medical Center received approximately \$10.6 million of the \$208 million for eight projects. All eight projects have been awarded. Projects include \$8.6 million for utility systems upgrades, and \$600,000 to replace an elevator. Overall, these projects account for approximately four recovery-funded jobs, to date.

So, in conclusion Mr. Chairman, the Department of Defense has awarded over \$208 million of ARRA funds for 112 DOD projects and \$7 million for three non-DOD projects. By the end of the fiscal year, one additional project will be awarded for over \$100 million which will bring our final total to well over \$318 million. Of the projects awarded, 98 of the 116 were awarded to Hawaii-based companies. The Department of Defense, through ARRA funds, assisted you to spur economic activity with over 400 recovery-funded jobs to date. At the same time, this funding certainly enhanced the readiness of our military services.

Thank you for your continued support of our Armed Services and thank you for the opportunity to provide this statement today.

Chairman INOUE. I thank you very much, General.

[The statement follows:]

PREPARED STATEMENT OF BRIGADIER GENERAL DARRELL K. WILLIAMS

Mr. Chairman, I am pleased to appear before you today to provide an overview of the Department of Defense's support of the American Reinvestment and Recovery Act (ARRA) of 2009 in Hawaii.

The Department of Defense (DOD) received approximately \$208 million in ARRA funds for 112 construction projects in the state of Hawaii. All DOD projects have been awarded and 42 projects are complete. DOD has also received more than \$110 million to award four non-DOD projects. Three projects have been awarded with one project completed. The last project will be awarded by September 2010. Overall the Department of Defense will award more than \$318 million in ARRA funds in the state of Hawaii. As a result of the ARRA funds, contractors have identified more than 400 recovery funded jobs according to the most recent reporting period ending March 31, 2010.

I will now provide a summary of the ARRA program based upon funds received by each service to include the non-Department of Defense contracts being executed by the Navy and the Army.

DEPARTMENT OF THE NAVY

The Department received approximately \$77 million of the \$208 million in ARRA funds (DOD) for five projects on Oahu and two projects on Kauai. All seven projects have been awarded. Projects include \$22 million to repair wharves at Joint Base Pearl Harbor Hickam, \$20.7 million to repair the runway at Pacific Missile Range Facility (PMRF), Kauai, \$21.9 million to install photovoltaic (solar energy) systems on Oahu and Kauai, and a new \$9.6 million child development center at Marine Corps Base Hawaii.

Naval Facilities Engineering Command, Pacific (NAVFAC Pacific) also administers non-Department of Defense projects located on Navy property. The Department awarded a \$6.2 million Visitor Parking Center at the Arizona Memorial for the Department of the Interior. No later than September 2010 NAVFAC Pacific is projecting to award a research lab and regional headquarters for the National Oceanic and Atmospheric Administration (NOAA) which is part of the Department of Commerce for over \$100 million.

Overall the Navy awarded \$83.1 million in projects which account for 128 recovery funded jobs to date. All but one project was awarded to companies headquartered in Hawaii.

DEPARTMENT OF THE ARMY

The Army Corps of Engineers, Honolulu District received approximately \$36.6 million of the \$208 million in ARRA funds for 24 Facilities Sustainment, Restoration and Modernization projects. All 24 projects have been awarded. Army projects include \$9.9 million for projects to install photovoltaic cells and \$2.9 million to repair various bridges. All of the projects were awarded to small businesses.

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These Army projects accounted for 164 recovery funded jobs to date. All but four projects were awarded to Hawaii-based companies.

ARRA CIVIL WORKS PROJECTS IN HAWAII

The Corps of Engineers also executes non-Department of Defense work under their Civil Works authorities to develop, manage, protect and enhance our Nation's water and related land resources for commercial navigation, flood risk management, ecosystem restoration and allied purposes. Through the Civil Works authorities, the Department also provides emergency services for disaster relief and administers the Army's regulatory program.

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DEPARTMENT OF THE AIR FORCE

The Department received approximately \$49.6 million of the \$208 million in ARRA funds for 36 projects at Joint Base Pearl Harbor Hickam and Kaena Point. All projects have been awarded. Projects include \$30 million in renovations for a new headquarters facility, \$4 million for utility infrastructure upgrades and \$8 million in pavement and building exterior improvements. Overall the Air Force projects account for roughly 100 recovery funded jobs to date. All but one of the Air Force projects was awarded to Hawaii-based companies.

DEPARTMENT OF DEFENSE (EXCEPT MILITARY DEPARTMENTS)

Tripler Army Medical Center received approximately \$10.6 million of the \$208 million in ARRA funds for 8 projects. All 8 projects have been awarded. Projects include \$8.6 million for utility system upgrades and \$600,000 to replace an elevator. Overall these projects account for approximately 4 recovery funded jobs to date.

CONCLUSION

Mr. Chairman, in total, the Department of Defense has awarded over \$208 million of ARRA funding for 112 DOD projects and \$7 million for three non-DOD projects. By the end of the fiscal year one additional project will be awarded for over \$100 million which will bring our final total well over \$318 million. Of the projects

awarded, 98 of 116 were awarded to Hawaii-based companies. The Department of Defense through ARRA funds assisted you to spur economic activity with over 400 recovery funded jobs to date. At the same time this funding enhanced the readiness of our military services. Thank you for your continued support of our Armed Services and thank you for the opportunity to provide this statement today.

Chairman INOUE. Before we proceed with questioning, I'd like to hear from the whole panel.

So, may I call upon Mr. Morioka?

STATEMENT OF BRENNON T. MORIOKA, DIRECTOR, DEPARTMENT OF TRANSPORTATION, STATE OF HAWAII

Mr. MORIOKA. Thank you, Mr. Chairman Inouye, Senator Akaka, Brennon Morioka, on behalf of the State Department of Transportation here in Hawaii. And we are very pleased to provide you with testimony on the current status and accomplishments of the State of Hawaii and utilizing funds provided by the American Recovery and Reinvestment Act for transportation purposes.

We are extremely grateful for the additional funds that came to Hawaii provided by this act. As you mentioned, it did go to help contractors, suppliers and local companies in these tough economic times and to allow them to either retain employees, or bring some of them back who were sitting on the bench and currently not getting a paycheck. And so we do believe that this was one of the ways to help our local economy, but also help the local families.

The stimulus funds have helped significantly in supporting Hawaii's efforts to focus on investing in our transportation infrastructure, create jobs and stimulate our economy. And based on the requirements in developing the number of jobs that were either sustained or created, Hawaii reported approximately 2,300 jobs that were created or funded by ARRA through the transportation program here in Hawaii.

As you are aware, determining which State and county projects would be funded through this unprecedented level of funding to the State required a significant amount of coordination and collaboration between all of our agencies, both the Federal highways administration, the State Department of Transportation, and our four counties, especially the four mayors and their transportation directors.

We also worked very closely with your office, Senator, as well as the staff of the other congressional delegation. And so we're very thankful for all of the support and guidance that we received throughout the entire process.

Due to the strong level of collaboration between Federal, State and county agencies, we do believe and we are of the opinion that Hawaii has one of the most diverse lists of projects funded by the ARRA transportation monies. And it was also important to ensure that these monies were distributed equally, fairly, through geographic and economically distressed areas.

So, in order to do that, we did meet extensively with all four counties, especially the mayors, directly, in order to discuss and identify the projects that we would move forward, statewide. We did have to meet certain requirements, and the four counties received approximately one-half of the stimulus funds, which is usually more than what they typically get in terms of the formula monies that we receive annually, so we did place a big focus on as-

sisting our county partners, and making sure that their infrastructure projects were able to be funded, as well.

The selection process included meeting certain criteria, including meeting the ARRA timelines; focusing on economically distressed areas, such as the Big Island and Molokai; within the State, we made a conscious decision to make sure that we focused on trying to select projects that had a more diverse nature, in terms of the various trades to be used, so that we did not focus on the same trade, that we would be able to spread the work and employment opportunities out to as many of our trade unions as possible; and we worked on providing secondary benefits such as promoting future job growth such as low-cost housing, as an example, the Mid-Level Road in Kona was one that is a project that could open up for future development and future employment opportunities in the Kona area.

We also took into account the selection of the projects that would employ people over a much longer period of time. We looked at construction projects that would last approximately 2 to 3 years, rather than just 2 to 3 months. And I think when you start comparing the percentages of funds that Hawaii used for such projects such as resurfacing, which is a very quick and easy project to do, nationally other States used approximately 49 percent of their ARRA funds on resurfacing. But, in our case, we used only approximately 14 percent of our funds on resurfacing. Because we did want to focus on the projects that would employ people through this economic condition, and get us through that period, rather than just have them employed for 2 or 3 months, and then go back on the unemployment roles and then we're back in the same problem.

So, we do believe that our—we are very proud of the list collectively—that we collectively put together, and I think our residents are beneficiaries of that, by having employment as well as allowing us to catch up on much of our significant backlogs on infrastructure demands.

So, of the highway projects, Hawaii received approximately \$126 million in highway monies. There were a total of 24 highway projects, 14 State, 10 county that were selected for implementation. Six out of the 14 State projects have been completed and 4 are currently in active construction. There are three other projects that we have for the State that have been issued and for those to proceed, the contractors are starting to process their material orders and their permits.

Five out of the 10 counted projects already have been issued notice to proceed, and will be continuing to be worked on. Three are in the process of being issued notice to proceed within this month of July, and two other county projects will be advertised very shortly.

So, as a result of many of the favorable bids that we had from the original list of the 24 projects, we were able to add four additional State projects and two additional projects on Maui County.

We also received monies for airport infrastructure. We received two Transportation Security Administration (TSA) grants and one Airport Improvement Program (AIP) grant from the Federal Aviation Administration (FAA). The first one was the AIP grant for \$15 million for a \$17 million to make improvements to the apron pave-

ment at Kahului Airport of which we are approximately 78 percent complete with the project.

The two TSA grants which we are very grateful for the assistance of your offices in helping Hawaii be 1 of 11 States who received TSA grants for airport improvements, both of them are for explosion detection systems. One at Kahului Airport which we have currently completed—we just recently dedicated the systems, about 1 month ago. That was \$7.2 million of ARRA funds out of a \$24 million project. And we are about to issue a notice to proceed in this month for the Honolulu International Airport EDS project, which is a \$64 million project, of which \$25 million will be paid for out of ARRA.

We were also very grateful to receive a TIGER grant which was done through a competitive process. We worked very closely with your office, Mr. Chairman, in working on positioning Hawaii on receiving this grant.

We submitted a single grant with three harbor projects for—we received \$24.5 million for one of the projects, which is a Pier 29 reconstruction, here in Honolulu Harbor. We also, as part of the grant, we had also put in for improvements to Pier 4 in Hilo, and Pier 2A out in Kahului Harbor. And so, as a part of the upcoming TIGER applications, we will be resubmitting those two projects, as well, and hopefully we will position ourselves, once again, on receiving monies for those harbor projects.

Hawaii also received Federal Transportation Administration (FTA) monies of which we were, Department of Transportation (DOT) was primarily a pass-through and assisted the four counties on the use of those funds. Most of those monies were primarily used to—on the Big Island they were used for construction of bus shelters, but also to expand their service by acquiring more buses to expand their services on the Big Island.

On Kauai, they used it to replace some of their aging buses, as well as purchase new buses to expand their program, as well. And on Maui, they also used it to purchase new buses for the expansion of their services.

In going through this whole ARRA process, we did have a few observations in working through it, because it was unanticipated monies, when you look over a long period of time and you budget out where your resources are going. So, this was a new influx of money with the same amount of resources that we had in terms of manpower, so it took a lot of prioritization on making sure that we focused our efforts on the highest priorities. And, obviously, that was getting the ARRA projects out, because they had the strictest amount of timelines to meet before—or else you would lose some of the monies.

So, it did create some strain on our internal staff, but I think through the resiliency of much of our staff, and the coordination between the counties and our Federal partners, we were able to manage and prioritize and make sure that we met all of the deadlines that ARRA imposed on us, as well as maintaining our current and existing programs that we have to do every year, anyway.

We do also understand the desire, and need for reporting and oversight for these additional monies but at the same time, this additional amount of paperwork also took away from some of the re-

sources that is traditionally used to actually deliver the projects. So, I think that is something that we are going to have to look at internally, to see if this kind of oversight and reporting requirements are included in future legislation and authorizations that we're going to also have to look at how we do business internally to make sure that we can accommodate those requirements, moving forward.

One of our biggest concerns about some of the things that have happened through the ARRA process is that the additional oversight by some of the Federal agencies has—there is the perception of some of the—or reintroducing of some of the old barriers between the Federal agencies and the State DOTs across the country. This—you know, following a number of years of development of relationships between Federal highways and all of the State agencies, the State DOTs across the country—and even more so here in Hawaii, because I think we are very proud of the relationship that we have with our Division of Federal Highways here in Hawaii. I think we have worked through some of those issues as best as we can. I think the Division Administrator, A. Wong, has done the best that he has been able to do in terms of following the requirements of oversight that they have to have over the State agencies as well as the county agencies, but also providing us with as much of the flexibility as possible and not moving backwards in terms of some of the stewardship relationship that we have developed with Federal highways as we are both serving the same customers. We are both trying to achieve the same mission, and I think Mr. Wong definitely understands that, and he is doing his best to make sure that the relationship is done in a mutual way. But, we also understand, from the DOT's perspective, that he also has his responsibilities for the oversight that needs to be.

So, we'll continue to work with Federal highways on making sure that we try and maintain that level of relationship and partnering, while still acknowledging and respecting the fact that oversight has to be had.

So, in closing, I do want to thank you for the opportunity to brief you on the status of our use of the ARRA funds that have been provided to Hawaii, and also to thank you for all of the support and guidance that you, personally, have provided to us, as well as all of your staffs. Because I don't think, without that cooperation, that Hawaii would not have been as successful as we have been. So, thank you very much.

Chairman INOUE. I thank you very much, Mr. Morioka.
[The statement follows:]

PREPARED STATEMENT OF BRENNON T. MORIOKA

The State Department of Transportation (DOT) is pleased to provide this testimony that outlines our current status and accomplishments in utilizing funds provided by the American Recovery and Reinvestment Act (ARRA) of 2009.

We are extremely grateful for the additional funds that were provided by this act to the State of Hawaii as it helps contractors, suppliers and local companies in these tough economic times and to allow for the state and counties to embark on projects that may not have otherwise proceeded. The Federal stimulus funds have helped in supporting Hawaii's efforts to focus on investing in the repair and modernization of Hawaii's infrastructure, create jobs and stimulate our local economy. Stimulus funds created 2,317 jobs for transportation infrastructure in Hawaii.

Determining which state and county road projects would be funded required an unprecedented level of coordination and collaboration between the Federal Highway Administration, the state Department of Transportation, the four county mayors and their transportation directors, and the Oahu Metropolitan Planning Organization. We also worked closely with Senator Inouye and his staff and would like to thank them for their input and support.

Projects were first evaluated on their ability to meet the ARRA milestone requirements. It was also important that we ensured the projects were fairly distributed geographically, including in economically distressed areas and other regions where the project would have an impact in the creation of jobs. We also put an emphasis on projects that had the potential to employ a diverse cross section of construction trades and provide such employment over a longer duration of time.

A summary of the Department's ARRA program is as follows:

Selection of Highway Projects

The selection of projects to be undertaken with ARRA funds was a result of a collaborative effort between the four counties and the State DOT to ensure an equitable distribution of ARRA funds.

After a list of prospective county and state projects was compiled by DOT and the respective county agencies, we met with the Mayors of each county individually to discuss and identify projects statewide.

The final selection of projects was based on the following criteria:

—Projects:

- That would meet the ARRA timelines;
- In economically distressed areas (Hawaii and Molokai);
- That would employ a diversity of trades;
- That would provide secondary benefits in promoting future job growth such as low cost housing;
- That would provide general transportation benefits to road and highway users.

It should be noted that the counties received nearly half of the ARRA funds for ready-to-go projects, which is a far greater amount of funding typically provided through the typical formula funds of the Federal aid program.

We also took into account the selection of projects that would employ people over a longer period of time (2–3 years) versus the approach taken by other jurisdictions that selected projects that were easy and quick to get out but would employ people over a shorter period of time (2–3 months). How Hawaii is investing taxpayer monies is important. We felt it important to make sure the investment of these funds would go towards extended employment and longer term benefits.

We are aware that approximately 49 percent of ARRA funds spent for highway systems on a national level has or will be used on resurfacing projects. It is important to note that in comparison, only 14 percent of the ARRA funds apportioned to Hawaii is being used on resurfacing projects.

Status of Highway Projects

Currently, of the 24 (14 state and 10 local) original ARRA highway projects, 6 of the 14 state projects have already been completed and 4 are currently in construction.

Because we were able to realize lower bid proposals for ARRA-funded projects, four more state road improvement projects have been added to the certified list. All four of these additional HDOT projects have already started construction.

We also remain committed to provide assistance to Economically Distressed Areas (EDAs), in this case Molokai and the Big Island.

Status of Airports Projects

The Airports Division received 3 ARRA grants. The following is a project status report:

- The structural improvements project for the apron pavement at Kahului Airport is 78 percent complete. The grant amount is \$15 million.
- The EDS integration improvements project at Kahului Airport is 100 percent complete. The grant amount is approximately \$7.2 million.
- Phase II of the EDS integration improvements project at Honolulu International Airport has an NTP date of July 19, 2010. The grant amount is approximately \$24.6 million.

Status of Harbors Project

The Harbors Division received 1 TIGER grant. The following is a project status report.

—The reconstruction of Pier 29 has an NTP date of December 2010. The grant amount is \$24.5 million and the estimated state match is \$7 million. Received grant agreement from MARAD on July 2, 2010. Ready to commence project upon release and availability of funds.

Status of FTA Projects

The project to construct bus shelters on the Big Island is complete. The grant amount is \$27,812.

The project for additional bus shelters on the Big Island is 75 percent complete. The grant amount is \$44,514.

The project to purchase buses for expansion of services on the Big Island is 100 percent complete. The grant amount is \$905,486.

The bus replacement program on Kauai is 100 percent complete. The grant amount is \$331,632.

The project to purchase buses for expansion of services on Kauai is 100 percent complete. The grant amount is \$646,180.

The project to purchase buses for expansion of services on Maui is 98 percent complete. The grant amount is \$977,811.

Observations

Through this process to meet the rigorous deadlines and stricter requirements imposed by the act, we did see the kind of resiliency and hard working individuals that we all possess within our agencies. We developed new strategies and innovative approaches to deliver projects faster, in light of some of the resource challenges we faced due to the economic climate of our state and our nation.

However, with the addition of these unanticipated funds to further accelerate infrastructure initiatives, the challenges to deliver and perform were sometimes overwhelming and often made for difficult choices in order to distribute the necessary resources to meet the new initiatives while maintaining existing responsibilities. It needs to be recognized that the benefactor agencies needed to dedicate a significant amount of resources to manage, monitor, and fulfill the new Federal requirements that came with acceptance of these additional Federal funds. However, although the act did provide for allowance for this fact, it was not apparent that there was much flexibility provided or acknowledgement that every state is different in their laws and processes became enormous obstacles that needed to be overcome in order to succeed.

Greater flexibility in working through Federal regulations would have assisted agencies in delivering projects more quickly. Strict compliance with all pre-existing requirements, though not necessarily critical to the delivery of a project but more applicable to the “process” by which they are delivered, such as the TIP and STIP processes, seemed to be contrary to the intent of the act to create and stimulate the economy in the quickest fashion possible.

We also understand the desire for the amount of reporting and oversight control by our Federal agency partners, especially in light of much of the perception of a lack of oversight of financial institutions. However, the degree to which the reporting and oversight was required and/or requested also took away from the same resources necessary to deliver the projects themselves. This had a tremendous impact on Hawaii’s agencies as our good intentions to spread the work around to benefit the largest amount of stakeholders also resulted in a greater amount of paperwork. Reporting on three very large projects would have been far easier for agencies as compared to tracking and reporting on a two dozen smaller projects. Therefore, the incentive to distribute the ARRA funds more equitably did not exist and states that did distribute funds to a wider base were, in essence, penalized for doing so.

One of our biggest concerns, however, has been that ARRA has reintroduced some of the barriers between the Federal agencies and the state DOTs. Following a number of years working toward stewardship agreements and partnering relationships, the oversight requirements imposed on FHWA and the local agencies have reestablished some of the perception that the role of FHWA will be more of a policing role rather than a partnering role. We are hopeful that this is not going to be the case moving forward and we will continue to work with our local division office towards that end as we believe we have built a trusting relationship with the local FHWA staff that we are currently proud of.

Closing

Thank you for providing us an opportunity to brief you on Hawaii’s efforts to use ARRA funds prudently and expeditiously. These projects demonstrate how the state, counties, and Federal agencies can work together to serve the critical needs of Hawaii’s residents and focus on investing in the repair and modernization of Hawaii’s transportation infrastructure and create jobs for the people in our state.

STATE AND COUNTY PROJECTS USING FEDERAL RECOVERY FUNDS

	Jurisd.	Island	Project Title	ARRA Cost	Notes or Remarks	Status 6/30/2010
S1	STATE	Oahu	H-1, Seismic Retrofit, Farrington Highway & Makakilo Separation, Oahu ⁵	\$865,200	NTP 7/13/09	Completed
S2	STATE	Oahu	Kamehameha Highway, South Punahoa Bridge Replacement, Oahu ³	\$15,298,510	NTP 8/26/09	30 percent
S3	STATE	Hawaii	Hawaii Belt Road, Clean & Paint Steel Members, Kukuau, Kuwaikahi, Ninole and Maulua Bridges, Hawaii ³	\$4,301,949	NTP 9/8/09	67 percent
S4	STATE	Kauai	Maalo Road Resurfacing, MP 0-MP 1.0, Kauai ⁵	\$729,083	NTP 7/20/09	Completed
S5	STATE	Kauai	Kuhio Highway Resurfacing, Kawahau Road to Kapa'a Bridge, Kauai ⁵	\$1,021,416	NTP 7/20/09	Completed
S6	STATE	Kauai	Kuhio Highway, Short Term Improvements, Kuamoo Road to Temporary Bypass Road ¹	\$4,170,000	\$34 million total; \$17 million ARRA	Awaiting FHWA decision on Sect 106
S7	STATE	Maui	Piilani Highway Pavement Preservation, Lipoa Street to Kiloohana, Maui ³	\$2,979,480	NTP 8/31/09	91 percent
S8	STATE	Maui	Hana Highway PPM, Kaupakalua Road to Huelo, Maui ⁵	\$619,301	NTP 8/26/09	Completed
S9	STATE	Molokai	Maunaloa Highway Resurfacing, MP 5—Airport, Molokai ⁵	\$2,688,406	NTP 8/26/09	Completed
S10	STATE	Molokai	Kalae Highway PPM, Maunaloa Highway to Kalaupapa Lookout, Molokai ⁵	\$1,061,781	NTP 8/26/09	Completed
SBU1	STATE	Molokai	Puupeleua Hwy Resurfacing, Maunaloa Hwy to Farrington Ave & Farrington Hwy Resurfacing, Puupeleua Ave to Kalae Hwy (Route 480 Pavement Preservation), Molokai ³	\$5,315,832	NTP 12/3/09	85 percent
SBU2	STATE	Maui	Kaahumanu Ave, Waiiale Bridge Girder Replacement, Maui ³	\$1,922,456	NTP 4/27/2010	0 percent
SBU3	STATE	Oahu	H-1 Dowel Retrofit, Kaimuki and Palatalai Areas, Oahu ³	\$6,350,000	NTP 1/29/10	0 percent
SBU4	STATE	Oahu	H-3 Seismic Retrofit, Mokuapu I/C, Oahu ³	\$1,599,283	NTP 6/30/10	0 percent
C1	COUNTY	Oahu	Traffic Signals at Various Locations, Phase 10 ³	\$3,407,221	NTP 12/21/09	1 percent
C2	COUNTY	Oahu	Traffic Imp. At Various Locations, Harding Ave. and 5th & 11th Aves ³	\$2,456,715	NTP 7/10	
C3	COUNTY	Oahu	Waipio Point Access Road Improvements ³	\$3,585,927	NTP 7/10	
C4	COUNTY	Oahu	Traffic Management Center Auxiliary Power Facility ³	\$291,652	NTP 4/30/10	0 percent
C5	COUNTY	Oahu	Kalaeloa Blvd Widening and Reconstruction, Phase 1 OR&L ROW to Lauwiliwili Street ³	\$6,773,817	NTP 7/10	
C6	COUNTY	Hawaii	Ane Keohokaloae Highway, Hawaii ³	\$28,541,891	NTP 3/29/10	5 percent
C7	COUNTY	Kauai	Lydgate Park to Kapa'a Bike/Ped Path (phase III) ¹	\$4,120,000		Not advertised yet
C8	COUNTY	Kauai	Market Street Improvements, Phase 2 ³	\$2,421,990	NTP 11/27/09	36 percent
MGBU1	COUNTY	Maui	Resurfacing Various Roads, Ohukai and Kama'u ³	\$409,558	NTP 4/12/10	94 percent
MGBU2	COUNTY	Maui	Lower Main Street and Kanaloa Ave Slurry Sealing ¹	\$4,100,000	BACKUP PROJECT	Not advertised yet
AIRPORT PROJECTS						
	STATE	Maui	Apron Pavement Structural Improvements, Kahului Airport ³	\$15,000,000	NTP 6/16/09	78 percent complete
	STATE	Maui	OGG EDS Integration Improvements, Kahului Airport ³	\$7,240,743	NTP 5/15/08	Completed
	STATE	Oahu	HNL EDS Integration Improvements, Phase II, Honolulu International Airport ²	\$24,573,200	NTP 7/19/10	Completed

HARBOR PROJECT	STATE	Oahu	Reconstruction of Pier 29 Container Yard, Honolulu Harbor ²	\$24,500,000	\$31.5 million total; \$24.5 million ARRA.	Going through Award process. Received grant agreement from MARAD on 7/2/ 10.
TI						
TRANSIT PROJECTS						
HC19	COUNTY	Hawaii	Construct Bus Shelters ⁵	\$27,812	Contract awarded 9/30/09.	Completed
HCBU 1	COUNTY	Hawaii	Additional Bus shelters ³	\$44,514	BACKUP PROJECT	75 percent
HC21	COUNTY	Hawaii	Purchase Buses for Expansion of Services ⁵	\$905,486	Contract awarded 9/30/09.	Completed
KC24	COUNTY	Kauai	Bus Replacement Program ⁵	\$331,632	Contract awarded 6/28/09.	Completed
KC25	COUNTY	Kauai	Purchase Buses for Expansion of Services ⁵	\$646,180	Contract awarded 6/28/09.	Completed
MC53	COUNTY	Maui	Purchase Buses for Expansion of Services ³	\$977,811	Contract awarded 6/30/09.	98 percent

¹ Obligated.
² Estimated cost.
³ Advertised/opened bids but have not issued NTP.
⁴ Completed.
⁵ Currently in construction.

Chairman INOUE. And now I'm going to call upon Mr. Guerin of the General Services Administration.

STATEMENT OF WILLIAM J. GUERIN, RECOVERY EXECUTIVE, NATIONAL RECOVERY PROGRAM MANAGEMENT OFFICE, PUBLIC BUILDINGS SERVICE, GENERAL SERVICES ADMINISTRATION

Mr. GUERIN. Good morning, Mr. Chairman, Senator Akaka. Thanks for the opportunity for GSA to come and talk about what we've accomplished for economic recovery here and across the country.

We have received funding in \$130 million or more for two projects in Hawaii, the Federal building here and the Federal building courthouse in Hilo. Both of those projects are underway, but I'd like to first talk about what we've accomplished generally before I get into some specifics about those two projects.

We submitted our first spend plan to fund projects in March 30, 2009 based on two overwhelming criteria: the potential to put people back to work quickly, and the opportunity for us to transform our Federal buildings into high-performance green buildings.

As we've realized savings from projects underway, we have revised our spending plans to reallocate funding. These savings were used to enhance or accelerate construction of existing projects, or to fund new projects. Today, we have revised our spending plan four times, and the latest version of that is actually in Congress, now, being reviewed and will be available for us to spend money on Friday of this week.

Our objective is to deliver projects on-schedule, on-budget, and on-green. We established aggressive targets to fulfill the intentions of the Recovery Act.

As of June 28, we've obligated over \$4.3 billion of recovery money to over 500 companies, and we've spent over \$485 million of that money already. We're on track to meet our next target of awarding \$5 billion in total construction projects before September 30, 2010.

We're meeting our performance target of on-green by investing in high-performance, green building projects. We're using recovery funds, and we have the opportunity to become a green proving ground, that is, to provide practical data on improving emerging green technologies and practices to determine what the return on investment of those technologies might be.

Our investments are helping to stimulate the economy in every State, including the State of Hawaii. Using Recovery Act funds, GSA has invested in two of Hawaii's landmark buildings, one here in Honolulu and one here in Hilo, as I said.

Construction began in late April on the Prince Jonah Kuhio Kalaniana'ole Federal Building and Courthouse. We received \$121 million in Recovery Act funds to modernize and renovate the building. These funds are being used to install an energy efficient heating and ventilation system, to renovate the restrooms and install new water efficient fixtures there, upgrade fire alarms and sprinkler systems, and replace the majority of lighting in the building. These modifications are expected to reduce energy consumption by nearly 30 percent, and will qualify the building for a green silver rating. I had the opportunity to tour the building yesterday and construction is underway. We have a lot going on there, we're moving people around inside of the building, in order to make way to

get the courthouse started, and that project is going to start very soon.

It should be—the first phase is complete, and construction began in April 2010. The first phase will be done in 2014. At that point, we'll be looking for additional funds to come and finish the Federal building courthouse complex.

Construction work on the Hilo Federal building began last August after the project received over \$7 million in Recovery Act funds. The work includes improvements to the plumbing and electrical systems, historic preservation measures, upgrades to the life safety systems and a seismic retrofit of the building. We expect that project to be completed in full in the summer 2011.

To clarify, when GSA obligates money, we are making a contract award directly with our contractors. The contract award is a catalyst for money to start flowing. Contractors immediately begin to secure financing, hire personnel and initiate early steps to perform their project. As progress is made, contractors invoice and get paid for the work they perform. These project payments are made over the life of the contract and provide steady support for our economy over an extended period, not just a jolt that lasts for a few months. As of June 28, our contractors reported that our investments have funded 2,688 jobs across GSA's program.

GSA's infrastructure investments vary in scope, type, and complexity. They range from the two landmark projects, here, in the 50th State, to the new courthouse in Austin, Texas, to as large as the new Department of Homeland Security (DHS) headquarters in Washington, DC, at the St. Elizabeth's Campus. That's going to be the largest Federal project in the area since the construction of the Pentagon.

Many of our projects include exciting approaches to energy conservation, including geothermal heat source pumps for both heating and cooling, and we're shooting for net-zero energy uses in all of our buildings, starting with one of our land ports of entry on the southern border.

Project labor agreements came from the Presidential Executive order regarding PLAs and we've had the opportunity to use PLAs in several of our projects. We're promoting the use of PLAs in our construction solicitations for projects greater than \$25 million. This is consistent with President Obama's Executive Order 13502 on the use of project labor agreements for Federal construction projects. PLAs are a collective bargaining agreement on the terms of employment for all laborers on the project, whether they are union or non-union. The agreement is between the contractor, its sub-contractors and the labor unions.

Appeal A was successfully negotiated between the contractor and labor here in Hawaii at the Prince Kuhio Building.

In addition to our Recovery Act funds, GSA expects to receive approximately \$856 billion from other agencies. Today, we received over \$450 million in Recovery Act reimbursable work, and of that we have obligated over \$300 million in contracts on behalf of other Federal agencies.

I've described our accomplishments and contributions to the Nation's economic recovery through the Recovery Act of 2009. We look

forward to working with you and the members of this committee as we continue to deliver this important work.

Thank you for the opportunity to appear here today, and I'd be happy to answer any questions you have when the time comes.

Chairman INOUE. I thank you very much, sir.

[The statement follows:]

PREPARED STATEMENT OF WILLIAM J. GUERIN

Good Morning Chairman Inouye, Vice Chairman Cochran, and members of the Committee. My name is William Guerin and I am the Recovery Executive for the National Recovery Program Management Office of GSA's Public Buildings Service (PBS). Thank you for the opportunity to appear before you today to discuss GSA's contribution to our nation's economic recovery through green modernization and new construction of our Federal buildings.

Last year, the American Recovery and Reinvestment Act (Recovery Act) gave GSA an unprecedented and exciting opportunity to contribute to our nation's economic recovery and environmental sustainability. The investments we made and continue to make in our public buildings are helping to stimulate job growth and retention in the construction and real estate sectors, reduce energy consumption, improve the environmental performance of our inventory, reduce our backlog of repairs and alterations, and increase the value of our assets. In addition, our investments will help further developments in energy efficient technologies, renewable energy generation, and green building solutions.

We are successfully meeting our established milestones to meet the intent and goals of the Recovery Act. I will first summarize, and then further elaborate on our accomplishments. Since enactment of the Recovery Act on February 17, 2009, we have accomplished the following:

- Submitted our first spend plan, identifying projects funded by the Recovery Act, to Congress on March 31, 2009. We have since submitted four revisions. Our fourth spend plan is still within the mandated 15 day congressional review period and will fund 268 projects in all 50 states, the District of Columbia, and two U.S. territories.
 - Established and met our target dates for contract awards:
 - \$1 billion in contract awards by August 1, 2009,
 - \$2 billion in total contract awards by December 31, 2009, and
 - \$4 billion in total contract awards by March 31, 2010.
 - Put GSA on track to meet our next targets:
 - \$5 billion in total contract awards by September 30, 2010.
- As of June 28, 2010, we have obligated nearly \$4.3 billion to more than 500 companies and outlaid over \$471 million.
- In addition to our Recovery Act Funds, GSA expects to receive approximately \$856 million in Recovery Act funds from other agencies. To date, we have received \$459 million in Recovery Act reimbursable work authorizations and, of that, have obligated over \$301 million in contracts on behalf of other agencies.
 - Over the last 3 reporting periods, GSA obtained nearly 100 percent compliance on contract recipient employment reporting on all 500+ separate contract awards. During the first quarter, only one recipient did not comply; in the second reporting cycle, GSA achieved 100 percent compliance. PBS received over 99 percent reporting compliance during the most recent reporting quarter that closed in April.
 - Established PBS as a Green Proving Ground to provide practical data in order to measure the returns on investment in emerging green technologies and practices.

GSA is proud of these accomplishments and our opportunity to contribute to our nation's economic recovery and reinvestment in our building infrastructure. I will now elaborate further on what we have done as well as describe some of our exciting building projects.

Organizational Response

Given the urgency of the situation and the goals of the Recovery Act we moved forward quickly and diligently to select the best projects for accomplishing the goals of the Recovery Act based on two over-arching criteria: potential of the projects to put people back to work quickly and to transform Federal buildings into high-performance green buildings. To help manage and oversee our Recovery Act program, PBS created a new national approach to program management and we adopted a credo of "On Schedule, On Budget and On Green."

As described earlier, we met our targets of “On Schedule and On Budget” by exceeding our aggressive goal of obligating \$4 billion by March 31, 2010. This is particularly remarkable given that project awards were on average 8–10 percent below our projected cost estimates. Lower-than-expected contract awards made additional funds available, which we reallocated and invested in new high-performance features and projects. To further describe the magnitude of this achievement, in order to meet the March goal we accelerated schedules for 116 projects representing \$561 million in investments.

We are working towards meeting our performance target of “On Green” with our Recovery Act funding targeted at high-performance green building projects. The funding provided by the Recovery Act has jump-started our effort to meet mandated energy and water conservation targets in the years to come. We appreciate Congress’ foresight to direct the majority of our funding toward converting GSA’s facilities into high performance green buildings.

In order to meet these aggressive measures, we set interim target dates for project awards in each quarter and monitor project progress, identify schedule variances early, streamline and accelerate projects, and share best practices. PBS has quickly identified opportunities for reinvestment and updated its spend plan to enhance or accelerate funding of other projects. To date, we have revised our spend plan four times: revisions were submitted on November 23, 2009, January 19, 2010, March 5, 2010, and most recently, on June 24, 2010. Speedy revisions to the spend plan were essential to meet our interim goals and are essential in meeting the mandated timelines in the Recovery Act.

Stimulating the Economy

GSA’s infrastructure investments vary in scope, type, and complexity and cover our entire portfolio. Funds from the Recovery Act are being used to convert our inventory to high-performance green buildings, as well as renovate and construct Federal buildings, courthouses, and land ports of entry. These projects range from single building system modernizations to large complex new construction projects. As of June 28, 2010 our obligations totaling nearly \$4.3 billion for the 262 projects on Spend Plan #3, are funding the following projects in all 50 states, 2 territories and in the District of Columbia:

- New Federal Buildings and Courthouses: 11.
- Land Ports of Entry: 7.
- High Performance Green Buildings—Full & Partial Modernizations: 45.
- High Performance Green Buildings—Limited Scope Projects: 199.

Notably, GSA’s “obligations” are awards flowing directly to our contractors, i.e., directly into the construction, real estate and architecture/engineering sectors. While contract award is the catalyst for money flowing through the economy, funds associated with construction or design projects are not immediately outlaid following contract award. Rather, payments to contractors for progress made over the life of the contract provide steady support for our economy over an extended period—not a jolt that lasts only a few months.

Less visible but important contributions to economic recovery follow shortly after we award a contract: contractors immediately begin to secure financing, hire personnel, and initiate early steps to perform the project.

Reports from our Recovery Act funding recipients indicate that as of June 28, 2010 2,688 prime contractor jobs were funded as a direct result of PBS Recovery Act funding during the reporting quarter ending June 30, 2010.

Diversity of Investments

As noted, the projects we have funded vary in amount of investment, scope of project, type of project, and geographic region. For example, in Austin, Texas, we are building a new courthouse that incorporates many innovative green features such as high-efficiency heating, ventilation and air conditioning (HVAC) systems and extensive use of natural light. PBS is building this courthouse to achieve Leadership in Energy and Environmental Design (LEED) Silver certification through the U.S. Green Building Council (USGBC). Although construction began in September, the project team continues to review the design to determine if additional high-performance green building features can be added to the project, including recycled interior finish materials and a highly insulated cool roof. Anticipated completion date is December 2012.

Our progress toward the development of the St. Elizabeths campus, in Washington, DC is on track. The St. Elizabeths project is the Washington metropolitan area’s largest Federal project since construction of the Pentagon, and will help revitalize and spur additional development in Southeast Washington’s Anacostia community. The completed complex will feature green roofs, landscaped courtyards to

capture and reuse surface water runoff, and innovative HVAC systems. We registered all buildings at St. Elizabeths with USGBC, and we expect the St. Elizabeths campus to earn a LEED Silver certification and are striving for Gold certification.

The B.H. Whipple Federal Building project in Fort Snelling, Minnesota will renovate the main building, the motor pool building and add a new Sally Port. The facility will use a geothermal/ground source heat pump system for both heating and cooling that will greatly reduce the facility's energy usage. A geothermal well field will require removal of most of the site pavement and will therefore promote storm water management for a "95 percent rain event." Other features include installing a high efficiency sprinkler system and plantings, and high efficiency LED site lighting. The Building Automation System will be upgraded to include demand controlled ventilation, an upgrade of the building lighting control system to include dimmable ballasts, occupancy sensor controls and daylight harvesting near exterior windows and solar thermal technology providing 30 percent of the building's domestic hot water. Once completed, the building will achieve at least a 30 percent efficiency improvement over a baseline HVAC system compliant with ASHRAE 2007 90.1.

Green Technologies and Practices

We are leveraging our Recovery Act investments to turn our large, varied and stable inventory of buildings into a proving ground for green building technologies, materials, and operating regimes. By adopting new ideas and products, then evaluating and publicizing our results, GSA is working to become one of the commercial real estate industry's "go to" sources for data on the environmental and economic payback of new systems and procedures. Our investments in innovative technologies and alternative energy solutions can help lead the transformation to new green jobs and new green industries. The table below identifies the number of green technologies we are including in our projects.

System	Projects With Expected Completion by 12/31/10
System Tune-ups/Recommissioning	58
Lighting	40
Water	7
PV Roof	11
Roof	26
Façade/Windows	11
Advanced Meters	150
Solar Hot Water	2
Wind	2

Restroom renovations at the Lewis F. Powell Federal Courthouse in Richmond, Virginia were successfully completed on May 3, 2010. This project focused on energy and water conservation, using more modern toilets, urinals and faucets. These new products use less water than the standard commercial products used in today's buildings. Also, modern lighting products were installed that use less energy per bulb and provide high quality illumination. In addition, motion sensor light switches were installed to minimize unnecessary energy usage. The contract was awarded on August 21, 2009 utilizing Recovery Act funds and employed approximately 10–15 employees from the prime contractor's staff and approximately 8 difference local subcontractors. The contractor worked quickly and provided a successful project on time and well within the budget allowed for this work.

At the Columbus, New Mexico Land Port of Entry, we are providing additional funds to design a net zero energy building. A net zero energy building is a highly energy-efficient building that uses renewable energy-generation technologies to produce as much energy as it consumes from traditional utility grids over the course of a year. Not only will this reduce greenhouse gas emissions, but it will also support the mission need of agencies housed there to maintain critical systems in the event of a complete loss of utilities. Building systems and technologies may include: integrated building walls containing super-insulation and high-performance glass; high-efficiency HVAC systems; energy-saving lighting systems; ground-source heat pumps; passive solar heating; natural ventilation; use of day lighting; solar heated air; and solar thermal water heaters.

At the Dayton Federal Building, we are installing an automated HVAC system as well as a lighting control system that includes occupancy sensors and dimmable ballasts. In addition, the building will harvest daylight near exterior windows to improve the quality of light and reduce the need for artificial lighting.

We are also pursuing projects that will upgrade the performance of specific systems within many of our buildings. These "Limited Scope" projects focus on improving energy performance and are evaluated in the context of the existing physical condition of the building. We evaluated these buildings and identified opportunities to "tune-up" the systems, improve building mechanical system controls, recommission building systems and retrofit or replace lighting or HVAC systems. To better achieve the goals of the Energy Independence and Security Act (EISA) of 2007, we particularly focused on those projects related to renewable energy production and water conservation.

In addition to the Limited Scope projects, PBS has obligated over \$113 million for High-Performance Green Building Small Projects that represent other opportunities for funding measures to convert our buildings to high-performance green buildings. These projects tend to be smaller in scope and size.

Recipient Reporting

The Recovery Act requires contractors and other recipients of Recovery Act funds to submit quarterly reports that provide the public information on the prime and sub-awards, funding, and project status. The third reporting period closed on April 16.

For this reporting period, we continued the multimedia outreach approach we developed last reporting quarter to ensure recipients were aware of the quarterly reporting requirement. We telephoned our prime recipients directing them to the FederalReporting.gov website used to register and report; we e-mailed Recipient Reporting Guidance to all recipients; we provided pre-populated report templates; and we posted guidance to the gsa.gov/recovery website. We also continued to leverage our call center to assist recipients with reporting questions. Our recipients have provided positive feedback about GSA's call center, and have expressed gratitude to our staff for assisting with the reporting process. I am proud to report that as of April 16, 2010, more than 99 percent of GSA's recipients have reported in 539 reports.

As of June 28, 2010 GSA has funded 2,838 jobs (3,057 including RWA work). PBS has funded 2,688 jobs from PBS funds and an additional 69 jobs funded from RWAs.

Support to Other Agencies

In addition to GSA's Recovery Act program, we are supporting the real estate needs of other agencies that have received Recovery Act funding, such as SSA, DHS, DoS. As of June 28, we have entered into reimbursable work agreements with customer agencies totaling \$459 million across 35 projects. In total, we anticipate receiving approximately \$856 million for Recovery Act projects from our customers.

Conclusion

Congress entrusted GSA with a significant increase in funding to support the construction and modernization of high performance green buildings while quickly putting people back to work during these challenging economic times. We have risen to the challenge, and we are implementing our program rapidly and successfully.

Today, I have described GSA's accomplishments and contributions to our nation's economic recovery through our investments in green technologies and reinvestments in our public buildings funded by the American Recovery and Reinvestment Act of 2009. We look forward to working with you and members of this Committee as we continue to deliver this important work.

Chairman INOUE. And now may I call upon NOAA's Representative Broglie. Mr. Broglie.

STATEMENT OF WILLIAM F. BROGLIE, CHIEF ADMINISTRATIVE OFFICER, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE

Mr. BROGLIE. Chairman Inouye, Senator Akaka, I appreciate the opportunity today to discuss the impact of the American Recovery and Reinvestment Act of 2009 in the course of the NOAA Pacific Regional Center.

I know you are both well aware of the good work that NOAA does, but for other present here today, I wanted to talk a little bit about NOAA in Hawaii, and the Pacific Regional Center, to maybe frame for folks why the ARRA funding is so important to NOAA for this project.

NOAA has a significant presence in Hawaii, with over 600 employees and associates working here. The programs NOAA manages in Hawaii and the Pacific Region are large and diverse, spanning a geographic area covering over 30 million square miles, five time zones and encompassing nearly one-half of U.S. Exclusive Economic Zone.

NOAA's responsibilities, include tsunami, climate and weather prediction, including tsunami and severe weather warnings fisheries management and stock assessments, marine mammal and endangered species protection, coral reef conservation, including marine debris removal, National Marine Sanctuary management and operation, and supporting the development and sustainment of hazard resilient communities.

NOAA operates three ocean-going research and survey vessels that are permanently homeported in Hawaii, and operate throughout the Pacific. In 2010, there was total investment in programs and operations in Hawaii is more than \$126 million, much of which is brought directly into the local economy through Federal jobs, contracts, and cooperative research projects conducted in Hawaii.

As NOAA's programs and mission responsibilities in the Pacific grew over time, we established a presence in nearly 18 different dispersed locations across Oahu. For almost a decade, NOAA has had a vision for a Pacific Regional Center, a centralized location that would allow NOAA to better integrate its research, products and services.

Approximately 6 years ago, NOAA entered into a partnership with the U.S. Navy in Hawaii to begin developing the new Pacific Regional Center on historic Ford Island, at Pearl Harbor. Undergoing its own revitalization plan, Ford Island provided the ideal location for NOAA's new Pacific Region headquarters: deep-water berthing for vessels, seawater for scientific research, and space that could support over 700 people in the future.

NOAA's development of the new Regional Center proceeded in three phases. First, a new Ship Operations Facility supporting our research and survey vessels opened the fall 2007. A new marine science and storage facility is currently under construction and is scheduled for completion in 2011. The third, and largest, phase, the development of the Center's main facility, received critical capital investment funds under ARRA.

The Center's main facility will encompass over 300,000 square feet of lab and office space, renovating two World War II-era hangars and developing a new third building that will join those together.

Later this summer on NOAA's behalf, the Navy will award the construction contract for the Center's main facility, with projected completion and occupancy in early 2013. The ARRA funding allowed NOAA to move forward with the main facility construction, and the overall consolidation at Ford Island.

The impact of ARRA funding in the context of the Center can be measured at multiple levels. In the short term, from a jobs perspective, we expect the award of the construction contract to bring over \$140 million in construction jobs to the labor market in Hawaii. Over the long term, having a world-class science and research facility located in Hawaii is expected to further promote international,

scientific, and local educational partnerships. This world-class facility is expected to aide in recruiting the next generation of scientists and researchers to work on the critical science issues facing the Nation and the Pacific region in the future.

NOAA also expects the project to promote further partnership opportunities on common operational and research issues with the Navy, given our joint presence at Pearl Harbor. The new facility will promote NOAA's continued commitment to sustainable design, achieving at least a LEED Silver status, and will allow NOAA to partner with the Navy in its deployment of solar energy and photovoltaic cell systems on Navy buildings in the near future.

In summary, NOAA's Pacific Regional Center main facility is expected to bring benefits to the local economy here in Hawaii, both in the short term, through the creation or sustainment of construction-related jobs, and in the long term, by creating a modern, state-of-the-art lab and office facility that promotes science and educational partnerships and attracts the next generation of scientists and researchers. The funding also allows NOAA to realize the programmatic vision of establishing a NOAA facility that better serves Hawaii and the broader Pacific Region.

We appreciate your historic and continued support of NOAA and its programs, and particularly this project. Thank you for inviting me to provide this testimony.

[The statement follows:]

PREPARED STATEMENT OF WILLIAM F. BROGLIE

My name is William Broglie, and I am the Chief Administrative Officer for the National Oceanic and Atmospheric Administration (NOAA). I appreciate the opportunity today to offer a few perspectives on the American Reinvestment and Recovery Act of 2009 in the context of the NOAA Pacific Regional Center.

NOAA has a significant presence not only in Hawaii, with approximately 600 employees and associates working here, but also in the larger Pacific Region, with offices in Guam, the Commonwealth of the Northern Mariana Islands, the Republic of Palau, the Federated States of Micronesia, American Samoa, and the Republic of the Marshall Islands. The programs NOAA manages in the Pacific are large and diverse, spanning a geographic area covering over 30 million square miles, spanning 5 time zones and encompassing nearly one-half of U.S. Exclusive Economic Zone. NOAA's responsibilities, including international, fall broadly into the following areas:

- Tsunami, climate and weather prediction (the latter encompassing both the Northern and Southern Hemispheres, and ranging from tropical to sub-polar);
- Tsunami information and warnings,
- Severe weather warnings (hurricanes, typhoons, flash floods, high surf, high winds, and even snow),
- El Niño/La Niña predictions and climate change impacts;
- Fisheries management and stock assessments; including tuna, swordfish, snappers, lobsters;
- Marine mammal and endangered species protection (monk seals, Pacific sea turtles, whales), research, and recovery;
- Coral reef conservation, including marine debris removal;
- National Marine Sanctuary management and operation including the Hawaii Humpback Whale Sanctuary and the Papahānaumokuākea Marine National Monument; and
- Hazard resilient communities.

NOAA operates three ocean-going research and survey vessels that are permanently homeported in Hawaii, but operate throughout the Pacific. Other NOAA vessels have missions that take them into the Pacific. NOAA's total fiscal year 2010 investment in programs and operations in Hawaii is more than \$126 million, much of which is brought directly into the local economy through Federal jobs, contracts for services, and cooperative research projects conducted in Hawaii.

As NOAA's program and mission responsibilities in the Pacific grew, it established a presence in nearly 18 different sites across Oahu. For almost a decade, NOAA has had a vision for a Pacific Regional Center, a centralized location that would allow NOAA to better integrate its research, products and services.

Approximately 6 years ago, NOAA entered into a very productive partnership with the U.S. Navy in Hawaii to begin developing the new Pacific Regional Center on historic Ford Island, at Pearl Harbor. Undergoing its own revitalization plan, Ford Island provided the ideal location for NOAA's new Pacific Region headquarters: deep-water berthing for vessels, seawater for scientific research, and space that could support over 700 people in the future. NOAA's development of the Pacific Regional Center (PRC) proceeded in three phases. First, a new Ship Operations Facility supporting our research and survey vessels opened the fall of 2007. A new marine science and storage facility is currently under construction and is scheduled to be completed in 2011. The third phase—development of the PRC Main Facility—received critical capital investment from American Recovery and Reinvestment Act (ARRA) funding.

The PRC main facility will encompass over 300,000 square feet of lab and office space in two renovated World War II era hangars and a third, new building that together will realize NOAA's goal of an integrated facility.

Later this summer on NOAA's behalf, the Navy will award the construction award for the Pacific Regional Center's Main Facility, with projected completion and occupancy in early 2013. The ARRA funding allowed NOAA to move forward with the Main Facility construction, and has therefore significantly reduced the time to completion of the project and the overall consolidation at Ford Island. The impact of ARRA funding in the context of the Pacific Regional Center can be measured at multiple levels. In the short term, from a jobs perspective, we expect the award of the construction contract to bring over \$140 million in construction jobs to the labor market in Hawaii. Over the long-term, having a world-class science and research facility located in Hawaii is expected to further promote international scientific and local educational partnerships. From a historical perspective, the ARRA funds allow us to restore and adaptively re-use World War II era buildings in a manner that preserves many of the structural components of the buildings, consistent with interests of Historic Preservation Partners with whom we have collaborated on the project.

This world class facility is expected to aide in recruiting the next generation of scientists and researchers to work on the critical science issues facing the Nation and the Pacific region in the future. NOAA also expects the project to promote further partnership opportunities on common operational and research issues with the Navy, given our joint presence at Pearl Harbor. The new facility will promote NOAA's continued commitment to sustainable design, achieving at least a LEED Silver status, and will allow NOAA to partner with the Navy in its deployment of solar energy/photovoltaic cell systems on Navy buildings in the near future.

We were very fortunate that the Pacific Regional Center Main Facility was well into the design process when the ARRA funding became available, which ensured that we could award the necessary contracts by September 30, 2010—the expiration date for the ARRA funding. We are also fortunate that funding required for other non-construction costs, such as funding to begin work on the information technology required for the building, and normal project-contingency funds had been separately appropriated; since such funding will be obligated after the expiration of the ARRA funds. The Administration's fiscal year 2011 budget request includes funding to support remaining project requirements, such as outfitting the building with information technology and furniture, and funding for the inevitable contingencies that do not occur until after the construction is already underway. We appreciate your continued support of this project, and look forward to its completion in 2013.

NOAA's Pacific Regional Center Main Facility is expected to bring benefits to the local economy here in Hawaii both in the short-term, through the creation or sustainment of construction-related jobs, and in the long-term, by creating a modern, state-of-the-art laboratory and office facility that promotes science and educational partnerships and attracts the next generation of scientists and researchers. The funding also allows NOAA to realize the programmatic vision of establishing a NOAA facility that consolidates most of the programs that serve Hawaii and the broader Pacific Region. One program that would not be consolidated is the Weather Forecast Office that is co-located on the University of Hawaii, Manoa campus.

Thanks you for inviting me to provide this testimony, I am happy to answer any questions you might have.

Chairman INOUE. Thank you very much.

I'd like to ask a general question to all of you, all of the witnesses. How many jobs have been retained or created as a result of ARRA funding?

Sir?

REPORT BY QUARTERS

General WILLIAMS. Sir, right now we take all of the information, I think, as does everyone from the recovery.gov Web site. And that is where the contractors report the number of jobs that have been created. Right now, on the Web site, it captures recovery-funded jobs, but it may not capture exactly how many have been retained, and how many jobs have actually been created. So, what we capture right now is recovery-funded jobs, which is a collection of both.

Chairman INOUE. How much is that? How many?

General WILLIAMS. Right now, the number is 405, however, that just goes to the end of—the end of March, the 31st of March. That was the end of the second quarter. And the way it works, right now, based on my knowledge, is that they report by quarter. We have just completed the end of the third quarter, which ended the last portion of June, and then the contractors take the first 10 days of the next quarter—we're in, as we speak, they're updating that Web site. Then, for us, in the military departments, we take the next 20 days or so to validate the input of the contractors, based on our awarded of that contract.

So, somewhere around 30 to 45 days after the end of the quarter, we actually have updated information. So, right now, we're reporting 405, but I suspect that the number is much higher. We should know in the month of August.

Chairman INOUE. I thank you, General.

Brennon?

Mr. MORIOKA. The report that we have for transportation-related jobs, either sustained or created, the last report was 2,317 jobs here in Hawaii, and that's between the highway funding, airport funding, and FTA funding.

Chairman INOUE. GSA?

Mr. GUERIN. Nationally, Senator, we've created over 2,600 jobs, based on the formula that the General described.

We also use a formula that we've talked about with Congress before of \$92,000 per job. And if you use that, in the \$130 million in the State of Hawaii, we could create upward of 1,400 jobs, here in the islands. That's assuming that all of the projects—all the jobs created for both the Federal buildings in Hilo and Honolulu.

Mr. BROGLIE. In NOAA's assessment, once the construction contract is awarded in September, is that we'll be looking at creating or sustaining approximately 1,400 construction-related jobs over the 2½ years period of the construction project. We haven't really tried to estimate beyond that, other jobs—service-related job that will be associated with supporting the facility once it's constructed and we occupy it.

Chairman INOUE. I ask that question because as we all are aware, sadly, the National unemployment numbers of 9.7 percent and in Hawaii it's 6.7 percent. And thanks to you, we've kept it going. And I hope it can continue.

Now, if I may continue, General, your area of responsibility, PACOM's area, is the largest in the world. I realize the funding here is just a drop in a bucketful of DOD funding, but does it help you in maintaining your mission?

General WILLIAMS. Sir, I don't think there's any question that the funding that we will receive, in fact, assists us with maintaining military readiness. Much of it, as you know, is related to our various facilities, and those facilities, of course, house our command and control structures as well as some of the non-DOD projects, for example, that will assist NOAA, that will also assist Tripler Army Medical Hospital. So, I don't think there's any question that it contributes to military readiness. And every bit of funding that we receive, we think, contributes to that cause. So, thank you very much.

Chairman INOUE. Thank you.

Mr. Morioka, you spoke about concerns over oversight. Can you describe that further?

Mr. MORIOKA. There's—part of the—the direction for Federal highways has been there's more oversight involvement by Federal highways in receiving more reports from the DOT's, looking through records and documentation on a more frequent basis. And so, that—just that increased level of oversight has required us to staff up on making sure that we have those records and documents available to Federal highways.

I think—part of our concern is more so just the relationship direction, from a national perspective. Here, in Hawaii, we initiated with our Federal highway partners, a stewardship agreement approximately 6 years ago. And I think when we at DOT in Hawaii started to ramp up and become more aggressive in our project delivery at about the same time, I don't think we would have been successful in our efforts, if it wasn't for the kind of partnership that we had with Federal highways. And we continue to have that very good relationship and partnering with our local office.

But we do know that there is some concern, especially with much of the banking industry and some of the oversight issues, that the desire for more oversight on a broader basis is a potential direction that might—that many of the Federal agencies might be going to. And we hear it more from our other State DOT's when we attend and talk with our other—my counterparts in other State DOT's, that the relationship between Federal highways and their departments are not as productive as they used to be.

That's surely not the case, here. And I think that's in large part due to Mr. Wong and the quality of much of his staff in trying to perpetuate the stewardship and partnering agreements that we have. But, it's just our concern that we don't want to go back to the old days, where it was more of a policing effort, rather than a partnering effort.

But, currently, that's not the case. We're just concerned that we don't go backwards, because I think we've come a long way in the last few years.

OVERSIGHT

Chairman INOUE. Do you believe that some of the oversight is unnecessary?

Mr. MORIOKA. No, I think there just needs to be an ability to strike a balance between the two.

Chairman INOUE. Okay. Is Mr. Wong here? Have you got any comment to make?

Mr. WONG. I think Brennon's observations are correct. Our differing with a higher level of accountability, transparency, we knew was going to be a challenge going into it. The question is whether it's going to be sustained by this, after ARRA expires and we go back to the legislation that we work under, which up for reauthorization, so that's still a big unknown.

But, you know, partnership, I think, has been strong. We met the challenge with the adjustments. I think what we're seeing in terms of the oversight piece of it, is a little bit more checking on the expenditure and the things and that does take a little bit of trying.

We are not trying to examine that, I guess, with an "I gotcha" mentality, but more as, you know, if there are weaknesses in that process that we use this opportunity to address those weaknesses on a more systemic basis.

So, for the overall good and probably the future of a program like this, I think this experience has been positive. But, in the sense that, I think with the resource restrictions and that type of thing, is has been a challenge.

Chairman INOUE. So, are you satisfied with the relationship?

Mr. WONG. I think it's worked very well. I think we've had a big challenge to step up to and with some of the limitations that occurred during that process, I think we've worked very well together.

Chairman INOUE. Congratulations.

Mr. WONG. Thank you, sir.

Chairman INOUE. This way we save a few bucks down there.

Mr. WONG. We try to.

Chairman INOUE. Do you think that the monies are being spent in a timely fashion?

Mr. MORIOKA. Yes, I do. I think just the way that we select the projects and the types of projects that we selected—our construction projects are going to be stretched over 2 to 3 years. I know there is a desire to see the expenditure rates go up a lot faster, to actually expend all of the—the ARRA funds itself. But when you look at the outlay of cash flow for a construction project, it's going to be done over a 3-year period. And, for us, that was a very conscious decision. We know that the expenditures were going to be slower, but it was going to be done on—over a longer period of time, making sure that the people are employed for a longer period of time. The types of projects that we chose were going to be larger infrastructure investments, and so I think we're expending the money in an appropriate timeframe, based on the types of projects that we have. And I think the projects that we have are the right projects for Hawaii.

Chairman INOUE. I must say that I was impressed at your statistics of 14 percent for resurfacing, and the national average is 40?

Mr. MORIOKA. Forty-nine.

Chairman INOUE. I think your decision was correct.

Mr. MORIOKA. Thank you.

Chairman INOUE. I thank you very much.

PROJECT STATUS

Mr. Guerin, have the Hilo and Honolulu projects progressed as planned?

Mr. GUERIN. They are. It took some time to procure both of the projects but they are now in construction and they are now moving forward, so I think we're right on track. We've been at this more than 1 year, now, and to add both of those projects in construction, as you know, Hilo has been an unfortunate victim of not enough funding for a period of time, and then we managed—because of the downturn in the economy—to get very good bids on the project. We were surprised about that, but happy to finally award that project, because it's been a need for a long time and has been seeking funds for several years, now.

The work, here, in Honolulu is more timely, but that project was designed quickly. It's a CMS constructor project, where the CM is helping us finish the design, as well as go into construction, and that's moving very well, as well. So, we're underway and we have a good project schedule.

The phasing for Honolulu is fairly elaborate because we can't move the courts out of the courthouse. Finding space for courtrooms and chambers that's adequate for the judge's needs is a tough trick anywhere, and in Honolulu it's a tough trick, as well. So, we have a phased construction project there, in the courthouse, we ran through the plans yesterday with the project team, and it's very well thought out, and moving forward.

Chairman INOUE. I'm especially pleased with the project labor agreement. I think it will provide a steady workforce and on-time completion.

Mr. GUERIN. We agree, Senator. The GSA led the charge with PLAs with the Executive order. Really, we haven't used them in the past. Came to find out, that several locations, the contractor and labor have been using PLAs that we were just not aware of. So there was a little bit of trepidation coming into it. But, we've been very successful with PLAs, so far, across the country and the project here is a good example of that.

Chairman INOUE. Thank you very much.

And with NOAA, you have this child development facility on Ford Island? I think that's one of your projects with the Navy?

Mr. BROGLIE. We're working closely with the Navy to reach agreement on how to leverage the investments that the Navy is already making at a Ford Island Child Development Center, to make sure that it meets not only the Navy's needs, but also can best serve NOAA's family needs moving forward, as well.

Chairman INOUE. I'm glad this is happening, because it's money being put to good use.

Mr. BROGLIE. We've benefited, Senator, with a very good partnership relationship at multiple levels with the Navy over the past several years and this is one example of it.

Chairman INOUE. Well, as you know, I have a NOAA Executive on my staff. And I'm constantly being propagandized.

Mr. BROGLIE. We appreciate her on multiple levels.

Mr. GUERIN. Do you need a GSA member, also?

Chairman INOUE. We'll consider that.

I'd like to call upon Senator Akaka.

Senator AKAKA. Thank you very much, Mr. Chairman.

Brennon Morioka, you say that you're applying right now about 2,300 or so on the jobs that you have, this stimulus money. Is that a cap, or is there a possibility of increasing that?

Mr. MORIOKA. No, we anticipate to actually have a much higher number by the time we're done. Many of our projects, some of the larger ones, are just starting out. We still have a couple more to bid that are fairly sizable, especially the Mid-Level Road in Kona. It has only started a few months ago, so that project will ramp up significantly, and that's a \$35 million project for the county of Hawaii. And so those numbers will continue to add. So, I think this number is going to increase significantly.

KONA PROJECT

Senator AKAKA. Particularly, I'm interested in that, they call it Leiopua 2010, I think, or 2020.

Mr. MORIOKA. Leiopua 20—yeah.

Senator AKAKA. 2020, yes.

Mr. MORIOKA. Correct.

Senator AKAKA. And it's a project in Kona on the sand, as you stand by Honakohau Road, there, above that is where this road is, to be constructed.

Mr. MORIOKA. Correct. It's a very good development. It's a regional vision for the people of Kona, something driven by the need for affordable housing, workforce housing in Kona. And so two of the major developments are affordable housing. It's Department of Hawaiian Homelands, for their development, and HHFDC's affordable housing program, that they have partnered with four cities to develop. And it's not just only affordable housing but it's development of a community with commercial facilities, recreational facilities, and so it very much is a community vision, rather than just building houses.

And the Mid-Level Road that the county is building is just a part of building that community. But it's a significant part.

Senator AKAKA. Yes, that village you're talking about, is called Ka Makana, affordable housing.

Mr. MORIOKA. Yes.

Senator AKAKA. And that, of course, is part of the community that we expect to rise from that project.

Can you tell me, further, about the status of that project?

Mr. MORIOKA. Well, I know DHHL is moving on two of their villages, they're in active construction. I believe Four Cities is still working out some of their permitting issues, and—but they will be entering into construction of their housing and commercial development, but the county also has quite a bit of construction in their facilities and their centers along Kealakehe Parkway that the Mid-Level Road ties into. So, this road really is, is a major vein for the development of this because it ties in and provides the network to connect all of these different components of the community.

So, the development of this area of Leiopua is definitely moving along very rapidly.

Senator AKAKA. I'm happy that culture is brought in this, as well. I understand the name of the highway is going to be Ane Keohokalole Highway.

Mr. MORIOKA. Yes.

Senator AKAKA. And that name is Queen Liliuokalani's mother's name. So, with that, it makes it more precious for the Kona area.

Mr. MORIOKA. Absolutely. And then Mayor Kenoi actually invited the family to the groundbreaking. So, it was a very touching ceremony.

Senator AKAKA. Thank you.

General Williams, I'm very pleased to know that already you've had 106 DOD construction projects in place. And this has been awarded in Hawaii, and you've created in those, about 400 jobs. I want to ask you is that—are you looking toward more jobs than 400?

General WILLIAMS. Senator, as I explained earlier, those figures really just reflect to the end of the second quarter. But we—I hate to speculate, but we certainly believe that when the end of third quarter data comes in that we'll see the number of jobs significantly increased.

Senator AKAKA. And I also understand that your focus has been on what you called sustainment, restoration and modernization types of projects. And as you know, today, in Congress, we're of course very aware of the deficit and we've been discussing—because I'm a senior member of the Armed Services—been discussing the funding between what we call the warfighters, and ensuring that the DOD has the necessary funding for this SRM. But, we continue to try to provide enough for the readiness of our troops. What are some of the other projects that we ought to keep in mind for Hawaii if funds become available that will help enhance PACOM's readiness programs?

CHILD DEVELOPMENT CENTER ON MARINE CORPS BASE

General WILLIAMS. Well, I would certainly go back to each of the service components and ask that specific question. But, first of all, thank you for your support of some of the less-than-high-profile projects. I mean, one of the ones that I testified about today that's very, very near and dear to our hearts, for example, is the \$9.6 million in funding that was awarded for a child development center on the Marine Corps base. It's that kind of funding that I believe you're talking about. In addition, NOAA just testified that, you know, their coordination with the Navy, also resulting in use of another child development center.

Well, for the military services, in particular, as you well know, while that may not be a high-profile project, it certainly helps to reduce the strain on many of our military families, especially those with extremely high operational tempo that are related to deployments. So, these kind of facilities, these childcare facilities are extremely important, and those are the kind of projects that we need to continue to support, and we appreciate your support on that.

Senator AKAKA. Well, we're grateful that you are focusing on families of our military personnel. That is so important in readiness.

I just want to mention another project that, for years, we've been trying to work on, and that's trying to place a new cable in Hickam to provide the energy and power through Hickam, and hopefully there will be funds to do that. I don't know whether that's on the list of your projects.

General WILLIAMS. Sir, I'll have to check that particular fact and get back to you. We'll specifically look for your request on that project.

[The information follows:]

The repair of the electrical distribution system is being executed in seven phases. Phase seven—estimated at \$8.5 million O&M—of the seven phase Hickam AFB Repair Electrical Distribution System was not on the ARRA list because at the time of submission the project did not meet the initial 2009 ARRA guidance of being awarded within 90–120 days of funds receipt. The seventh phase, which places the final leg of the existing overhead Hawaii Air National Guard circuit underground, corrects safety deficiencies, and replaces live front transformers, is currently under design. HQ PACAF did submit the project as its number 1 priority for the fiscal year 2011 PACAF congressional Milcon insert and O&M Earmark Candidates. Phases 1 thru 3 are 100 percent complete and were funded with Milcon. Phases 4 thru 6 are O&M funded projects and are at various stages of construction, and on target to be completed by spring 2011. Phase 7 is currently in design and should be completed by the time earmark funds are provided.

Senator AKAKA. Mr. Broglie, the Kohala Center received a Recovery Act award to improve the condition of the Peliconi A watershed in South Kohala on the Big Island. This project is expected to reduce sediment, runoff into the bay that damages coral. Given such challenges as runoff, climate change and increased ocean pH levels, can you tell us what more must be done to protect corals and clean ecosystems?

Mr. BROGLIE. Senator, I'll probably need to get back to you with a fuller answer on that, consulting with the programmatic areas, I know they handle coral reef and ecosystem sustainment. I don't have an immediate answer for you today.

REPORTING PROCESS

Senator AKAKA. Mr. Guerin, you indicated in your testimony, and in our discussion earlier, the job creation totals from GSA and Public Building Service. What data quality review procedures or steps did you follow to ensure the reliability of filling those jobs reported?

Mr. GUERIN. I think that gets to some of the comments that the General made, and also the discussion with Mr. Morioka about the recipient reporting process and the activity associated with that. The President has instituted a very robust reporting process that requires each recipient receives funds from the Recovery Act to report to the Federal Government on a quarterly basis. And those results are just being compiled now for the third quarter.

But it's a very iterative process whereby GSA, particularly, has created templates, worksheets for recipients so that we reach out to them to give them information, so, that they can provide back to us. Their job is, specifically, to tell us how many jobs, how many person-hours of work was accomplished during the reporting period.

But GSA has been very actively engaged in trying to make that easier for people, because it is a burden. It is a—it's a very significant process that is focused on the recipients of the funds. So, we've tried to do everything we can—we have a call center whereby we

reach out to people to remind them that, you know, it's time, again, to report, to make sure that the forms are filled out properly, to make sure that it's as easy as possible for them to report information to us, and we believe the information is quite accurate.

The first go-around was, there was some, you know, well-publicized congressional districts that didn't exist, those kinds of things, but the administration has been very aggressive about trying to correct that information and make sure that the information reported back to us is as accurate as possible, and I believe they've made great strides in that.

In my own program, I run a program management office specifically focused on the Recovery Act, and I have a whole subset of people in my organization that are specifically devoted to recipient reporting and ensuring that that reporting process is done correctly. So, I believe the information is as accurate as we can make it.

Senator AKAKA. You've reported that you've now hired about 1,400 people to work—is there a—

Mr. GUERIN. No exactly, Senator. What I said is, based on a CEA data point of \$92,000 per job, if you took the \$130 million that's coming to the State of Hawaii, that could potentially equate to 1,400 jobs.

Senator AKAKA. Thank you very much, Mr. Chairman.

Chairman INOUE. Thank you.

I'd just like to add, and join Senator Akaka on commending the military on child development programs. I think most Americans don't realize that in World War II the—my regiment was quite, I think, typical. Four percent of the officers and men were married, 96 percent were single. Today, 70 percent are married, with dependents, and 30 percent single. As a result, we have more children in the military than ever before. Your concerns about kids are, I think, well placed.

General WILLIAMS. Sir, I would further say that family readiness is military readiness.

Chairman INOUE. Thank you, sir.

And thank you, I'd like to thank the panel. We appreciate it very much.

Our next panel is made up of the Executive Vice President and Chief Information Officer of Hawaii Pacific Health, Mr. Steve Robertson, and the Director of Continuing/Distance Education and Strategic Planning, College of Pharmacy, University of Hawaii at Hilo, Dr. Karen Pellegrin.

Mr. Robertson? Welcome, sir.

**STATEMENT OF STEVE ROBERTSON, EXECUTIVE VICE PRESIDENT
AND CHIEF INFORMATION OFFICER, HAWAII HEALTH INFORMATION
EXCHANGE**

Mr. ROBERTSON. Thank you.

Thank you, Chairman Inouye, Senator Akaka, I want to thank you for inviting us to testify today. I'm actually here as the Board President of the Hawaii Health Information Exchange. And I'm happy to report that over the last few months, we've been awarded \$11.4 million in grants under ARRA to facilitate the fundamental transformation of health information technology in the State and across the country.

The Hawaii Health Information Exchange is a nonprofit company that was formed in 2006 by a group of stakeholders—healthcare stakeholders—that were interested in actually beginning the process of working collaboratively to really improve the efficiencies and overall healthcare processes in the State. In September of last year, became the State-designated entity for implementing the Statewide Health Information Exchange.

Our Board of Directors is broad, we've got representation from the community, the neighbor islands, and the local healthcare industry, spanning hospitals, physician groups and insurance plans.

Over the next couple of years we've got two main goals as funded by these grants. The first one is to assist in the adoption of electronic health records and the second one is to enable the safe, secure health information exchange between care providers, among other things.

And what I'd like to do is to kind of give you an example of what that really means from a practical sense. Today, if you walk into a physician's office, more chances than not—greater than 50 percent of the time—what you see are paper medical records, sitting right there behind the registration desk. And all of your care is documented in that paper, and when you leave that visit, your care gets coordinated via faxes and other paper mechanisms. So, we've been operating that way for more than 100 years, and it's served us well. But to really transform healthcare we need to do more than that, we need to go electronic.

So, if we take that example a little bit further, let's say we've got a patient who's medivaced from a neighbor island into an Oahu emergency room. If it's just paper alone, that emergency room physician—if the patient is unconscious and no one else is with that patient, the emergency room physician has to act on the information that's available. If it's all on paper, sitting in a clinic somewhere on a neighbor island, that's not going to be particularly helpful. So, what will occur if we become electronic, in other words, if we can get all of our primary care physicians onto an electronic health records and get those electronic health records actually talking to each other, then we can provide better care by ensuring that emergency room physician has access to the complete medical record.

So, that doctor will be able to look up that patient's record, see what other kinds of medications, allergies might be present or the existing physical conditions of that patient, and provide the best possible care given the amount of information that's available.

Our goal is to use the ARRA funds to make that possible. So, when you look at our total funding of \$11.4 million, to date we've added 7 physicians with the hope of creating a total of 27. But the real savings, and the real value is going to come from these increased efficiencies by providing better care. So, the fewer medical errors that are present, the less costly—the lower the utilization of hospital admissions, et cetera.

As I said, the \$11.4 million actually comes from two grants. The first one is to actually build—to plan and implement a Health Information Exchange in Hawaii. And that grant award amount is \$5.6 million and do that over 4 years. The award occurred in February, so it's fairly recent. So, we're still in the early stages.

We're in the process of developing the statewide health information technology plan, strategic plans and operational plans to do Health Information Exchange. And these plans will be submitted for approval to the State Coordinating Committee for Health IT in August with the expectation that we will get the strategic plan and operational plans approved later in the year so that we begin the hard work of actually creating the system.

The second grant is a \$5.8 million, 4-year grant awarded in April, and it's to build the Hawaii Pacific Regional Extension Center. So, this grant covers Hawaii in addition to supporting Guam, Samoa, and the Marianas Islands. And its primary purpose is to help primary care physicians choose and implement electronic health records. So, the idea is, the more physicians we get on board with electronic health records, then we actually do through Health Information Exchange, provide better care across the State.

Our operational plan has already been submitted and approved by the Office of the National Coordinator, and we expect to, again, this grant has two existing positions, so once the final rules and regulations regarding the meaningful use of electronic medical records is in place, we'll begin the full rollout. So, the idea is that will be fully staffed within 12 months or sooner.

In closing, I just want to say, Senator Inouye and Senator Akaka it's—we very much appreciate the opportunity and the funding that Hawaii has. A lot of us have been talking about doing this sort of thing for a very long time but never really made real progress. And it's only because of the ARRA stimulus money that we can actually now put these dreams to use to fundamentally change healthcare and set the foundation for healthcare reform across the country.

Thank you very much.

Chairman INOUE. Thank you very much, sir.

[The statement follows:]

PREPARED STATEMENT OF STEVE ROBERTSON

Aloha Honorable Chairman Inouye, Honorable Chairman Akaka, and members of the Appropriations Committee.

Thank you for offering the Hawai'i Health Information Exchange (Hawai'i HIE) this opportunity to testify today on the American Reinvestment and Recovery (ARRA) HITECH Act programs: the State HIE Program and the Hawai'i-Pacific Regional Extension Center program. We appreciate your support in helping to secure this funding for Hawai'i and for your commitment to improving the healthcare system.

The Hawai'i Health Information Exchange (Hawai'i HIE) is a 501(c)(3) nonprofit company established in 2006 by leading healthcare stakeholders in Hawai'i for the purpose of improving healthcare delivery throughout the State through seamless, effective, and safe health information exchange. In September of 2009, the Hawai'i HIE was designated by the Governor as the entity to develop and implement a statewide health information exchange that will ultimately support the national health information network.

The Hawai'i HIE has a broad and representative board of directors that includes physicians, hospitals, insurance plans, community representatives, business representatives, laboratories, the John A Burns School of Medicine, and others. Our united vision is to build a statewide system that enables our patients to receive the best possible care by facilitating coordination between care providers and to improve health outcomes while improving efficiencies that help mitigate the spiraling costs of healthcare. The opportunities afforded by the American Reinvestment and Recovery Act of 2009 will help Hawai'i to expedite its long-term HIE goals.

On February 8, 2010, the Hawai'i HIE was awarded a \$5,602,318 grant under the State HIE Cooperative Agreement Program through the Office of the National Coordinator for Health IT (ONC) to develop and implement a State HIE Plan over a 4

year period. The HIE Cooperative Agreement Program builds on existing efforts to advance regional and state-level health information exchange while moving toward nationwide interoperability.

Our goal, working with key stakeholders in partnership with the State Coordinating Committee for Health IT that includes members from the Department of Budget and Finance, Department of Human Services, Department of Health, Department of Accounting and General Services, and the Department of Commerce and Consumer Affairs, is to develop the State's strategic and operational plans by August 31. Our Executive Director, Christine Sakuda, meets weekly with State Health IT Coordinator, Mark Anderson to ensure appropriate progress is being made. To date, we are on track. ONC approval of these plans is expected in October, with the hope that the work of building the Exchange can begin shortly thereafter.

Transparency and inclusivity are two of Hawaii HIE's core values. We recognize that broad community input from all of Hawai'i is imperative to our process. We achieve this through our website at www.hawaiihie.org, our blog at <http://hawaiihie.ning.com/>, and through open community meetings. To date, we have conducted informational meetings on the islands of Kauai, Maui, Molokai, Lanai, Hawai'i Island, and O'ahu. These meetings provided an overview of the State HIE plans and findings while encouraging community members to share their ideas and concerns. Our message was warmly received on all islands and well attended by the islands' diverse healthcare stakeholder population. Overwhelmingly, the participants see the advantages of a health information exchange to improve the quality of Hawai'i's healthcare delivery system through increased coordination of care, ready access to needed information at the point of care and increased access to quality patient health information.

The Hawai'i HIE received a second grant award of \$5,859,716 from ONC on April 6, 2010 to manage the Hawai'i Pacific Regional Extension Center (REC) Program. The goal of the Hawai'i Pacific REC is to support primary care providers in effectively choosing and implementing electronic health records (EHRs), establishing privacy and security best practices, redesigning workflow, and instituting health information exchange. The Hawai'i HIE has subcontracted with Mountain Pacific Quality Health-Hawai'i (MPQH-H) and the Telecommunications and Information Group (TIP-G) at the University of Hawai'i to serve all of the Hawaiian Islands, as well as Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. The ultimate outcome of the REC program is to help providers reach meaningful use of electronic health records, as defined by the Centers for Medicare and Medicaid Services (CMS), and, as a result, become eligible for stimulus incentives offered by the CMS Programs.

The Hawai'i-Pacific REC's operational plan has been approved by ONC and we are now developing the administrative and project plans to meet the aggressive timelines set forth by ONC pending the final CMS rule on electronic medical record "Meaningful Use" requirements. Meaningful Use is one of the yardsticks by which we will measure our success.

In addition to improving health outcomes and mitigating the rising costs of healthcare, we believe these ARRA HITECH Act grants in coordination with the third ARRA HITECH Act grant on the Hawai'i Island called the Hawaii County Beacon Community Consortium (HCBC) will serve as a much needed catalyst in spurring more investments in health information technology throughout the State and further develop a demand for highly skilled information technology professionals. Christine Sakuda currently represents the Hawai'i HIE on the Board of the HCBC that help in state HIE planning efforts. Together, these initiatives bring us closer to achieving the same vision, where hospitals, clinicians, and patients are meaningful users of health IT, with measurable improvements in healthcare quality, safety, efficiency, and population health.

Thank you for this opportunity to testify.

HAWAII HIE BOARD MEMBERS

Money Atwal—CFO & Chief Information Officer, HHSC East Hawai'i Region (Hilo Medical Center)

Francis Chan—Chief Information Officer, Clinical Laboratories of Hawai'i, LLC

Jennifer Diesman—Vice President, Hawai'i Medical Service Association

Susan Forbes—CEO, Hawai'i Health Information Corporation

Beth Giesting—CEO, Hawai'i Primary Care Association

Bruce "Skip" Keane—Community Member

Emmanuel Kintu—Exec. Director, Kalihi Palama Health Center

Janet Liang—President, Kaiser Hawai'i

Wesley Lo—CEO, Maui Memorial Medical Center

Roy Magnusson, MD—Assoc. Dean, John A Burns School of Medicine
 John McComas—CEO, AlohaCare
 Gary Okamoto, MD—Past President, Hawai'i Medical Association
 Kevin Roberts—President, Castle Medical Center
 Steve Robertson—Exec. Vice President and Chief Information Officer, Hawai'i Pacific Health
 David Saito, MD—Officer, Hawai'i Independent Physician's Association
 Christine Sakuda—Executive Director, Hawai'i HIE
 Barbara Kim Stanton—Exec. Director, AARP
 Jim Tollefson—President/CEO, Chamber of Commerce
 Lisa Wong—Member, Society of Human Resource Managers
 Raymond Yeung—Vice President, Diagnostic Laboratory Services, Inc.
 Jeffrey Yu, MD—Chief Technology Officer, The Queen's Health System

Chairman INOUE. Dr. Pellegrin.

STATEMENT OF DR. KAREN PELLEGRIN, Ph.D., M.B.A., DIRECTOR, CONTINUING/DISTANCE EDUCATION AND STRATEGIC PLANNING, COLLEGE OF PHARMACY, UNIVERSITY OF HAWAII AT HILO

Dr. PELLEGRIN. On behalf of the University of Hawaii at Hilo College of Pharmacy, thank you very much, Senator Inouye, Senator Akaka, for the opportunity to participate in this field hearing. I am the Director of Continuing Education and Strategic Planning for the College and Principal Investigator for the Beacon grant. The Beacon Community Cooperative Agreement Program is funded through the U.S. Department of Health and Human Services Office of the National Coordinator for Health Information Technology.

The Hawaii County Beacon Community Consortium is one of 15 sites across the Nation selected to achieve the vision of healthcare where hospitals, clinicians and patients are meaningful users of health information technology, and together achieve measurable improvements in healthcare quality, cost efficiency, and population health. We were awarded over \$16 million to achieve a more sustainable model of healthcare.

The College of Pharmacy is honored to be the lead applicant organization for the Hawaii County Beacon Community Consortium. In addition to the College of Pharmacy, key stakeholder organizations include the Hawaii County acute care hospitals, federally qualified health centers, Hui Malama Ola Na Oiwī, East Hawaii IPA, the mayor's office, HMSA, and the Hawaii Health Information Exchange, all committed to demonstrating the Beacon vision in Hawaii County.

We're in the startup phase of our grant, and we look forward to achieving the following milestones in the very near future. We will meet the other Beacon site team leaders in Seattle next week, the Microsoft Amalga Health Information Exchange for Hawaii Island will go live by the end of the third quarter of this year, Mayor Kenoi is featuring the Beacon project in his August 13 healthcare conference, Beacon officials from HHS will be visiting the Big Island in early August, and we expect our budget revisions to be approved by ONC very soon, at which time we will begin hiring staff.

As with all of the Beacon communities, our proposed budget was reduced by about 19 percent, leaving a balance of approximately \$16.1 million. Because of the importance of the human factor in successful implementation and use of information technology, no cuts were made to our original personnel budget, which includes funds for 15 to 17 full-time employees in Hawaii for 3 years. We believe that this is an important strategic investment, not only for

Hawaii County, but for the State of Hawaii and the Nation. The Hawaii County Beacon Community Consortium members are committed to ensuring a strong return on this investment.

Thank you for the opportunity to testify.

Chairman INOUE. I thank you very much.

[The statement follows:]

PREPARED STATEMENT OF KAREN L. PELLEGRIN

On behalf of the University of Hawai'i at Hilo (UHH) College of Pharmacy, thank you for the opportunity to participate in this field hearing. I am Karen Pellegrin, Director of Continuing Education and Strategic Planning for the College and Principal Investigator for the Beacon grant. The Beacon Community Cooperative Agreement Program is funded through the U.S. Department of Health and Human Services Office of the National Coordinator for Health Information Technology (ONC) under the American Recovery and Reinvestment Act (ARRA) of 2009.

The Beacon Program provides funding to communities to build and strengthen their health information technology (health IT) infrastructure and exchange capabilities. These communities will demonstrate the vision of a future where hospitals, clinicians, and patients are meaningful users of health IT, and together the community achieves measurable improvements in healthcare quality, safety, efficiency, and population health.

The Hawaii County Beacon Community Consortium was selected as one of 15 sites across the nation at the cutting edge of electronic health record (EHR) adoption and health information exchange. We were awarded over \$16 million to achieve a new level of sustainable healthcare quality and efficiency. We plan to demonstrate how health IT can help providers and consumers develop innovative ways of delivering care leading to sustainable and measurable health and efficiency improvements. Along with the other Beacon sites, our successes and lessons learned will guide state and other community efforts across the nation to achieve similar goals enabled by health IT.

The UH Hilo College of Pharmacy is the lead applicant organization for the Hawaii County Beacon Community Consortium (HCBCC) application submitted on January 29. In addition to the College of Pharmacy, the stakeholders represented on the consortium governing board include senior leaders from the Hawaii County acute care hospitals, federally qualified health centers, Hui Malama Ola Na Oiwai, East Hawaii IPA, Mayor's Office, HMSA, and the Hawaii Health Information Exchange (HHIE), all committed to demonstrating the Beacon vision in Hawaii County.

Since the Beacon grant awardees were announced May 4, the Hawaii County Beacon Community Consortium has achieved the following milestones:

- The Privacy Committee has completed a privacy policy, patient authorization form, and participant agreement.
 - The Hawaii Island Health Information Exchange was incorporated on June 22 to prepare for the implementation of the Amalga HIE for Hawaii Island and for sustainability beyond the 3-year grant period.
 - All required documents have been submitted to ONCHIT on time.
- In the near future, we look forward to achieving the following milestones:
- Team members will attend the first in-person meeting of all Beacon sites which will be held in Seattle July 12–14.
 - The Amalga HIE for Hawaii Island will go live in the third quarter of this year.
 - Mayor Kenoi is featuring the Beacon project in his August 13 healthcare conference.
 - Beacon officials from HHS will visit the Big Island in early August to discuss the importance of the Beacon sites and learn about our unique challenges and improvement plans.
 - We expect our budget revisions to be approved by ONCHIT soon, at which time we will begin hiring staff.

As with all of the Beacon communities, our proposed budget was reduced by about 19 percent, leaving a balance of approximately \$16.1 million. Because of the importance of the human factor in successful implementation and use of information technology, our revised budget reflects that most of the cuts were in health information technology. No change was made to our original personnel budget, which includes funds for 15 to 17 full-time employees in Hawaii for 3 years. In summary, our current revised budget of direct costs includes over \$6 million for health information technology, almost \$5 million for staff in Hawaii, almost \$1 million for consultants (particularly for care re-design and sustainability consultants), and almost \$1 mil-

lion in other expenses. Approximately \$2.5 million in indirect costs will go to the University of Hawaii Hilo according to the federally negotiated rate.

We believe that this is an important strategic investment not only for Hawaii County, but also for the State of Hawaii and the nation. The Hawaii County Beacon Community Consortium members are committed to working together to ensure a strong return on this investment.

Thank you for this opportunity to testify.

Chairman INOUE. In recent days, I've been very much interested and concerned about what you're talking about. I'm well aware that in cancer, very few cancer specialists operate their offices on naval islands—Malakai or Maui or places like that—they're all in Honolulu. As a result, say, 5 years ago, if you were required to have chemotherapy, you were required to make 24 trips. That's extra cost.

Today, with electronic telehealth and telemedicine, two trips would be enough—the first one to diagnosis and the last one to see how you've done well. And in between it's done by electronic devices. And just to think the costs involved, the time spent, you're saving a lot—a lot of lives.

And I was impressed with statistics coming from Georgia where they have a large number of those with diabetes. And although rural Georgia has less in population than the city in Georgia, there are more amputees caused by diabetes in rural Georgia than in the town of Georgia. And it's because of the lack of transportation, the lack of communications.

So, what you're doing for Hawaii is extremely important. It will provide first-class healthcare for all people, whether you're a Nihau or Lanai or Malakai, and I commend all of you.

And I'm glad to see the pharmacy college operating well.

Dr. PELLEGRIN. Thank you.

Chairman INOUE. For you're the only one in the Pacific, now.

Dr. PELLEGRIN. Yes, that's correct, that's correct.

We appreciate your support.

Chairman INOUE. Well, someday I may go in there and get myself an aspirin.

Dr. PELLEGRIN. We'll treat you well.

Chairman INOUE. Now, you spoke about collaboration between all of these federally approved centers and native Hawaiian centers and such. Can this model be employed in, say, Maui and Kauai?

Dr. PELLEGRIN. It is certainly our belief and our intention that we will build a model that is scaleable and transportable. I would assume that each community will have its unique factors, but our goal is to develop a model that would be able to be adapted to other communities in Hawaii and likely the Nation.

Chairman INOUE. Well, I congratulate you for all of the fast advancements you've made so far. You've been in business for less than 2 years.

Dr. PELLEGRIN. I think 2006 was the official start, but our final cohort of students will start this fall.

Chairman INOUE. Mr. Robertson, when will we achieve, say, 70 percent of our doctors electronically fixed up, or most of our hospitals? Right now, I gather, nationally less than 5 percent?

Mr. ROBERTSON. Yes. I think if we're talking about locally or nationally, I know that I can tell you that Hawaii is actually doing pretty well, in terms of the hospitals. We've got our—at least three

of our largest healthcare systems in Hawaii are in electronic medical records and several others are getting their—or have some system.

I think our biggest challenge is going to be in primary care. The cost and the impact to physician workflow is pretty dramatic. But, I think given the incentives, the CMS incentives and Medicaid incentives, that's going to go a long way to propelling that. So, in terms of getting a number, if we're successful, we'll achieve that within 3 to 4 years.

Chairman INOUE. We're watching your activity very closely, because if you're as successful as you predict, you'll get more money.

Mr. ROBERTSON. We look forward to that.

Chairman INOUE. Senator Akaka.

Senator AKAKA. Thank you very much, Mr. Chairman.

I am so glad to hear in your testimony how you're moving along here on our health programs, as well as our pharmacy programs.

Dr. Pellegrin, I'm proud that Hawaii Beacon Community Consortium was selected, and it was selected to be one of only 15 sites nationwide to implement a Beacon Program. So, I congratulate you and all of your consortium colleagues in your successful efforts to secure this important grant. The college has significant strengths and challenges within its healthcare delivery system.

Doctor, in your testimony you mention that the Beacon Program communities will achieve measurable improvements in high-quality, safety, efficiency, and population health. How does the consortium intend to achieve these goals?

Dr. PELLEGRIN. We are in the process of submitting our final set of measures and plans for achieving improvements in those measures. Some of the key areas that we are looking at to achieve measurable improvement is in things like access to appropriate care, so we can look at, for example, the numbers of patient who need to leave the island to receive care, the ability to provide specialty care on the island.

Another important area is in the area of prevention and management of chronic disease. And a key measure of that will be, and is nationally, preventable hospitalizations for particular conditions of chronic diseases. If we are managing those patient populations well, we can keep them out of the hospital. We can prevent, at least, some of those hospitalizations.

And then finally, we're also looking at measurable improvements in the reduction of disparities among populations at risk. As I know you know, the Native Hawaiian population has a shorter life expectancy than other populations. This is a 3-year grant, and so we are going to focus on areas like diabetes, where there is a higher rate among the Native Hawaiian population. And organizations like Hui Malama Ola Na Oiwī play such an important role in ensuring the delivery of culturally competent care to that population. So, we look forward to working with that organization closely, to learn lessons from them and apply those throughout the county.

Senator AKAKA. Well, I certainly want to wish you well. And that, without question, it will certainly be achieved.

Dr. PELLEGRIN. Thank you.

Senator AKAKA. Mr. Robertson, public health surveillance data helps the Department of Health and healthcare providers, as well,

identify trends and react to epidemics—food poisoning and other adverse situations. How will the coalition interface with the public health surveillance data, and what will the potential benefits of this increased collaboration be?

Mr. ROBERTSON. Okay, well, that is a fundamental requirement for the Health Information Exchange. And we are working with the Department of Health and the Hawaii emergency surveillance system to do that. And we've actually piloted some of that effort, already, separately between Hawaii-Pacific Health, and the Queen's Medical Center to provide that data and set those data standards.

So, the idea is that many of those standards and protocols will be adopted by the Health Information Exchange so that all can participate. But we're probably—we're still a few months from being able to do that.

Senator AKAKA. Thank you. Thank you very much.

The health information technology, Mr. Robertson, has—to improve the quality and accessibility of care, reduce costs and medical errors. What is your current evaluation of the use of health information technology in Hawaii? And how will the stimulus resources be utilized to promote greater use of health technology?

Mr. ROBERTSON. I think Hawaii is leading the country with regard to the adoption of health information technology. I think—there's a national organization called the Health Information Management Society, it's a professional group that actually benchmarks our organizations. And when you look at where Hawaii is, many of its top providers are in the top 10 percent of the country with their capabilities. I think that puts us in a really good position to make these programs really effective.

The ARRA stimulus money, in addition to the incentives for hospitals and physicians to implement electronic medical record is going to accelerate that adoption curve over the next 3 to 5 years, we're starting to see a lot of that activity today.

Again, that just positions us better to do that kind of communication to truly coordinate care, and to provide a level of—actually put ourselves in a position so that we can hold ourselves all accountable, with true, transparent performance measures, which will drive that adoption even more, so that we can all compete on quality and cost.

Senator AKAKA. Thank you very much, Mr. Robertson.

Thank you, Mr. Chairman.

Chairman INOUE. Dr. Pellegrin, Mr. Robertson, thank you very much.

Mr. ROBERTSON. Thank you, Senator.

Chairman INOUE. Our third panel, Cable Administrator, Hawaii Department of Commerce and Consumer Affairs, Mr. Clyde Sonobe; Vice President for Information Technology and Chief Information Officer University of Hawaii, Dr. David Lassner; Vice President, Gold Ivory, LLC, Ms. Su Shin; and the General Counsel of Hawaiian Telecom, Mr. John Komeiji.

I thank you for joining us this morning, Mr. Sonobe.

STATEMENT OF CLYDE S. SONOBE, ADMINISTRATOR, CABLE TELEVISION DIVISION, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII

Mr. SONOBE. Good morning, and thank you Chairman Inouye, and thank you for inviting me to testify about the state of Hawaii's Broadband Mapping Project under ARRA and the impact of its grant to Hawaii's citizens. It's a privilege to appear before you.

The State of Hawaii's Department of Commerce and Consumer Affairs (DCCA) has been awarded a \$1.9 million Federal grant to develop an interactive, online map that can be used by consumers to identify the availability, speed, and location of broadband services in the State of Hawaii. The grant includes approximately \$1.4 million in funds for broadband data collection and mapping activities over a 2-year period, and \$500,000 in funds for broadband adoption activities over a 5-year period.

Hawaii's map will be included as part of the national broadband map that is being developed with input from each of the States. The CCA has teamed with the University of Hawaii and the Pacific Disaster Center to complete the mapping portion of the project. Using substantial expertise and resources available within the State, the team has made significant progress in completing multiple layers of real-time location and broadband serviceability data. Broadband providers have been generally cooperative, and staff at the U.S. Department of Commerce's National Telecommunications and Information Administration have been very helpful in assisting DCCA through its various Federal grant obligations.

Although the mapping data is still being processed, it is anticipated that the results will reinforce the State's longstanding position that portions of Hawaii are extremely difficult to serve, and as a result, broadband availability is very low in remote regions of the State. Accordingly, DCCA has recently requested additional Federal funding in the amount of \$2.4 million from the National Telecommunications and Information Administration (NTIA) to pursue two Federal programs: one for State broadband capacity-building, and one for technical assistance and outreach. These two programs, which are still being organized, are paying that increasing broadband adoption and penetration in the State and coincide with parallel State program resulting from recent State legislation, House Bill 2698, relating to technology, telework promotion, and broadband assistance.

DCC believes the mapping activities promote the State's long-term broadband plan, as developed by the State task force. The State task force was established in 2007 to provide recommendations on how to advance broadband in the State. In its final report, dated December 2008, the task force made four recommendations, including, establishing a forward-looking vision to make Hawaii globally competitive; creating a one-stop broadband advancement authority; welcoming trans-Pacific submarine fiber to Hawaii; and stimulating demand for broadband.

DCCA's mapping project will produce highly accurate and reliable resource for consumers in Hawaii, enabling them to identify and choose between the growing number of broadband services that are becoming available in the State. The broadband map will also encourage increased competition between broadband service pro-

viders, by giving them additional information on communities within the State that would benefit from availability of new broadband services.

Furthermore, DCCA's broadband adoption programs will complement State efforts and goals to reach out to consumers and increase broadband penetration.

In sum, the ARRA has been beneficial in helping to further the State's objective in its broadband plan. It is vital for DCCA to ensure that all citizens of Hawaii receive the most benefit from the stimulus funding, and have meaningful access to broadband services.

Thank you, again, for this opportunity to appear before you today and for your continued help in the area of broadband and telecommunications.

Chairman INOUE. Thank you, Mr. Sonobe.

[The statement follows:]

PREPARED STATEMENT OF CLYDE S. SONOBE

Chairman Inouye and Members of the Committee, thank you for inviting me to testify about the State of Hawaii's broadband grant under the American Recovery and Reinvestment Act, and the impact of its grant on Hawaii's citizens. It is a privilege to appear before you today.

The State of Hawaii's Department of Commerce and Consumer Affairs (DCCA) has been awarded a \$1.9 million Federal grant to develop an interactive online map that can be used by consumers to identify the availability, speed and location of broadband services in the State of Hawaii. The grant includes approximately \$1.4 million in Federal funds for broadband data collection and mapping activities over a 2-year period, and \$500,000 in Federal funds for broadband adoption activities over a 5-year period.

DCCA has teamed with the University of Hawaii's Pacific Disaster Center and other entities within Hawaii to complete the mapping portion of the project. Using the substantial expertise and resources available within the State, the team has made significant progress in compiling multiple layers of real-time location and broadband serviceability data. Broadband providers have been generally cooperative, apparently recognizing the public benefits that can be achieved through this process, and staff at the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA) have been very helpful in shepherding DCCA through its various Federal grant obligations.

Although the mapping data is still being processed, it is anticipated that the results will reinforce the State's long-standing position that portions of Hawaii are extremely difficult to serve and, as a result, broadband availability is very low in remote regions of the State.

Further, the broadband adoption and penetration rate may be relatively low throughout the State as compared to the rest of the country.

Accordingly, DCCA has requested additional Federal funding from NTIA to pursue two Federal programs—one for state broadband capacity building and one for technical assistance and outreach. These two programs, which are still being organized, are aimed at increasing broadband adoption and penetration in the State and coincide with a parallel state program resulting from state legislation H.B. 2698, relating to technology, telework promotion and broadband assistance.

DCCA is working to manage these two efforts jointly. Such an approach should result in substantial synergies, including the use of State and Federal funds in a 20/80 percent match to fund the hiring of up to three people, including their expenses, to work on broadband adoption.

DCCA believes its matching and planning activities promote the goals of the State's broadband plan as developed by the Hawaii Broadband Task Force (Task Force). The Task Force was established in 2007 by Hawaii's State Legislature through Act 2 of the First Special Session of Hawaii 2007 to provide recommendations on how to advance broadband within the State. In its Final Report dated December 2008, the Task Force made four recommendations, including: Establishing a Forward-Looking Vision to Make Hawaii Globally Competitive; Creating a One-Stop Broadband Advancement Authority; Welcoming Trans-Pacific Submarine Fiber to Hawaii; and Stimulating Demand for Broadband.

DCCA's mapping project will produce a highly accurate and reliable resource for consumers in Hawaii, enabling them to identify and choose between the growing number of broadband services that are becoming available in the State. The broadband map will also encourage increased competition between broadband service providers by giving them additional information on communities within the State that would benefit from the availability of new broadband services. Furthermore, DCCA's broadband adoption programs will complement the State's efforts and goals to reach out to consumers and increase broadband penetration.

In sum, the ARRA has been beneficial in helping to further the State's objectives in its broadband plan. It is vital for DCCA to ensure that all citizens of Hawaii receive the most benefit from the stimulus funding and have meaningful access to broadband services.

Thank you again for the opportunity to appear before you today. I would be happy to answer any questions you may have.

Chairman INOUE. Dr. Lassner.

STATEMENT OF DR. DAVID LASSNER, VICE PRESIDENT FOR INFORMATION TECHNOLOGY AND CHIEF INFORMATION OFFICER, UNIVERSITY OF HAWAII

Dr. LASSNER. Mr. Chairman, thank you for this opportunity to share some perspectives from the University of Hawaii on the impact of the ARRA on broadband in Hawaii.

Let me quickly summarize four key aspects of the ARRA that advance broadband. The ARRA charged the Federal Communications Commission, the FCC, to create our Nation's first national broadband plan, and I know there's been some talk about that this week, here. That plan was delivered in March, and implementation activities are now underway.

Second, the ARRA provided funding for State-based data collection efforts to implement, in fact, your Broadband Data Improvement Act of 2008. Mr. Sonobe just commented on that activity. The university is proud to be working with him on this.

Third, the ARRA created some significant new grant and loan programs in the Department of Commerce and Department of Agriculture to actually deploy broadband. And I'll say a little bit more about those programs and their hoped-for impact in Hawaii, as will my colleagues.

And then fourth, the ARRA provided substantial funding to the National Science Foundation, which although it's not the lead agency on broadband, they developed some programs which can support broadband, including in Hawaii.

I should also say that, from the UH perspective, a number of our faculty are quite entrepreneurial, and have competed for, and won, so far 71 projects totaling \$62.8 million in non-broadband related ARRA activities that often aren't thought of, because they come from Department of Health and Human Services, Department of Energy, Department of the Interior, Department of Justice, where our faculty are always trying to advance the state of the art in their professions.

The projects I've been involved with have been primarily focused on connecting anchor institutions or community anchor institutions throughout the State of Hawaii. And one of the real breakthroughs over the past couple of years has been a recognition by the Obama administration of the importance of connecting the Nation's schools, libraries, community colleges, hospitals and universities to begin to really create a broadband future for our Nation. Connecting these institutions creates jobs, it increases the infrastruc-

ture that than can be available for connecting homes and businesses, and these are the institutions that also deliver the public services that really deliver on the promise of broadband for our Nation that are education—cheaper, faster, more available—human services, health services—such as we just heard about on the previous panel—and economic diversification and development.

The university submitted four proposals and the sad story is that none of them have yet been funded, but the good story is that they are all still in play as we speak. And any of them could be funded, literally, any day, at this point. So, let me quickly summarize these proposals.

One of them is called Ke Ala 'Ike, the Path to Knowledge. And this is a large proposal prepared by the University of Hawaii system, the Hawaii State Department of Education and Hawaii State Public Library System that would provide fiberoptic capability at every public school, every public library, every community college, every public university, and all of the remote learning centers on six islands throughout the State of Hawaii, providing gigabit capability, or 1 billion bits per second, at every one of these locations. That one would create, using the Federal Government's estimate, about 430 jobs and this would really put Hawaii in a leadership position, I believe we would be the first State in the country that would have every public school and every public library on every island connected.

Our second proposal fits in as a Public Computing Center proposal. This, again, involves the University of Hawaii and the Hawaii State Public Library System. We would acquire 693 new public-use broadband-connected computers at 66 locations, again, on six islands. And the idea is that we would use the community colleges and public libraries as a safety net for members of the public who cannot afford broadband or computers, or who are homeless, and they would have locations where they would be able to access broadband capabilities to look for jobs, to advance themselves economically, participate in education and training, perhaps even make appointments for healthcare—the kinds of things that they really can't do. And using the public libraries and the community colleges, they have extensive outreach capabilities, and these are institutions that are very accustomed to serving the public throughout the State.

The second two proposals are to the National Science Foundation (NSF), and these really address the area of advancing our science and technology capabilities for economic development and diversification.

The first one is in a new program that NSF created called Academic Research Infrastructure. And this is something I've been struggling with for about 20 years, trying to keep Hawaii—like Alaska, we have real challenges connecting to the rest of the Nation, because we have to rely on expensive submarine fiber. This is a \$10 million proposal to the National Science Foundation that would provide us with connectivity to the U.S. mainland, and to the national fiberoptic networks, comparable to most other universities, two 10-gigabit per second connections.

The fourth proposal, the second one to the National Science Foundation, is to the EPSCoR Program, I think you're familiar

with, and that is an inter-island high-speed connectivity proposal that would connect the University of Hawaii at Hilo, picking up the Manoa Kay observatories on the way, connect them to the Maui Super Computing Center, then over to Oahu to the University of Hawaii at Manoa and then onward to Kapiolani Community College, which has been very involved in science and technology and engineering education on a statewide and, in fact, throughout the Pacific basis.

The first two of these proposals were ranked first and second by the Governor in her ranking of the proposals to the Department of Commerce and if all four of these proposals are funded and in fact, all four are still currently under review and in play, this would be a hugely—I think you can see how these fit together, connecting all of our schools, libraries, community colleges to each other, connecting between the islands, connecting to the rest of the country and providing the safety net of computers for the public that really doesn't have access to these capabilities, yet, at home.

Last time I was here, I reported on some of the concerns we had with some of these programs. And I'm happy to report that the Department of Commerce really stepped up to the plate. I think it improved their online system for submission of proposals, the guidelines were much friendlier for us, for the kinds of proposal that we wanted to submit, to connect community anchor institutions to serve the public. And I—I could use the word "brutal" but I would say they are exceeding diligent in ensuring that our proposals are well-founded, both technically and administratively, and that we're going to be capable of fulfilling. And I think that's part of the reason—they're being extremely careful about what they fund.

These are—it's been a real pleasure, I think, to work—for us to work with the Department of Education and the Hawaii State Public Library System on a statewide basis are really looking after the needs of people on all of our islands, together and holistically.

I'll just share one concern that, last week, I know the House supplemental budget included a rescission of some funds for some of these broadband programs. And, obviously, if any funds are cut from these programs, that's going to limit the number of awards that can be made. And so, for those of us who are still pending, that's of concern, that less funds means less projects that would be funded, potentially, including ours.

Thank you for this opportunity.

Chairman INOUE. I thank you, sir.

[The statement follows:]

PREPARED STATEMENT OF DAVID LASSNER

Thank you for this opportunity to share some perspectives from the University of Hawaii (UH) on the impact of the ARRA on broadband in Hawaii.

American Recovery and Reinvestment Act (ARRA) of 2009 and Broadband

It is useful to summarize some key elements of the ARRA that advance Broadband:

- The ARRA charged the Federal Communications Commission to create our nation's first national broadband plan. The FCC delivered that plan to Congress and the nation in March of this year, and implementation activities are now underway.
- The ARRA provided funding for state-based data collection efforts to implement the Broadband Data Improvement Act of 2008. Mr. Clyde Sonobe of the State Department of Commerce and Consumer Affairs, is leading this initiative for

Hawaii. The University is pleased to be partnering in this initiative by applying the expertise in geospatial information systems of the Pacific Disaster Center on Maui, which is now managed by the University of Hawaii.

—The ARRA created new grant and loan programs in the Department of Commerce and Department of Agriculture to deploy broadband in accord with a clearly defined set of statutory purposes and to provide support for broadband adoption and usage.

—The ARRA provided substantial additional funding for the National Science Foundation (NSF), some of which was used for programs that can fund broadband connectivity.

I will focus my testimony today on these latter two sets of programs and describe the University of Hawaii initiatives to respond to these opportunities.

The Importance of Anchor Institutions

I would like to first provide some context regarding the importance of community anchor institutions in advancing our national broadband agenda.

Last spring I had the opportunity to work with a group of colleagues around the country as we tried to communicate to the new Obama Administration the importance of colleges, universities, schools, libraries and hospitals as broadband anchors in creating our nation's future. I believe that it is now well-understood within the Federal government that connecting these institutions will create jobs, increase our infrastructure capacity to enable higher-speed broadband in more places, improve the quality of a wide range of educational, public and human services, drive economic diversification and development, increase our nation's competitiveness, create future demand for more advanced broadband services, and provide a safety net for those who might otherwise be left behind.

The importance of connecting community anchor institutions is emphasized in particular in the National Broadband Plan and in the Department of Commerce's Broadband Technology Opportunities (BTOP) program. In addition, the National Science Foundation continues to have a keen interest in connecting colleges and universities, among others, for the purpose of advancing research and related Science and Technology capabilities.

The University of Hawaii's Broadband-Related ARRA Proposals

In addition to our work with Mr. Sonobe on the Broadband Data Mapping project, the University has four broadband-related ARRA proposals under active consideration at this time.

Ke Ala Ike.—The University of Hawaii, Hawaii Department of Education and Hawaii State Public Library System collaborated to submit a large statewide Comprehensive Community Infrastructure proposal to the Broadband Technology Opportunities Program (BTOP) to provide or upgrade direct fiber optic connectivity at every public school including public charter schools, every public library, every community college, every public university, and every community college remote education center used for distance learning on six islands. As a result of this project, each of the 388 participating sites would have external connectivity of at least 1 gigabit (billion bits) per second. This proposal would also deploy advanced high definition interactive distance learning capabilities in higher education to begin to demonstrate the uses and benefits of higher speed broadband services. Notable benefits to disconnected communities would include pulling the first fiber optic cable to Hana, Maui and Lanai City. If this proposal is funded, I believe that Hawaii would be the first state in the Nation to have provisioned direct fiber optic connectivity to every public school, every public library, every community college and every public university with gigabit or faster connectivity. Using the Federal government's methodology for understanding job creation, it is estimated that 430 job-years would be created by this project including 275 indirect and 155 induced job-years. The total project cost is \$42,466,000, and this project is currently undergoing a due diligence review.

Access for All.—The University of Hawaii and the Hawaii State Public Library System also collaborated on a Public Computing Center proposal to the BTOP program to provide public computers and training in every public library and in community college libraries and education centers throughout the State. A total of 693 new public-use broadband-connected computers would be provided in 66 locations on six islands. In 2008 the Hawaii Broadband Task Force recommended that "Government lead by example in demonstrating the value of broadband to our citizenry, deploying broadband services to the public, and ensuring that we do not leave behind the economically disadvantaged members of our communities who may be inhibited from full participation in the 21st century." While the current financial crisis has made it impossible for the State to financially invest in this vision, the "Access for

All project partners have taken this to heart and worked together to develop this proposal to create a statewide safety net for our most disadvantaged citizens. This safety net will be used to help Hawaii's citizens improve their social, personal and economic well-being. The total project cost is just over \$2.4 million. This project is currently also undergoing a due diligence review.

Connecting Hawaii to the U.S. National Cyberinfrastructure.—Using a portion of the ARRA funds appropriated to the National Science Foundation, NSF created the Academic Research Infrastructure Program: Recovery and Reinvestment (ARI-R²) to support 21st century research and research training infrastructure in our Nation's academic institutions and nonprofit research organizations. The program's purpose is to revitalize existing research facilities so that they provide next-generation research infrastructure and facilitate the integration of researchers with shared resources such as remote instruments and research platforms, data repositories, and national computing facilities. The ARI-R² program invited proposals for broadband connectivity to support research, and the University of Hawaii submitted a proposal to address a previously unfunded recommendation in the America COMPETES Act to improve high-speed connectivity between Hawaii's research and education community and the national cyberinfrastructure for research. This is particularly timely, given the announcement last week of \$62 million in BTOP funding to Internet2 and partners for a major upgrade of the fiber optic research and education backbone network that serves the 48 states on the U.S. mainland. This proposal would provide two 10 gigabit per second circuits between Hawaii and the West Coast, with a total project cost of just under \$10 million. This proposal is currently under active consideration by the NSF.

Connecting the Islands: Cyber Connectivity for Science and Technology in Hawaii.—ARRA funding also enabled NSF to create a new Research Infrastructure Improvement Program: Inter-Campus and Intra-Campus Cyber Connectivity (RII C²) for the jurisdictions participating in the Experimental Program to Stimulate Competitive Research (EPSCoR). RII C² is intended to enhance broadband access for academic research and the utilization of cyberinfrastructure consistent with the jurisdiction's Science and Technology plan. The University submitted a proposal to provide 10 gigabit per second connectivity from the University of Hawaii at Hilo to the Maui High Performance Computing Center to UH-Manoa to Kapiolani CC, which is active in Hawaii's EPSCoR program activities. This is about a \$1.2 million proposal, which is also currently under active consideration by the NSF.

The Department of Commerce requested each governor to provide input on the proposals submitted from within their states, and the first two proposals described above were ranked #1 and #2 respectively.

In addition to these four active proposals, the UH Pacific Business Center Program requested just over \$1.5 million in BTOP Sustainable Broadband Adoption funding for a Pacific Basin Islands Ecommerce Portal that would set up a broadband-based ecommerce portal for the U.S. affiliated Pacific Basin islands, specifically American Samoa, the Commonwealth of Northern Mariana Islands, the Republic of the Marshall Islands, the Republic of Palau, Guam and the Federated States of Micronesia. In addition, the U.S. State of Hawaii will be served, and will also act as the base of operations. This proposal has not entered a due diligence

Others on the panel will testify regarding additional broadband proposals submitted from within Hawaii and the benefits they would provide. I will just observe that if all four of these currently active University proposals are funded, we will enjoy a fundamental leap in the capabilities available to the education and research community in Hawaii. We would have a world-class education and research network serving all islands within the State, with adequate domestically-provided connectivity for the first time in many years. Of course, with the funding of a new 100-gigabit per second national research and education broadband backbone network on the mainland, we will need to continue to be vigilant and active to avoid falling behind again.

Observations on the Process

At the August hearing on this topic in Hawaii, I shared with the Committee a number of concerns with the BTOP program as implemented in Round 1. It turned out that no Hawaii BTOP proposals were funded during Round 1.

From my perspective representing a Community Anchor Institution within Hawaii and as a repeat applicant to the BTOP program, I am happy to report that there were substantial improvements in Round 2 of the program. The new online system that was so troublesome during Round 1 was dramatically improved for Round 2. And more importantly, the program guidelines for Comprehensive Community Infrastructure were much friendlier to Community Anchor Institutions, including the public schools, libraries, public universities, community colleges and the re-

mote education centers through which we provide so many services throughout the State.

I should also report to this Committee that my limited experience with four ARRA proposals at two Federal agencies indicates that these agencies are taking their stewardship responsibilities extremely seriously. Their technical and administrative review processes have been extremely thorough and highly focused on ensuring compliance with all applicable rules and laws, verifying the public benefit, and ensuring that the projects can be executed as proposed.

Conclusion

At the time of this writing we are in active conversation with Federal officials regarding all four of the University's ARRA broadband proposals. We are hopeful for success, and believe that with anchor institutions in nearly every Hawaii community on every island connected at very high speeds we will be able to dramatically advance education and research throughout the State.

Just as importantly, these projects will enable us to fulfill our responsibilities as Community Anchor Institutions. Hawaii's ambitions for ubiquitous high-speed broadband connectivity as expressed in the Hawaii Broadband Task Force Report are far more ambitious than those called for in the National Broadband Plan. Widespread gigabit connectivity, beginning in these institutions, will also drive adoption and demand by consumers and businesses for advanced applications that could return the United States to the international leadership position in affordable high speed connectivity we lost over the past decade.

Chairman INOUE. Ms. Shin.

STATEMENT OF SU SHIN, VICE PRESIDENT, GOLD IVORY, LLC

Ms. SHIN. Thank you.

Mr. Chairman, Thank you so much for inviting me here today to provide some testimony on Gold Ivory's experience with the ARRA.

First, a little bit of background on our company. Gold Ivory is an affiliate of Waimana Enterprises, which is a native Hawaiian company with many, many years of utility infrastructure experience and also intimate knowledge of telecommunications issues unique to Hawaii. In the last decade, Waimana focused its resources on providing telecommunication services to the most rural and underserved areas of our islands. Through these efforts, Waimana witnessed and experienced the lack of basic communications infrastructure and equipment for local public safety agencies to be able to perform their duties adequately. And Mr. Sonobe talked about some of the lack of access in remote areas in his statements, as well.

For the past 3 years, Waimana has been working very closely with public safety agencies trying to find a way to help them build out this much, much needed infrastructure. Currently, the public safety agencies in our rural communities rely on an antiquated system that does not provide first responders with sufficient access to communication where and when they need it.

Also, as experienced during Hurricane Anike, the network is not hardened, and is susceptible to outages. When Congress passed the ARRA, creating the Broadband Technology Opportunities Program, or BTOP, this became—or we realized this was a vehicle for providing funding necessary to build out this public safety communications infrastructure statewide that was so needed.

Initially, we had met with all four counties to design a statewide network, dedicated for public safety use. As it turns out, because their needs were greater, only Kauai, Maui, and Hawaii counties chose to participate.

Last year, Gold Ivory submitted an application in response to the first round of BTOP funding. The application proposed a robust

and hardened network that provided interoperability and increased coverage across all neighbor islands that would survive a catastrophic event so that first responders can coordinate recovery efforts, both on-island and off.

Upon the request of the counties, it also transferred ownership of the completed network to the public safety agencies for their dedicated use.

Our application was, unfortunately, denied in the round 1 funding, because it did not allow commercial traffic to interconnect to this public safety network. So, when the second round of funding was announced, Gold Ivory resubmitted its application, however we made a key revision to allow interconnection with commercial traffic to meet those programmatic requirements. The network was strategically designed to provide both backhaul capacity, as well as maximum coverage for future LTE-700 MHz technologies, which was recently authorized by the Federal Communications Commission (FCC) for public safety use.

We just completed the due diligence phase, which Dr. Lassner talked about just now, of our second application. During that process, however, the National Telecommunications and Information Administration or NTIA, with very little regard for its impact on the needs of public safety. As a result, our network was stripped down to a skeleton system that provides limited redundancy and a significant reduction of capacity. This means that the mission-critical communications network of the public safety entities in our most rural and underserved communities will be vulnerable to a single point of failure.

Also, during due diligence, we were required to meet cost metrics identified in a recent FCC technical paper. The paper identifies significant cost differences between a stand-alone public safety network, and an incentive-based partnership network. The fundamental difference between the two is that a stand-alone network model anticipates building an entirely new network from the ground up for a single customer base, much like our project is proposing to do.

The incentive-based partnership is less costly to build out, because it assumes that public safety agencies will be able to leverage existing commercial infrastructure and have access to an existing back-haul network.

Due to the remote and rural nature of our project sites, there is little to no existing broadband infrastructure and it is extremely costly to build out.

Our proposal is a combination of a stand-alone network, and an incentive-based partnership model. Because of the need to build out expensive infrastructure, our network's initial capital investment is similar to that of a stand-alone public safety network. However, our ongoing operating expenses will be lower, much like an incentive-based partnership. This is possible because of the revenue generated from its commercial interconnections, as required by this Federal program.

While our network is a hybrid model, the NTIA due diligence team only evaluated our application costs against the metrics for the less costly incentive-based partnership model. We do—we would like to highlight the fact that our total project budget was

roughly \$180 million, but of that amount, \$50 million is an in-kind contribution to the project that we provided. We would like to highlight the fact that that's 26 percent of the total project cost. And the reason that large in-kind contribution is possible is because we are able to leverage our existing state-of-the-art buried fiber network that currently is in existence.

All of this being said, the final design of our proposal still provides the counties with a basic network infrastructure that does not exist today. This opportunity would not be possible without the passage of the ARRA. We look forward to the positive impacts this historic program will bring to Hawaii, including job creation, and the many social benefits of broadband connectivity mentioned by all of our previous speakers. And we humbly request your support of our project.

Thank you for the opportunity to testify.

Chairman INOUE. I thank you very much, Ms. Chin.

[The statement follows:]

PREPARED STATEMENT OF SU SHIN

Mr. Chairman and Committee members, my name is Su Shin and I am the Vice President of Gold Ivory, LLC. Thank you for inviting me here today to provide testimony on our experience with the American Recovery and Reinvestment Act of 2009 (the ARRA). The United States Congress was bold and visionary in passing the ARRA to stimulate the economy and fuel a revival of jobs in America. As further explained below, Gold Ivory has attempted to bring the benefits and opportunities created in the ARRA from its origins in Washington, DC directly to the residents and businesses of our State.

Gold Ivory is affiliated with Waimana Enterprises, Inc. (Waimana), a native Hawaiian company with many years of utility infrastructure experience and intimate knowledge of telecommunications issues unique to Hawaii. In the last decade, Waimana focused its resources on providing telecommunication services to the most rural and underserved areas of our islands. Through these efforts, Waimana witnessed and experienced the lack of basic communications infrastructure and equipment for local public safety agencies to perform their duties. This problem, however, is not exclusive to Hawaii. Thus, one of the five stated purposes of the Broadband Technology Opportunities Program (BTOP), created by the ARRA, is to support broadband programs that "improve access to, and use of, broadband service by public safety agencies." Additionally, the express language of the ARRA identifies a native Hawaiian organization as an eligible grant applicant under the BTOP program. Thus, Waimana, through its affiliate Gold Ivory, identified BTOP as a means for providing critical broadband infrastructure to the remote areas of our state.

In July 2009, the National Telecommunications and Information Administration (NTIA), Department of Commerce, issued the first BTOP Notice of Funds Availability (NOFA). Gold Ivory partnered with Raytheon and Alcatel-Lucent, industry leaders in broadband technology, to submit an application to design and construct a public safety broadband network to serve the rural counties of Kauai, Maui, and Hawaii. Gold Ivory worked closely with first responders from each respective county to identify essential broadband needs and address critical shortcomings. Three fundamental problems were identified across all three counties:

- Lack of Coverage—first responders are unable to communicate with each other in many remote areas;
- Lack of Capacity—first responders are unable to take advantage of current technology (e.g., video surveillance, mobile data services, CAD dispatch, and GIS/Mapping) due to insufficient bandwidth; and
- Lack of Redundancy—currently, public safety agencies rely on a single network primarily supported by pole-hung fiber, which is highly susceptible to service outages due to natural and manmade disasters.

Gold Ivory submitted an application to NTIA that addressed these problems by proposing a robust Hawaii Public Safety Broadband Network (HPSBN) that drastically increased the coverage areas on each island, provided virtually unlimited bandwidth through a pair of dedicated fiber (OC 192), and inter-connected the public safety agencies to support interoperability. Upon completion, Gold Ivory proposed to transfer ownership of the HPSBN to each respective county, which required that

the HPSBN be for the exclusive use of county agencies. Unfortunately, the NTIA denied Gold Ivory's application on the basis that it did not allow commercial traffic to interconnect to the HPSBN, despite the NOFA's recognition of unique law enforcement needs.

In January 2010, NTIA issued a second NOFA for BTOP funding (Second NOFA). Gold Ivory again submitted an application for a robust Hawaii Broadband Network (HBN) to primarily serve the public safety agencies of the Counties of Kauai, Maui, and Hawaii. The HBN was strategically designed to provide both backhaul capacity and maximum coverage for future LTE 700 MHz technologies for public safety agencies. It also addressed the critical component of redundancy by providing back-up connections to ensure that mission critical communications are not interrupted and can survive disasters. Unlike the first application, however, the HBN was designed to allow interconnection with commercial traffic.

Last month, Gold Ivory was notified by the NTIA that it qualified for advancement to the due diligence phase. The NTIA due diligence team was professional and responsive throughout the review process, and we wholeheartedly appreciate the significant responsibility placed upon the review team. However, in the spirit of providing constructive feedback to improve future programs aimed at improving public safety broadband networks, we respectfully call attention to two fundamental concerns.

The first concern deals with the design standards of the HBN. As stated earlier, the HBN was primarily designed to generally accepted public safety reliability and survivability standards, which ensures a fully functioning network after a catastrophic event so that first responders can coordinate recovery efforts both on-island and with neighboring islands. Under the guidance of the NTIA due diligence team, however, the robust HBN was stripped down to a skeleton system that provides limited redundancy and a significant reduction in capacity from an OC48 to an OC12. This means that the mission-critical communications network of the public safety entities in the rural and underserved counties will be vulnerable to a single point of failure.

The second concern is one of due process. After Gold Ivory submitted its second application, the Federal Communications Commission (FCC) issued an OBI Technical Paper Series entitled "A Broadband Network Cost Model: A Basis for Public Funding Essential to Bringing Nationwide Interoperable Communications to America's First Responders" (April 2010) (the Technical Paper). The Technical Paper astutely identifies significant differences between a Stand-Alone Public Safety Network and an Incentive-Based Partnership Network. The Stand-Alone Public Safety Network model anticipates building an entirely new network from the ground up for a single customer base. The Incentive-Based Partnership leverages existing commercial assets that already have backhaul to a functioning core network, which eliminates the cost of building a new network from the ground up. The Stand-Alone Network would require at least 2.5 times more capital investment, excluding deployable equipment, and proportionally even more in operating costs. As such, the Technical Paper recommends the Incentive-Based Partnership model.

Fundamentally, the HBN is a Stand-Alone Public Safety Network. The NTIA due diligence team, however, evaluated the HBN against the Technical Paper's metrics for the less costly Incentive-Based Partnership model. From a due process standpoint, Gold Ivory respectfully challenges the fairness of holding its application to standards that were not referenced in the NOFA and published after the application deadline. This situation is exacerbated by the NTIA's restriction of the HBN budget to meet metrics that are not relevant or applicable to a Stand-Alone Network model.

Our due diligence period recently ended and we are awaiting a final decision from NTIA. However, we have been advised that our application is on hold pending final review of new applications submitted under a May 2010 amendment by the NTIA of its second NOFA to selectively accept applications for BTOP funding from state and local governmental entities that recently received FCC approval to use the 700 MHz public safety broadband spectrum. As a qualified applicant, local and State agencies of Hawaii had until July 1, 2010, to submit an application. While Gold Ivory endorses the need for improvements to Hawaii's public safety broadband infrastructure and equipment, it is unreasonable to delay our application process because BTOP applications are funded on a "rolling basis subject to the availability of funds."

That being said, the final design of the HBN still provides the counties with a basic network infrastructure that does not exist today and can be expanded over time. The NTIA should be applauded for the resources and efforts expended toward implementing the historic BTOP initiative of the ARRA. The FCC should also be commended for their creation of a National Broadband Plan and specifically recognizing the need to create a nationwide interoperable public safety broadband wire-

less network for first responders and other public safety personnel. Finally, the United States Congress should be praised for their vision and leadership in steering our country through one of its worst economic crises.

Thank you for the opportunity to testify on our experience with the ARRA.

Chairman INOUE. Mr. Komeiji.

STATEMENT OF JOHN KOMIJI, SENIOR VICE PRESIDENT AND GENERAL COUNSEL, HAWAIIAN TELCOM

Mr. KOMIJI. Thank you, Mr. Chair. Hawaiian Telcom also thanks you for the opportunity to testify before you today and to report to you the status of our applications with the two programs, the two programs being the Broadband Technology Opportunities Program as well as the Broadband Infrastructure Program (BIP).

We have submitted applications for two projects, one coming under what they call BTOP and one coming under BIP.

In terms of our BTOP application, we filed our application in conjunction with the Hawaii County to increase and improve broadband access for the residents, businesses and critical community facilities on the Big Island. Our total project is \$6.2 million, and of that amount, we're requesting that the Government assist us in the amount of \$4.3 million.

The primary purpose of that project is to create a "middle mile" segment between Pahala to Volcano. That would allow us to complete a loop around the entire Big Island, which allows for redundancy as well as resiliency for our network.

We also would be upgrading broadband access points at 22 central office communications which would again allow greater broadband access to the residents and businesses on the Big Island. We also will be extending fiber facilities to the nine most critical county-designated sites to, again, allow them—for emergency responders, first responders, as well as in catastrophic emergencies.

So, we believe that our project improves the lives of the people on the Big Island. We estimate that about 62,000 households will get increased broadband coverage; 4,300 businesses will get increased broadband coverage. We also will, as I mentioned, provide key points of communication for the county in this project.

We estimate that about 102 jobs will be created by this particular project.

We, like the previous speakers, we also went through a rigorous and detailed NTIA due diligence. But our take is a little bit different from everyone else in the sense that, although it was very vigorous and they've propounded question after question to us, we took away the fact that they were very interested in assisting us, rather than trying to shoot us down in terms of our project. They seemed quite helpful to us—like I said, not taking away from the rigorosity of their review—they seemed quite helpful and went out of their way, in fact, in our minds, to kind of help us complete and provide a very good application.

So, we've actually completed our broadband, our due diligence on June 24, and are optimistic and hopeful that this particular project will get funded.

And the other project we have is under the RUS, the BIP project, and it's a East Hawaii Fiber Broadband Project. And this is a "last mile" project which would help connect up and serve about 6,100

households, 54 businesses, and 31 critical community facilities in the Pepeekeo Point area, Hawaiian Paradise Park Makai area, Hawaiian Acres, Fern Forest, Royal Hawaiian Estates and Kalapana area. This is a \$5.4 million project, \$3.8 million of it which would be funding that we would be requesting, and we would provide the balance of the amounts. In this particular project, there are about 69 jobs that we think would be created by this particular project.

Now, under the BIP process, there is no due—as we understand it—no due diligence so we’re not quite certain as to the status of this particular project, in terms of obtaining funding. But again, we think that this project is very viable, it’s also very important to the Big Island.

So, in summary, again, we’re very hopeful about both projects, and we thank you for your assistance and for your continued support in this area.

Chairman INOUE. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF JOHN KOMELI

Chairman Inouye and Members of the Senate Appropriations Committee: I am John Komeiji, testifying on behalf of Hawaiian Telcom, in support of its Hawaii County Community Broadband Upgrade project application, submitted for the Broadband Technology Opportunities Program (BTOP), and its East Hawaii Fiber Broadband Project application submitted for the Broadband Infrastructure Program (BIP), both under the American Recovery and Reinvestment Act of 2009.

BTOP and BIP were established to award and administer grants to (1) increase broadband penetration in underserved areas, (2) improve broadband access to public safety agencies, (3) stimulate demand for broadband and (4) spur job creation and stimulate long-term economic growth. Both Hawaiian Telcom’s Hawaii County Community Broadband Upgrade project and East Hawaii Fiber Broadband project more than meet these objectives.

PROJECT SUMMARY

Hawaii County Community Broadband Upgrade Project

This project is a \$6.2 million private-public partnership effort between Hawaiian Telcom and the County of Hawaii to increase and improve broadband access for residents, businesses and critical community facilities on the Big Island. Of the \$6.2 million, \$4.3 million is being requested in grant funds with Hawaiian Telcom funding the \$1.9 million balance. The project is projected to benefit approximately 62,450 households and 4,360 businesses. It will also provide a needed boost to the Big Island economy by creating an estimated 102 new jobs: 19 direct jobs and 83 indirect and induced jobs.

The project includes:

- Construction of a “middle mile” fiber segment from Pahala to Volcano to complete Hawaiian Telcom’s fiber ring network encircling the Big Island (see Attachment I);
- Upgrading broadband access points at 22 Central Office telecommunication locations on the Big Island;
- Extending direct connect fiber facilities to the 9 most critical County-designated sites; and
- Upgrading broadband access at 82 County sites, including 42 Public Safety Entities (Civil Defense, police and fire stations) and 40 Critical Community Facilities that provide essential County services.

East Hawaii Fiber Broadband Project

This is a \$5.4 million “last mile” project to extend high-speed fiber broadband service to 6,180 households, 54 businesses and 31 Critical Community Facilities in the underserved rural East Hawaii areas of Pepeekeo Point, Hawaiian Paradise Park Makai, Hawaiian Acres, Fern Forest, Royal Hawaiian Estates and Kalapana (see Attachment II). Of the \$5.4 million, \$3.8 million of grant funding is being requested with Hawaiian Telcom funding the \$1.6 million balance. Extension of Hawaiian Telcom’s fiber network into these communities will allow them first-time ac-

cess to affordable, reliable broadband services and to various online programs, communications and work-at-home opportunities. Hawaiian Telcom is receiving an increasing number of calls and letters from residents in these communities who are frustrated by their lack of access to affordable broadband service and are requesting that Hawaiian Telcom extend broadband service to the underserved communities of East Hawaii. This project is expected to create 69 jobs: 23 direct jobs and 46 indirect and induced jobs.

NEED FOR BTOP AND BIP PROJECTS

Constructing a network on the Big Island is typically more costly than construction in the more urban parts of the state. The Big Island, with a landmass of approximately 4,028 miles, is more than six times larger than the island of Oahu, but has about one-fourtieth, or 2.5 percent of the population of Oahu. While most of the island's population is congregated in Hilo on the east side of the island and Kona on the west, the rest of the island consists of highly dispersed rural communities. Demographics also show that Hawaii County is an economically distressed county. The geography of the island is characterized by dramatic changes in topography, climate, and character across very short distances, and the underlying structure is mainly lava rock. The combination of higher construction costs, distances and relatively small customer base does not justify a business case for upgrading and expanding the broadband network, without government funding support.

At present, residents and businesses of Hawaii County, particularly those in underserved communities, have limited affordable access, if any, to High Speed Internet service (up to 11 Mbps), Enhanced IP Data Service (speeds up to 1 Gbps), Routed Network Services and other advanced applications using network infrastructure with wider bandwidths. County facilities are currently limited to a maximum of 1.5 Mbps.

BENEFITS TO BIG ISLAND RESIDENTS AND BUSINESSES

Completion of the BTOP Hawaii County Community Broadband Upgrade project will have a positive impact on the expansion and accessibility of affordable broadband services to most of the Big Island, while completion of the BIP East Hawaii Fiber Broadband Project will provide first-time access to affordable, reliable broadband services to the six underserved East Hawaii communities. In particular, for the BTOP project:

- Completion of the fiber ring around the southern half of the island (from Pahala to Volcano) will create a “mesh” network that is better able to survive fiber cuts than a radial network or a simple ring, by eliminating “single cut” vulnerability points. This improves both the reliability and resiliency of the broadband network against the effects of hurricanes, earthquakes, and tsunamis, as well as fires and automobile accidents.
- Upgrading broadband access points at 22 Central Office locations, together with completion of the fiber ring will create a network expandable to capacities in excess of 800 Gbps that can be accessed at affordable rates by more of the island population. This network upgrade will improve “last mile” services to about 62,450 households and 4,360 businesses, with broadband traffic traversing the newly created fiber ring.
- Extending direct connect fiber facilities to the 9 most critical County-designated sites will enable the County to access greater broadband services to improve its internal and external communications and data services needs, as well as its ability to serve residents and businesses, especially in emergency situations. Due to County budget limitations, this type of upgrade would normally take many years for the County to justify.
- Upgrading broadband access at 82 County sites, including 42 Public Safety Entities and 40 Critical County Community Facilities, will improve emergency response times and information sharing on a real time basis between and among County agencies and the general public for both small and large scale events, as well as improve the reliability of all telecommunication services, including critical E-911 service.
- Improved broadband access and reliability will help create an estimated 102 jobs (19 direct and 83 indirect) and foster economic development.

WHY HAWAIIAN TELCOM'S APPLICATIONS SHOULD BE FUNDED

Both the Hawaii County Community Broadband Upgrade project and the East Hawaii Fiber Broadband project have numerous community benefits and are the most cost effective means of improving broadband services to the largest number of current and future broadband customers on the Big Island. This is due to the fact

that the projects leverage Hawaiian Telcom's current extensive network infrastructure investments as well as its on-island workforce.

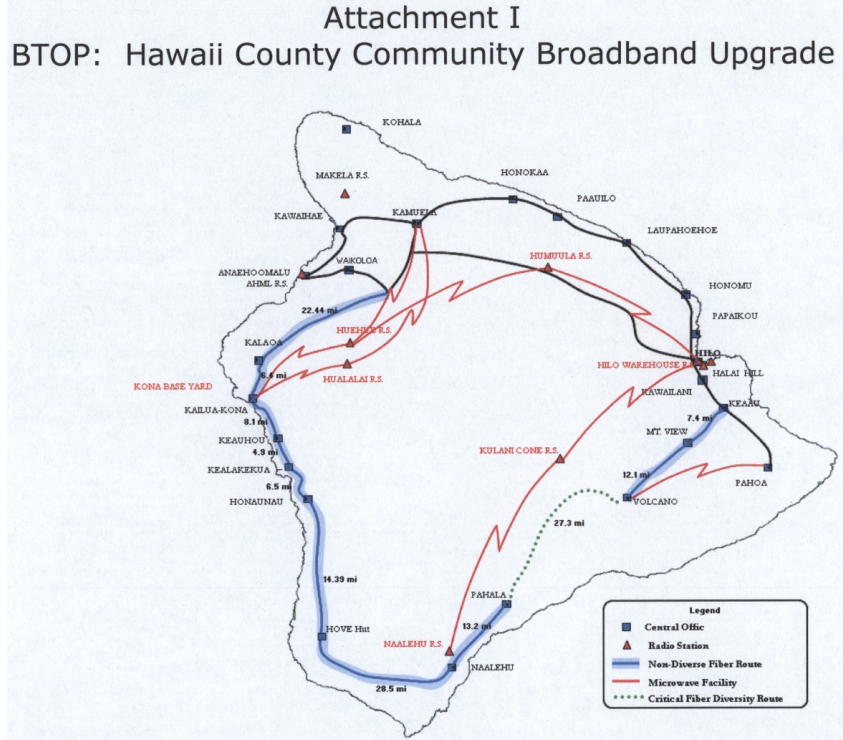
Hawaiian Telcom owns and operates an existing network that serves most of the island through a combination of advanced and legacy systems, microwave facilities and non-diverse fiber circuits. Although the projects are designed to expand and improve broadband access, these upgrades will be part of the island-wide network. Thus both projects, but especially the Hawaii County Community Broadband Upgrade project, will serve a broader customer base than a stand-alone project and set the foundation for both customers and competitors to rely on Hawaiian Telcom's network to meet their communication needs and broadband growth for years to come.

Hawaiian Telcom has the proven expertise to construct and operate communication networks and our experienced workforce, combined with the above projects, will ensure a resilient, well maintained network that will be upgraded and grow as the Big Island's demands for broadband grows. However, as indicated previously, without Federal assistance there is no business case to justify the expenditure of funds to complete the fiber ring from Pahala to Volcano, make the other improvements to the network and to extend broadband service to the six underserved rural East Hawaii communities that currently do not have access to wired broadband service.

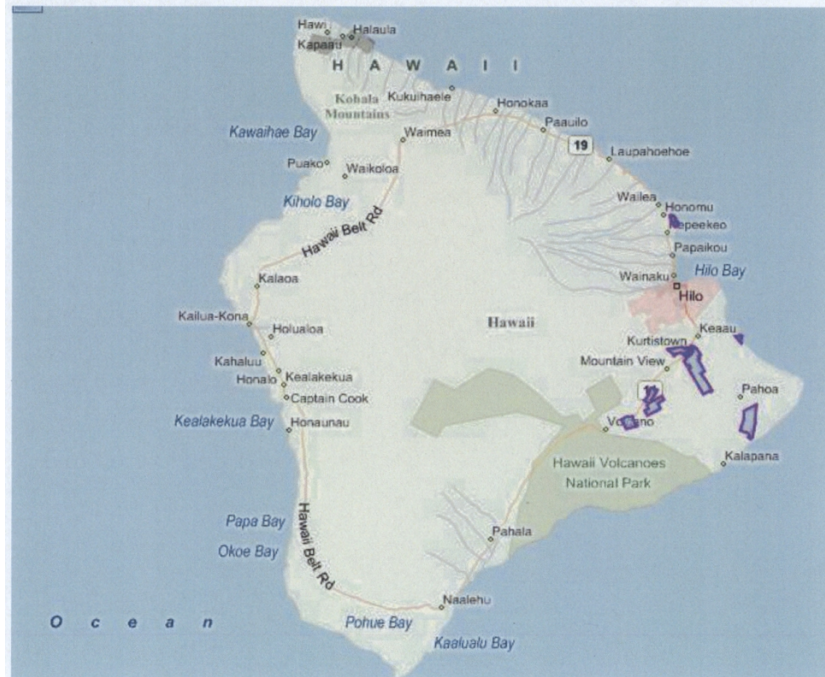
Demographics show that Hawaii County is an economically distressed county and the Hawaii County Community Broadband Upgrade is the only application that benefits the majority of the Big Island community. Federal assistance from the Recovery Act will allow this project to move forward and allow the residents and businesses to enjoy the benefits of an enhanced broadband network and the improved economic development that greater broadband access is expected to create. In addition, Federal assistance for the BIP East Hawaii Fiber Broadband Project will also allow Hawaiian Telcom to extend broadband service to the underserved rural East Hawaii areas of Pepeekeo Point, Hawaiian Paradise Park Makai, Hawaiian Acres, Fern Forest, Royal Hawaiian Estates and Kalapana.

Hawaiian Telcom respectfully requests your support for both the Hawaii County Community Broadband Upgrade project and the East Hawaii Fiber Broadband Project which will help realize the broadband benefits and objectives of the Recovery Act of 2009. Thank you for the opportunity to testify.

Attachment I BTOP: Hawaii County Community Broadband Upgrade



Attachment II BIP: East Hawaii Fiber Broadband Project



Chairman INOUE. I believe that all of you are aware that I spent the last 2 days with the Chairman of the FCC, Genachowski, and I wanted him to see firsthand and discuss with people the problems we have on these seven inhabited islands, mountainous, and I must say that he spent every hour doing something.

Yesterday—the day before yesterday—we were on the Big Island, meeting with the mayor and his first responder team to get some of the challenges and concerns. Then after that, we met with—we went all over the islands, looking at the remoteness, and realizing that this is not like Kansas.

And then we met with Hawaiian community, and Hawaii mayors. We had a wonderful meeting there. We also met with Alaskans and Indians—American Indians. Yesterday, we had a luncheon meeting, he also went to Queen's Hospital and saw the effect of electronic communications. So, he had a full dose of information. And I can assure you that, as a result, we'll get something, here.

I'm having a major meeting, not only with him, but with the Commission when I get back to Washington, and I hope that we can get results.

So, if I may ask a few questions, on your map, are you getting good cooperation from communication providers in Hawaii?

Mr. SONOBE. I think, generally, they have been very cooperative, Senator.

Chairman INOUE. In general.

Mr. SONOBE. The map currently calls for data at the census block level. The State feels that for the map to be more informative, that the information should really be at the address level.

So, initially, the NTIA's requirement was that data to be reported at the address level, and our request initially went out for information, as such. There was some hesitance on the part of the providers to provide that information. The NTIA then changed their requirement to make it a census block reporting requirement, and at that point, the providers became more cooperative. So, I think—

Chairman INOUE. Because without the data you won't be able to make the map.

Mr. SONOBE. Right. And again, the point the State would take is that for it to be truly informative and useful, that the data should be at the address level.

Chairman INOUE. When will the map be ready for public viewing?

Mr. SONOBE. The initial data was sent to the NTIA at the end of April. The final map is due in September.

Chairman INOUE. Thank you very much.

Dr. Lassner, yours is a very ambitious program. When are you going to have this connection between all of the schools and libraries?

Dr. LASSNER. If we're funded, which we haven't been yet, this would—

Chairman INOUE. Assuming you're funded.

Dr. LASSNER. Assuming we're funded, we think it's about a 2-year project.

Chairman INOUE. I'll do my best to get the funding.

Dr. LASSNER. Thank you.

Chairman INOUE. And, how do you propose to connect with the mainland?

Dr. LASSNER. It's—what we've done is, we've proposed to buy capacity on one of the new submarine fibers that was just installed this year, that comes from southeast Asia, to Guam, to Hawaii, to the mainland. And one of the least expensive times to buy capacity is when the fiber is new and they still have vacant capacity. So we've proposed to the National Science Foundation to get the money to actually purchase the ownership of a portion of that for—it's called an indefeasible right of use, or IRU, for two 10-gigabit per second circuits. Then, in California, we will connect to Los Angeles, and then up to Seattle.

And then here, from our hub at the University of Hawaii at Manoa, we would make that available to all of the community colleges, campuses. If the schools are participating with Internet, too, or other things, we'll work it that way.

Then from our operating budget, we'll pay the maintenance on that.

Chairman INOUE. What will that cost for all of this?

Dr. LASSNER. That's about a \$10 million project. And that's in process at NSF right now.

Chairman INOUE. I think I'll have my staff call upon you for further discussion about this.

And now, I'm interested in your work with first responders. Are we on the right track?

Ms. SHIN. I think that—I made some statements earlier about what we had originally proposed, and what our design ended up looking like at the end of our process. We certainly would have loved for it to—the network, the public safety network—to have the kind of redundancy and resiliency that we had originally designed into the network.

However, we think that this is a tremendous opportunity, and again, it will provide sort of that basic infrastructure that the public safety entities can utilize and build upon.

So, I guess it's—although it's not perfect, we are—we're fairly confident that it will help the public safety entities and will improve what they have today.

Chairman INOUE. At the present time, our first responders, they're not able to communicate with each other.

Ms. SHIN. There are many areas in some of these remote spots of our, especially over at our neighbor islands, where they are unable to do even basic, push-to-talk radio communications, much less broadband, which is what we're talking about here.

Chairman INOUE. It's no secret that the Asia-Pacific area has become an area of major concern to our Nation. It's no longer the Atlantic Ocean, because we think that the potential explosions, if it does happen, would be happening in our area. That being the case, some of us feel that the military should be tied up with your communication system. What do you think about that?

Ms. SHIN. That's really the idea that we had when designing this network. It was intended to be a fully interoperable network, so that in the event of some—either natural or man-made disaster, if, say the Federal Emergency Management Agency (FEMA) were to have to fly in, or, you know, Homeland Security or whomever, that the network would be designed such that there would be—it would be relatively easy for all of those public safety entities at all of those different levels and jurisdictions to be able to communicate with each other fairly effortlessly.

So, that was the intent of the design of our network, so.

Chairman INOUE. I will have my staff get together with you because if we can get the military interested, funding would be very simple.

Ms. SHIN. Thank you.

Chairman INOUE. They're loaded.

Ms. SHIN. Thank you.

Chairman INOUE. Well, Mr. Komeiji?

Mr. KOMEIJI. Yes, sir.

Chairman INOUE. How is chapter 11 going? I—didn't ask that question.

Mr. KOMEIJI. We've cleared the hurdle with the bankruptcy court. The bankruptcy court has approved our plan for reorganization and we're currently awaiting on, I think it was January 4, we filed an application with the Public Utility Commission asking that they also approve the plan. So, currently, we're awaiting some decision by the Public Utility Commission regarding the plan.

The plan itself, I'm sure you know, would reduce our debt by about \$800 million.

Chairman INOUE. I want to be helpful because your organization is a very important element in our civilization here, so—

Mr. KOMELJI. Thank you, sir.

Chairman INOUE. If I can be of any help, you let me know.

Mr. KOMELJI. Yes, sir.

Chairman INOUE. Have you been able to get together with the FCC Chairman?

Mr. KOMELJI. No, we have not—

Chairman INOUE. I thought that you had met yesterday?

Mr. KOMELJI. Yes—no, sir.

We have a pending application before the FCC dealing with the Universal Service Fund, and that's something that's very important to us. And I think that your visit with the Chairman will help us, in terms of attempting to get a waiver. Basically, what we're seeing is, the way the FCC looks at the Universal Service Fund now, it considers the State as a whole. So, because Oahu and Honolulu is so urbanized, they consider the whole State urbanized.

So, what we've been asking them is to understand that the separate islands are very rural in nature, so that they should break up the study areas into smaller groups.

Chairman INOUE. I think he was convinced when he took that flight.

Mr. KOMELJI. Yes. But because of that, I think—because of the pending application before them, I think it would put him in a very difficult situation to meet with us. So, we understand the reluctance to meet with us on a formal basis.

Chairman INOUE. Would you get together with my staff and prepare a memo so I can understand your problem—

Mr. KOMELJI. Yes, sir.

Chairman INOUE [continuing]. Better?

Mr. KOMELJI. Thank you, we will.

Chairman INOUE. Well, I'd like to thank the panel for your testimony today; you've been very helpful. I'll do what I can.

Mr. KOMELJI. Thank you.

Chairman INOUE. The fourth panel consists of the Renewable Energy Program Manager of the Hawaii Department of Business and Economic Development and Tourism, Ms. Maria Tome; the Manager of System Integration, Hawaiian Electric Company, Mr. Leon Roose; Vice President and General Manager ULPLSC, Dr. James Rekoske; and the Engineering Manager of the Kauai Island Utility Cooperative, Mr. Michael Yamane.

Well, Ms. Tome?

STATEMENT OF MARIA TOME, RENEWABLE ENERGY PROGRAM MANAGER, STATE ENERGY OFFICE, HAWAII DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

Ms. TOME. Good afternoon—yes, good morning, Chairman Inoue. Thank you for the opportunity to provide comments on the progress of Hawaii's implementation of energy funding for the American Recovery and Reinvestment Act. You have written testimony that's quite extensive, and I'll summarize the process that we used and the progress that we are making on this.

The Hawaii State Energy Office, together with other State agencies, administrative offices, and a wide variety of participants from the private sector have made great strides in wisely planning and spending Recovery Act formula funding for energy in the State of Hawaii. The current energy transformation began in 2006 with Governor Lingle's Energy for Tomorrow Initiative. We identified both short- and long-term changes needed for success. We realized that outside help was needed to provide the expertise, confidence, and activation energy to spark the transformation.

So in 2008, the Hawaii Clean Energy Initiative (HCEI) was launched in partnership with the U.S. Department of Energy. Its goal is a 70 percent clean energy economy by 2030. This requires transforming the regulatory and policy framework, as well as changing many of the business models that had implied fossil energy generation, transmission, delivery, and use.

Through the HCEI process, the Hawaii Clean Energy Initiative process, we brought together many of the public sector partners and private industries that are now involved in our energy transformation. Recovery Act energy funding provides Hawaii a timely downpayment for reinvestment in our energy future.

We were able to bring the Recovery Act funds into plans that had already been developed for the HCEI, and to expand and accelerate the start of important projects. Once the plans were set, a number of months were spent working alongside the Department of Energy through the challenges well known to many, the National Environmental Policy Act (NEPA), Buy American, Davis-Bacon and other issues not foreseen in the spring 2009.

Additionally, the State of Hawaii has endured significant budget pressures, reductions in force and furloughs, which were necessary under the circumstances, but made for a challenging environment in which to move rapidly. After receiving final guidance from the U.S. DOE in December 2009, our team set to finalizing the agreements and obligating the funds. In an adverse environment, our team has met every goal which the U.S. DOE has set, including just last week, the goal of 85 percent obligation of State energy program funds by June 30, 2010.

So Recovery Act funding has been a tremendous catalyst to fueling energy transformation, especially in a period when financial resources have been constrained, both in the State and private sector budgets. The time spent in 2009 aligning the spend plan to both long-term transformation and short-term recovery objectives has been shown this year to have been time well spent.

Several great examples of the impact of Recovery Act energy funds in Hawaii may be found in our written testimony. If we have time I'd like to highlight one example. The appliance rebate program was announced at a press conference on May 13 and officially launched on May 24, 2010. It offered consumers a \$250 rebate to trade in an older inefficient refrigerator and replace it with a new ENERGY STAR refrigerator. The old refrigerator was hauled away and delivered to a recycler. New ENERGY STAR qualified refrigerators employ 50 percent less energy than ones made just 10 years ago, so replacing a single 10-year-old refrigerator can save island residents between \$1,700 and \$2,000 over its 15-year lifespan. The rebate was available for a total of 4,356 refrigerators state-

wide, and nearly 4,000 were sold on the very first day. Please note that while \$1.2 million of stimulus funding was committed directly to consumers under the program and the merchandise has moved, the U.S. DOE has been invoiced for less than \$100,000 due to the lag times in these—these types of programs.

Likewise, for other projects described in the written testimony, funding is obligated, hiring is in progress, and work is underway. So Recovery Act energy funds are being spent at an opportune time. While the pain of high oil prices is still being felt, displaced workers are excited about new energy opportunities, and the images of the gulf oil spill remind us of the importance and urgency of developing our alternatives.

Hawaii's success in achieving and exceeding the HCEI goal of 70 percent clean energy will not only attain energy security, independence, and economic vitality for the State and its residents, but will serve as a model of energy system transformation for other States, regions, and nations.

Thank you for your support of Hawaii's energy transformation and for the opportunity to testify.

Chairman INOUE. Thank you very much.

Ms. TOME. Thank you.

[The statement follows:]

PREPARED STATEMENT OF MARIA TOME

The State Energy Office of the State of Hawaii Department of Business, Economic Development, and Tourism (DBEDT) appreciates the opportunity to submit testimony, with input from the U.S. Department of Energy (USDOE), to the Committee.

This statement will cover the Hawaii portions of the energy formula grants under the American Recovery and Reinvestment Act of 2009 (ARRA) as well as input from the USDOE regarding competitively awarded projects to be deployed in the State of Hawaii.

This submission is organized into the following sections: Hawaii's Total Energy Formula Funding under the Recovery Act (ARRA); Strategic Approach for Building the Expenditure Plan; Formula Funding Expenditure Project Plan and Status; and U.S. Department of Energy Competitive Grants in Hawaii.

HAWAII'S TOTAL ENERGY FORMULA FUNDING UNDER ARRA

State Energy Program (SEP) DE-FOA-0000052—\$25.93 million.

Energy Efficiency and Conservation Block Grants (EECBG) DE-FOA-0000013—\$15.1 million total (\$9.6 million to State; \$5.5 million to Counties).

State Energy Efficient Appliance Rebate Program (SEEARP) DE-FOA-0000119—\$1.236 million

Weatherization Assistance Program (WAP) Formula Grants DE-FOA-0000051—\$4.04 million.

Energy Assurance Programs:

—Enhancing State Government Energy Assurance Capabilities and Planning for Smart Grid Resiliency DE-FOA-0000091—\$318,000.

—State Electricity Regulators Assistance Funding DE-FOA-0000100—\$782,000.

Total Formula Funding \$47.38 million

The purposes of ARRA energy funding are “[T]o preserve and create jobs and promote economic recovery; to assist those most impacted by the recession; to provide investments needed to increase economic efficiency by spurring technological advances in science and health; to invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits; and, to stabilize State and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive state and local tax increases.”

ARRA—*State Energy Program (SEP)*

Goals: The existing goals of the long-standing State Energy Program (SEP) are to:

- Increase energy efficiency to reduce energy costs and consumption for consumers, businesses and government;
 - Reduce reliance on imported energy;
 - Improve the reliability of electricity and fuel supply and the delivery of energy services; and
 - Reduce the impacts of energy production and use on the environment.
- The goals of the additional ARRA funds allocated to the SEP are to:
- Stimulate the creation or increased retention of jobs;
 - Save energy (kWH/therms/gallons/BTUs/etc.);
 - Increase energy generation from renewable sources; and
 - Reduce greenhouse gas emissions.

ARRA—Energy Efficiency and Conservation Block Grants (EECBG)

Purpose: The purpose of the EECBG program is to assist eligible entities in creating and implementing strategies to achieve the following:

- Reduce fossil fuel emissions in a manner that is environmentally sustainable and, to the maximum extent practicable, maximize benefits for local and regional communities;
- Reduce the total energy use of the eligible entities; and
- Improve energy efficiency in the building sector, the transportation sector, and other appropriate sectors.

ARRA—State Energy Efficient Appliance Rebate Program (SEEARP)

Purpose: The Appliance Rebate Program Objectives are:

- Save energy by encouraging appliance replacement through consumer rebates.
- Make rebates available to consumers.
- Enhance existing rebate programs by leveraging ENERGY STAR national partner relationships and local program infrastructure.
- Keep administrative costs low while adhering to monitoring and evaluation requirements.
- Promote state and national tracking and accountability.
- Use existing ENERGY STAR consumer education and outreach materials.

ARRA—Weatherization Assistance Program Formula Grants

Purpose: The Weatherization Assistance Program (WAP) objective is to increase the energy efficiency of dwellings owned or occupied by low-income persons, reduce their total residential expenditures, and improve their health and safety. The WAP priority population is persons who are particularly vulnerable such as the elderly, persons with disabilities, families with children, high residential energy users, and households with high energy burdens.

ARRA—Enhancing State Government Energy Assurance Capabilities and Planning for Smart Grid Resiliency (DE-FOA-0000091)

Purpose: The following activities shall be addressed when structuring projects under this funding opportunity:

- Create in-house expertise at the State level on energy assurance planning and resiliency, focusing on Smart Grid.
- Develop new, or refine existing, Energy Assurance Plans to incorporate response actions to new energy portfolios, including Smart Grid technologies.
- Revise appropriate State policies, procedures and practices to reflect the Energy Assurance Plans.
- Develop and initiate a process or mechanism for tracking the duration, response, restoration, and recovery time of energy supply disruption events.
- Train appropriate personnel on energy infrastructure and supply systems and the content and execution of energy assurance plans.
- Conduct energy emergency exercises (intra and interstate) to evaluate the effectiveness of the energy assurance plans.

ARRA—State Electricity Regulators Assistance Funding (DE-FOA-0000100)

Purpose: ARRA funding for electricity sector activities and initiatives will significantly affect utility investment in the electric power sector. State Public Utility Commissions (PUCs) will be involved in implementing key facets of ARRA electricity-related initiatives. To ensure that PUCs can meet the demands caused by the increased workload required to fully address the electricity sector initiatives included in the ARRA, the USDOE made funding available to PUCs to hire additional staff so they can ensure appropriate technical expertise will be dedicated to regulatory activities pertaining to ARRA electricity-related initiatives. The intent of the funds made available through the ARRA State Electricity Regulators Assistance Initiative is to supplement, not supplant, normal state appropriations for PUC staffing,

expressly for the purpose of addressing the significant increase in PUC workload created by ARRA electricity-related initiatives.

STRATEGIC APPROACH FOR BUILDING THE EXPENDITURE PLAN

In January 2008, the State of Hawaii, in partnership with the U.S. Department of Energy (DOE), announced the Hawaii Clean Energy Initiative (HCEI), which sets an ambitious goal of moving Hawaii to 70 percent clean energy by 2030. Analysis and planning to achieve this 70 percent clean energy objective has been underway for the last 30 months. This HCEI objective is the overarching policy and implementation framework for planning the expenditure of ARRA's energy funding. The goal in utilizing ARRA energy funding is to catalyze significant progress in many of the components of HCEI. Achieving this alignment was accomplished through the efforts of many HCEI partners and stakeholders.

Hawaii's ARRA funding expenditure plan was developed after broad consultation to ensure that it supplemented HCEI and other related initiatives already underway. Specific attention was paid to the DOE's and national laboratories' annual operating plans to ensure that the state's spending plan complemented but did not duplicate intended Federal expenditures.

Beginning in February and continuing through July 2009, meetings were held with energy sector stakeholders to discuss priorities and to build awareness of the spending plans. The plan also received input and guidance from HCEI Working Groups' recommendations and from HCEI partner projects. Potential technical support from the national laboratories was also factored in. Central to this planning effort was focus on augmenting programs and processes already in place in order to speed deployment of the funds into the market. In April, a meeting of Hawaii's key energy community members and agencies which are funding energy projects was held to construct a "landscape" of existing initiatives into which ARRA funding could be deployed. Briefings were provided by the Department of Defense, the University of Hawaii, the Pacific International Center for High Technology Research, electric and gas utilities, and state agencies such as the Department of Accounting and General Services and the Department of Hawaiian Home Lands, among others. The existing goals and budgets of these agencies were taken into consideration when drafting the ARRA plan in order to avoid redundant efforts.

The objective has been to create a plan which integrates multiple Hawaii energy sectors, each of which has multiple formula funding sources. Planning and analysis focused on identifying opportunities to enhance projects which fit Hawaii's strategic plan, which have a sound basis and rationale, and which can be implemented quickly to obtain measurable results.

The complexity of Hawaii's energy system and programs makes a comprehensive effort challenging, but a thoughtful and inclusive approach, as undertaken in developing this plan, is essential to its success.

ARRA has been a tremendous catalyst to fueling energy transformation, especially in a period when financial resources have been constrained both in the state and private sector budgets. The time spent in 2009 aligning the spend plan to both long term transformation and short term recovery objectives has been shown this year to have been time well spent.

FORMULA FUNDING PROJECT EXPENDITURE PLAN AND STATUS

Formula funding project spending plan summary:

- SEP—Energy Efficiency Programs—\$7,990,280
- SEP—Electric Power and Renewable Programs—\$9,663,425
- SEP—Transportation Programs—\$5,292,357
- SEP—Clean Energy Policy—\$780,227
- SEP—Communication and Outreach—\$1,084,000
- SEP—Administration—\$1,119,711
- EECBG—State Portion—\$9,593,500
- SEEARP—Energy Efficient Appliance Rebate—\$1,235,985
- Energy Assurance Programs—\$1,100,000

State Energy Program (SEP) ARRA Grant—\$25,930,000

The State Energy Program is managed by the Department of Business, Economic Development, and Tourism (DBEDT). The Director of DBEDT is the State Energy Resources Coordinator. Within DBEDT is the Strategic Industries Division, which functions as the Hawaii State Energy Office.

Significant deliverables under this Recovery Act grant include: Energy Efficiency Programs; Electric Power and Renewable Energy Programs; Transportation Energy Programs; Education and Outreach; and Clean Energy Policy.

The expenditure of ARRA funds has focused on wisely using these resources to target strategic market interventions that can cause permanent structural change; identify opportunities for better integration of initiatives for technology deployment and market transformation; and promote collaboration across public and private agencies.

These market interventions are expected to provide energy savings and renewable energy generation as follows per market area:

- Buildings: 49,000 MBtus
- Electric Power & Renewable Energy: 4,023,000 MBtus
- Transportation: 37,000 MBtus

We have met the USDOE's goal of 85 percent of SEP funding being obligated by June 30, 2010, and are on track to meet the goal of 100 percent obligation prior to September 30, 2010.

SEP—Energy Efficiency Programs

Energy efficiency programs provide quick economic stimulus through employing local construction industry personnel in projects to retrofit existing buildings or to install energy-efficient equipment. Reduced energy costs are realized quickly and the savings can be directed to growth, investment, and employment.

High Performance Buildings Program—\$800,000

The goal of this program is to accelerate adoption of highly energy-efficient buildings. Buildings account for 72 percent of electricity consumed in the United States, produce 38 percent of all carbon dioxide emissions, 40 percent of raw materials use, 30 percent of waste output (136 million tons annually), and 14 percent of potable water consumption. The strategy will include providing technical assistance and training to building owners, developers, design professionals, and county building code officials to ensure that new and renovated buildings are designed and built with high efficiency and do not compromise our energy future. We are bringing buildings to Energy Star and Leadership in Energy and Environmental Design (LEED) standards.

The U.S. Environmental Protection Agency established an Energy Star buildings program which allows building owners and managers to “benchmark” or identify energy use per square foot, compare building performance to a national standard, and to receive certification of the energy efficiency of their buildings. Energy Star buildings are in the top 25 percent of building performance. Our goal is to ensure that as many buildings meet the Energy Star standard and make improvements to meet Energy Star standards.

Our strategy also includes building design and operations to meet a higher and more robust efficient building standard which has international recognition, provides third party verification for performance, and is included in the Governor's Administrative Directive 06–01 to state agencies. This standard is Leadership in Energy and Environmental Design. Buildings built or renovated to LEED (Silver Standard) are generally 30 percent more energy efficient.

Support updating and adoption of a higher efficiency building code. The State of Hawaii has adopted the International Energy Conservation Code (IECC) of 2006; we are targeting adoption of IECC 2009 by the end of this year.

Funds for these projects are 90 percent obligated. Approximately 10 percent of the work has been completed. Two contracts have been executed with kick off meetings planned for July. The third contract has been awarded and will be executed this quarter.

The 10th Annual Build and Buy Green Conference¹ was completed in May; it featured 42 speakers and 47 exhibitors and attracted 350 attendees.

Government & Residential Energy Efficiency Programs—\$6,865,280

The residential efficiency program supports the U.S. Department of Energy's Weatherization Assistance Program (WAP), which services qualified low-income households. Our funds will expand the WAP program measures by providing education, audits, and the installation of high efficiency residential appliances. (\$500,000)

A project with the Public Utilities Commission supports activities of the Public Benefits Fee program, expanding and accelerating the energy savings significantly for electric utility customers on Oahu, Maui, Molokai, Lanai, and Hawaii islands. (\$6,165,280)

A project with the Kauai Island Utility Cooperative expands and accelerates the energy savings for electric utility customers on Kauai. (\$200,000)

¹http://hawaii.gov/dbedt/info/energy/efficiency/bbg/index_html.

We initiated the very popular statewide rebate program for replacement refrigerators which, in combination with ARRA-State Energy Program and the ARRA-State Energy Efficiency Appliance Rebate Program, resulted in about 8,000 Energy Star refrigerators purchased in 1 month.

Funds for these projects are 100 percent obligated; work has begun and is approximately 15 percent completed.

Hospitality Sector Energy Efficiency Program—\$325,000

The strategy for this program is to develop an assessment to attract financing for a sea water air conditioning chilled water loop for Waikiki hotels. The Greening of Waikiki provides a stronger marketing edge and operating/economic efficiencies for a major Hawaii attraction. A Waikiki Roundtable event bringing together major Waikiki hotel managers and engineers to present the program has galvanized hotel interest. Our analysis shows that there are already six Energy Star hotels and over 4 million square feet of hotel rooms and grounds that meet Energy Star. A sea water air conditioning project would make Waikiki a first in the nation.

Project has been expanded to include hotels statewide and a contractor for Energy Star benchmarking and verification has been selected per state procurement requirements. A kickoff meeting will be scheduled very shortly.

Funds for this project are 40 percent obligated. Work has begun, and is approximately 5 percent complete.

SEP—Electric Power and Renewable Energy

Electric Power and Renewable Energy programs attract investment to transform Hawaii's energy system to be less reliant on petroleum (and less vulnerable to oil price shocks) and more reliant on locally-available energy sources with more stable costs. Attracting investment to Hawaii can assist with its economic recovery, while reinvesting in Hawaii's electricity and fuel generation and distribution systems for improved economic stability.

Renewable Energy Program Support

To meet at least 40 percent of Hawaii's energy needs with renewable sources (solar, wind, wave, OTEC, geothermal, hydropower, and bioenergy) by 2030, as required by State statute, multiple successful projects—properly sited, cost-effective, publicly accepted, effectively permitted, and interconnected—will be needed.

Support will be provided to tip major projects currently in the pipeline toward accelerated completion; assist with identifying and completing project permitting requirements in an efficient and effective manner; facilitate communication with renewable energy project developers, landowners, investors, environmental groups, the public, and others; enable interconnection, conversion, and storage of renewable energy; document project success and lessons learned; provide information, guidance, and case studies to other project developers and the public; and facilitate the transfer of credible and current information on the long term costs, benefits, and realistic assessments of technologies from and to Hawaii's residents, decision-makers, landowners, media, and the public.

To accomplish this work, positions have been created; staff has been hired; and work is proceeding on solar energy support; wind energy support; renewable energy resource assessment, data analysis, and technology assessments of wave, ocean thermal energy conversion, geothermal, hydropower, bioenergy, and energy storage; collaborative efforts with Federal, State, and County agencies; and providing information and meeting with project developers, researchers, land owners, teachers, students, and the general public on renewable energy issues and opportunities.

Additional renewable energy support projects include:

e-Permitting Portal—\$375,000.—In this project, an on-line permitting service is created for all Hawaii State Department of Health (DOH) permits and regulatory approvals required for renewable energy projects. Users will be able to create individual permit files and track the processing status of their permit applications.

The funds have been 100 percent obligated following finalization of the contract on May 25, 2010. DBEDT, DOH, and Windsor Solutions—the contractor retained to conduct the technical work—have scheduled project kick-off meetings the entire week of July 19, 2010. Windsor has already begun work on this project.

Permitting Guidebooks and Online Information—\$150,000.—Funds for this project will be used to complete the Hawaii-specific renewable energy permitting guidebooks for each of the main renewable energy technologies and for each of the Counties. The contractor will provide an overview of Federal, state, and county permitting requirements and enable access to the permitting guidebooks on-line. In addition to providing links to the permitting and approving agencies, users will be able to create individual project files, or “permit plans,” to identify the necessary permits and estimate project development timelines.

The solicitation for this contract is being finalized and will be released soon. Work is scheduled to begin in September, 2010.

Energy Storage Project to Demonstrate Renewable Energy Support Technologies—\$1,800,000.—Energy storage is expected to play a critical role in helping Hawaii reduce its dependence on the use of fossil fuels; provide support for intermittent energy sources; and increase the use of renewable energy. Energy storage could help to diversify Hawaii's energy sources and improve price predictability, stability, and energy security for Hawaii's electric utilities and energy consumers.

This project will demonstrate the use of energy storage on the electrical grid to provide grid stability and support, to "tip" intermittent energy projects from concept into reality by the development of technical solutions to interconnection concerns.

Funds will be used to support the purchase and installation of two energy storage systems at locations on the Maui Electric Company (MECO) and Hawaii Electric Light Company (HELCO) grids with high penetrations of renewable distributed generation.

The installation of commercially-available energy storage systems on these grids will improve understanding of the use of energy storage to increase the penetration of renewable energy on Hawaii's electrical grids, ultimately leading to an increased ability of the electrical distribution systems to accept higher levels of renewable distributed generation such as wind and solar and the attraction of private sector investment in renewable and energy storage systems.

With adequate levels of dispatchable energy storage, higher penetration of intermittent resources, such as photovoltaics, will be achievable; grid resiliency and reliability will be improved; and additional renewable energy investments can be expected.

We are working with the utility to refine the scope of the project, and will seek input from the national laboratories on technical aspects of the energy storage system specifications. The funds are to be fully obligated by the end of July.

Support for Interisland Cable

The interisland cable has been identified as an essential component of Hawaii's energy future. An interisland cable would increase access to renewable energy projects statewide, which could lead to consumer and business cost savings, as well as improved energy security and grid resiliency.

One of the important benefits that could be realized with an inter-island cable is better use of the excellent wind energy resources which are available in certain areas of Hawaii. Wind energy is one of the lowest cost of the proven and mature utility—scale renewable energy technologies.

Although Hawaii's power grids are not yet interconnected, there are several interisland telecommunications cables already interconnecting the islands. Undersea power cables are in use in other states and countries. ARRA funding will support initial studies, environmental surveys, and other non-construction aspects of interisland cable development. Specific projects include:

Cable Special Deputy Attorney General—\$200,000.—This contract will aid the State of Hawaii in the development of the interisland cable by advising on legal, regulatory, business, financing, and strategic decisions. This funding will reduce risk for the State and consumer, and shorten the timeline for getting the undersea cable in place.

Funds are 100 percent obligated; contract has been executed; work has begun.

Cable Subject Matter Expert—\$500,000.—This contract will aid the State of Hawaii in the development of the interisland cable by providing advice based on experience in development of undersea power transmission cables. This funding will reduce risk for the State and consumer, and shorten the timeline for getting the undersea cable in place.

Funds are 100 percent obligated; contract has been executed; work has begun.

Request for Information—\$50,000.—This project enabled the State of Hawaii and the Hawaiian Electric Company (HECO) to collect information regarding the financing and development of the interisland cable via a cable developers' conference. The results of the RFI will be used in the Request for Proposals (RFP) for the interisland cable. This will directly reduce ambiguity and cost for the cable.

Funds are 100 percent obligated; contract has been executed; work is substantially complete.

Technical Assistance for Cable Interconnection—\$500,000.—This project will provide expertise and assistance on technical and interconnection aspects of the interisland cable project. This funding will reduce the risks for the State, consumers, and potential project developers, and reduce the project and financing costs by providing independent information on technical alternatives.

These funds are expected to be obligated in August.

Interisland Cable Environmental Impact Statement (EIS)—\$2,997,947.—This contract will provide required environmental review documentation to satisfy the requirements of the National Environmental Policy Act (NEPA) and the Hawaii Environmental Policy Act (HEPA) for both a programmatic EIS for the Interisland Wind project and also project-specific environmental analyses for the Interisland Cable based on the alternatives selected. As part of the EIS, the consultant team will examine impacts on cultural resources; historic and archeological resources; socio-economic impacts; coastal aquatic ecology; endangered, threatened and protected species; coral reef ecology; whales and marine mammals; wildlife and fisheries biology; water quality; ecological and human health; offshore habitats; essential fish habitats; visual impacts; preferred routing alternatives; and other issues. The EIS work will also include rigorous public involvement on the affected islands through a comprehensive public outreach and participation process.

Funds are 100 percent obligated; contract has been executed; work has begun.

Undersea Cable Ocean Floor Surveys—\$300,000.—This project conducts ocean floor surveys for the proposed deep water undersea cable route south of Oahu, collecting side-scan sonar data, high resolution near-bottom bathymetry data, and sub-bottom sonar data, accurately positioned with a short baseline acoustic navigation system. A website disseminates the data from the surveys and provides access to maps, features, images and video.

Funds are 100 percent obligated; contract has been executed; work is largely complete.

SEP—Transportation Energy Transformation Program

This project plans and implements actions to transform Hawaii's transportation energy supplies from 95 percent petroleum-based liquid fuels to a variety of locally-available energy sources including renewable electricity and biofuels. The transportation energy diversification project will ready Hawaii for significant deployment of electric drive vehicles and other advanced transportation energy technologies, as well as the development of locally produced fuels.

To accomplish this work, positions have been created; staff has been hired; and work is proceeding on vehicles; fuels; agri-bioenergy assessments; collaborative efforts with Federal, State, and County agencies; and providing information and meeting with project developers, researchers, land owners, teachers, students, and the general public on transportation energy, vehicle, and fuel-related issues. Additional transportation energy support projects include:

Hawaii EV Ready Program—\$4,024,780

This program provides grants and rebates for the installation of electric vehicle chargers and the purchase of new, commercially-available full-speed electric motor vehicles. Result: 1,000–5,000 electric vehicle chargers installed and 200–600 electric vehicle purchases supported by grant and rebate funds.

Funds for this project are 100 percent obligated. \$1,024,780 has been allocated for the rebate program; \$3,000,000 is available for grants. The allocation between grants rebates may be adjusted based on the needs of the market in this highly dynamic time for electric and other advanced technology vehicles.

The Grant Opportunity Announcement, released on June 9, 2010, invites grant applications from Hawai'i businesses, nonprofit organizations, and State and county government entities to support the installation of commercially available and standard-compliant electric vehicle (EV) charging equipment and to accelerate the adoption of full-speed electric motor vehicles in Hawai'i. The application due date is July 26, 2010, 11 AM Hawaii Time. Selected projects are to be announced August 31, 2010.

The Hawai'i EV Ready Rebate Program, scheduled to begin in August of 2010, will provide rebates for Hawaii residents, businesses, State and County agencies, and nonprofit entities for the initial purchase of new, commercially available electric vehicles for use in Hawaii and for the purchase and installation of commercially available charging equipment in Hawaii.

More information and documents are available at <http://electricvehicle.hawaii.gov>.

State Fleet Program—\$475,500

This program supports State infrastructure and vehicle fleet demonstrations and transformation, providing funds for vehicles and infrastructure. Result: deployment of electric vehicles in State fleets and installation of charge stations in State owned facilities.

Funds for this project are 100 percent obligated. The Department of Accounting and General Services (DAGS) operates the Hawaii State motor pool and will be using the funds to acquire electric, plug-in hybrid electric, advanced technology, or alternative fuel vehicles and to install electric vehicle chargers. DAGS will assist

Hawaii State government agencies to lead by example through acquisition of electric or plug-in hybrid electric vehicles and to comply with statutory requirements for electric vehicle parking at state facilities, including parking lots, in accordance with Act 156, Session Laws of Hawaii 2009.²

Transportation Energy Transformation Strategy—\$60,000

This project includes public input and participation in vehicle, fuel, and food project development via websites, e-mails, personal communication, presentations, and reports; collecting data and documenting success; and developing, directing, and participating in collaborative bioenergy, integrated agricultural and energy analysis, and food-and-fuel development tasks.

In addition to the work described above, DBEDT is participating as a member of the Center for Bio Energy Research and Development (CBERD), established in September 2008 with an award from the National Science Foundation through the Industry/University Cooperative Research Center program. The University of Hawaii was selected as one of five participating university sites along with the South Dakota School of Mines and Technology; Kansas State University; State University of New York at Stony Brook; and North Carolina State University. Second year funding was received in September 2009. CBERD provides a valuable service for the identification of solutions and provides a forum for understanding of Hawaii's unique bioenergy crop, by-product, and scale needs. The Center will focus on aspects of life cycle analysis—from raw material acquisition through production, use, end-of-life treatment, recycling, and disposal—of bioenergy feedstocks. The goal of the current projects are (1) to conduct a net energy analysis of a plantation-scale Eucalyptus production system, and (2) to identify the carbon and greenhouse gas implications of utilizing existing Eucalyptus trees for bioenergy production. Activities by the Center support and extend recent advances made by industrial partners. On June 8, 2010, the State Energy Office signed a contract to contribute \$20,000 annually for three years in support of the Center.

Funds for this project are 100 percent obligated.

Clean Energy Policy—\$780,227

This project supports, coordinates, facilitates, engages, and participates in Hawaii Clean Energy Initiative activities, programs, and plan development to ensure the achievement of the Clean Energy Goal of transforming Hawaii to a clean energy economy consistent with the State's energy goals and policies provided under Section 226–18, Hawaii Revised Statutes.

Funds for this project are 100 percent obligated. Work has commenced and is proceeding at an accelerated pace. We are on track to complete the work needed and fully expend the funds.

SEP—Education and Outreach

Communications—\$500,000

Provide information to the public, decision-makers, the media, investors, project developers, private sector, nonprofit, government entities about Hawaii's progress in renewable energy and energy efficiency programs, policies, goals, economic development opportunities; provide information on the use of energy-efficient and renewable energy technologies including solar, wind, hydropower, wave energy, ocean thermal energy, geothermal, interisland cable, transportation, electric vehicles, fuel cells, building efficiency, and energy conservation; encourage input and provide information on energy policies and planning (FiT, decoupling, etc.); and provide information on energy project financing and funding. Provide information to the media (i.e., radio, television, print interviews, news segments/articles, news conferences, special events, etc.); local, national and international energy industry representatives; property owners; business, community, government, military, and other stakeholders; and the general public. Provide website content and updates for consumers, businesses, government, military, community and education sectors.

Funds for this project are not obligated at this time as we are going through the procurement process and anticipate a contract being signed in August 2010.

Energy Conference Services—\$160,000

Under a UH Conference Center contract, the State will provide technical assistance, training, and public education activities to encourage the use of energy-efficient and renewable energy technologies. In order to maximize grass-roots and business support, we will work with UH Conference Center to assist with conferences,

² http://www.capitol.hawaii.gov/hrscurrent/Vol05_Ch0261-0319/HRS0291/HRS_0291-0071.htm.

workshops, and/or meeting logistical needs such as registration, speaker coordination, audio visual, etc. As part of the State's business-to-business goal, Hawaii must continue to showcase energy projects and programs in order to stimulate job growth and economic development opportunities.

Funds for this project are 100 percent obligated; contract signed on June 15, 2010.

SEP—Administration

Administration of the State Energy Program ARRA funds includes Program oversight, coordination, management, procurement, contracting, accounting, and reporting in accordance with Federal and State requirements.

Funds for this task are 100 percent obligated. Work has commenced and is proceeding at an accelerated pace. We are on track to complete the work needed and fully expend the funds.

EECBG—Energy Efficiency and Conservation Block Grant—\$9,593,500

DHHL Homestead Energy Program—\$2,900,000

The Department of Hawaiian Home Lands (DHHL) is partnering with DLIR Office of Community Services in assisting DHHL homestead communities. The project covers 400 homestead homes and will be conducted over a period of 18 months. Included are conducting home energy audits and assessments; delivering energy efficiency and conservation education/training; and retrofitting/installing homes with solar water heating systems and energy-efficient lighting.

Funds are 100 percent obligated. Contracts are in place; work has begun.

Department of Accounting and General Services (DAGS): “PV on State Buildings”—\$2,970,000

Funds will be used for the installation of photovoltaic (PV) systems as a demonstration and educational project involving a renewable energy technology that will reduce State consumption of electrical power generated with fossil fuels. The DAGS goal is to achieve 40 percent reduction in energy consumption for State office buildings under its management and control.

Funds are 100 percent obligated. Contract is in place; work will begin at the end of July, 2010.

KIUC Customer Energy Efficiency Project Augmentation—\$200,000

These funds are allocated to KIUC through DBEDT to offer the customer energy efficiency rebate programs for government and nonprofit buildings on Kauai. These funds are in addition to the \$200,000 KIUC customer energy efficiency project.

Funds are 100 percent obligated; contract is in place; work will begin soon.

DBEDT Innovative Clean Energy Financing—\$2,922,928

The innovative clean energy financing initiatives support public adoption of energy technologies by overcoming market barriers; i.e. up-front economic costs and risks, through financing mechanisms such as Property Assessed Clean Energy and Loan Loss Reserve Fund.

The “Property Assessed Clean Energy” (PACE) program is a local government (County) level retrofit financing program providing property owners with a more desirable retrofit capital option than otherwise available. In addition to leading to a significant number of energy saving retrofits, this activity will serve as a model for future retrofit financing programs throughout the state. The participating Counties will be chosen based on interest and willingness to accelerate program implementation and desire to continue operating the program into the future. Funds provide initial capital for the program to enable financing of retrofits to an estimated 110 homes; the program is intended to enable the participating Counties to attract private capital for subsequent retrofit cycles. Using the DBEDT “I-O Model Type 2 (2010)” multiplier, this grant will generate \$1.3 million in direct, indirect and induced income to Hawaii's economy, and 23 job-years over the grant duration.

The “Loan Loss Reserve Fund” will be used to expand the capital available to fund building retrofits and energy improvements across all building segments by creating and funding a loan loss reserve fund. This will provide support for the large market for energy efficiency and renewable energy loans that banks have been slow to respond. This will leverage private investment. Moreover, by mitigating the risk associated with these loans, Hawaii will help borrowers gain access to lower cost capital than would be possible without the reserve leading to more attractive interest rates for the supported loan products. Once banks have sufficient data to confidently assess the risks associated with energy efficiency and renewable energy loans, they can develop underwriting criteria for determining the associated risk and resulting pricing.

DBEDT EECBG Administration—\$600,268

Funds have been allocated to two administrative positions and miscellaneous expenses to assist with the administration of the EECBG funds.

SEEARP—State Energy Efficient Appliance Rebate Program—\$1,236,000

The Hawai'i Energy Efficient (Energy Star) Appliance Rebate Program, marketed as "Trade Up for Cool Cash" and "Replace, Recycle, Save," was a riveting success statewide. The program, which was announced at a press conference on May 13, 2010, and officially launched on May 24, 2010, targeted the replacement of older, inefficient refrigerators with qualified Energy Star rated appliances by offering consumers a \$250 rebate. Consumers were required to trade-in their older operating refrigerator, preferably their oldest one, which was then hauled away and delivered to a recycler. The Public Utilities Commission-Public Benefits Fee Administrator, Hawaii Energy, managed the appliance rebate program for the Counties of Honolulu, Maui, and Hawai'i, while Kauai Island Utility Cooperative (KIUC) handled the rebates for Kauai County.

The rebate was available for a total of 4,356 refrigerators statewide, and nearly 4,000 were sold on the very first day. An additional 4,000 rebates for Energy Star refrigerators, following SEEARP criteria, were made available through another source of ARRA funding, on all islands except Kauai. Retailers saw a large increase in business, along with their delivery divisions and the recycling companies, but the actual level of job creation is unknown. KIUC's informal poll of the retailers, delivery companies, and recycling company on Kauai concluded that there wasn't enough sustained activity to create additional jobs, since their program only lasted 5 days. Hawaii Energy budgeted for personnel costs but has not yet reported on jobs created.

Participating retailers played an important part of the program by assisting consumers wanting to participate in the program and in helping them obtain their rebates. These retailers pledged to provide delivery of the new refrigerator and haul away and properly recycle the old refrigerator, making them a "one stop shop" for the rebate program.

Sears is a good example of what retailers did to boost their sales and promotions. The stores opened early on the start date of the program, offered free coffee and pastries to the early-shoppers, and implemented efficient processes to assist customers. Consumers seemed to echo a general feeling that the program provided them with an opportunity to get rid of their old refrigerator—something many had been putting off for some time. Customers who purchased a new refrigerator are also taking a step toward helping Hawaii reduce its dependence on oil and fossil fuel; and, they're going to be saving money that can go toward other necessities. With such a high level of consumer interest, the program is certain to run through its available rebate applications soon.

The tremendous response to the appliance rebate program is largely due to media interest and heavy coverage. A total of 27 articles were written in print/online media including the Honolulu Advertiser, the Honolulu Star-Bulletin, The Garden Island, Maui News, Hawai'i Tribune Herald, Pacific Business News, and Business Week. Additionally, the program was covered by 17 broadcast television/radio segments, which include KHON2, KITV4, KHNL8, KGMB9, KHPR, and KSSK.

Cooperation and consensus among the State, Hawaii Energy, and KIUC were the keys to accomplishing a program not only benefitting our economy and the environment, but also incentivizing consumers to move sooner rather than later. The underlying goal for this program was to involve everyone, State program managers, the two implementers, consumers, retailers, distributors, haulers, recyclers, print media, television, and radio stations. We wanted to help consumers statewide take full advantage of these funds. As we designed this program, we looked at all the issues at hand, but we never forgot about making the process simple enough for qualified consumers to take advantage of the program, while allowing our implementers to effectively control the roll-out. As a result of this cooperative effort, up-front marketing costs of the statewide program were reduced, allowing more of the Federal funds to be spent for rebates.

Funds for this project are 100 percent obligated. We will be invoiced shortly and funds will be expended soon.

Energy Assurance Formula Grants

This program is intended to increase expertise in regulatory and energy assurance issues related to smart grid and to increase training and staff capability with new technology. Specific projects are:

State Electricity Regulators Assistance Funding—\$782,000

This funding will be used to improve the State Public Utility Commission's (PUC's) ability to gain the expertise required to handle increasingly complex issues associated with Smart Grid technology and the associated regulatory issues. The SERAF program aims to ensure that PUCs can meet the increased demands caused by the increased workloads through the hiring of additional staff. This goes to ensure appropriate technical expertise will be dedicated to regulatory activities pertaining to Recovery Act electricity-related initiatives. The Hawaii PUC was received its award notification in November 2009.

Enhancing State Government Energy Assurance Capabilities and Planning for Smart Grid Resiliency—\$318,000

This funding is to create expertise at the State level on energy assurance planning and resiliency, focusing on Smart Grid; support development of energy assurance planning and plans; train personnel on execution of energy assurance plans; and fund energy emergency exercises to evaluate the effectiveness of the energy assurance plans. Hawaii's Energy Assurance proposal was submitted on July 27, 2009. The awards have been awarded and received.

The Request for Proposals for the contract under this project was released July 1, 2010. In-house work has begun on the project and we are on track to meet program goals, objectives, and timelines.

USDOE RECOVERY ACT PROJECTS

The Recovery Act supports the Department of Energy's diverse research and development (R&D) portfolio, while weatherizing homes, funding Energy Efficiency and Conservation Block Grants (EECBG), and funding the State Energy Program. The latter three investments are making homes, businesses, and towns across the Nation more energy efficient, saving Americans money on their energy bills. Formula grants awarded to Counties under the EECBG program are listed below. In addition to Recovery Act Section 1603 grants in lieu of tax credits, DOE is working with the Department of the Treasury to formulate another program to issue grants in lieu of tax credits for qualified renewable energy projects. Lastly, the Recovery Act expanded the fund for the DOE Loan Guarantee Program to support commercial applications of qualified technologies.

County Block Grants—\$5,474,700

The Energy Efficiency and Conservation Block Grant Program touches communities throughout the United States, highlighting the importance of sustainability at the county and municipal levels. With approval from DOE, the State of Hawaii's EECBG plans at the County level are complete and projects are under development, putting Americans to work and helping move Hawaii toward a clean energy economy. The following four counties highlight some of the EECBG projects Hawaii has underway.

—*City and County of Honolulu—\$3,863,700.*—The six projects include four lighting improvement projects and two solar photovoltaic (PV) system facility installations. These projects have not started as yet. A possible seventh project is being discussed with USDOE.

—*Hawaii County—\$737,800.*—Of the six projects overall, three relate to green retrofits and public education; the funds have been encumbered and the consultants selected. One project addresses financing for energy efficiency and renewable energy; a contract has been issued for this project. One project seeks to improve government operations with respect to sustainability; a contract for this project has been issued. Lastly, a street light retrofit project is still pending.

—*Maui County—\$605,300.*—The 13 total projects include 12 for energy audits followed by solar PV system installations and one project for feasibility of a waste-to-energy facility. Maui County has encumbered \$25,000 related to the energy audit projects.

—*Kauai County—\$267,900.*—To install a solar PV system at a fire station. Phase I is a \$25,000 plan and design phase. Phase II will solicit for the build phase. Currently, Kauai County is awaiting a tax clearance prior to a notice to proceed to the company selected to do the Phase I work.

Recovery Act Competitive Grants

The Office of Energy Efficiency and Renewable Energy and the Office of Electricity and Energy Reliability both supported various competitive grant solicitations related to priority objectives of DOE programs. Several Hawaii-based projects were selected from numerous responses to Funding Opportunity Announcements. These projects include funding of:

- \$25,000,000 awarded to UOP for pilot and demonstration scale biorefineries;
- \$5,500,000 awarded to the Kauai Island Utility Cooperative Smart Grid project;
- \$5,300,000 awarded to the Hawaiian Electric Company Oahu Smart Grid project;
- \$3,000,000 awarded to Phycal for innovative concepts for beneficial reuse of carbon dioxide;
- \$2,500,000 awarded to the University of Hawaii to develop a new cross-disciplinary program focused on areas of clean energy technologies, renewable energy production, storage, integration, and smart grid technologies;
- \$750,000 awarded to HECO for wind energy technology R&D and testing; and
- \$750,000 awarded to Pacific Center for Advanced Technology Training (University of Hawaii Community Colleges) to develop and enhance a career pathway for technicians that will deploy and maintain electric power transmission and distribution through the application of smart grid technologies.

Hawaii Section 1603 DOE/Treasury Grants

As of July 2, 2010, grants have been awarded to 20 statewide projects, totaling more than \$9.4 million.³ These projects include 15 solar electric projects, four solar thermal projects, and one fuel cell project. The grants in-lieu of tax credits program was developed as an alternative to investment tax credits (ITC) and production tax credits (PTC) renewable energy developers received over the last two decades. The erosion of profits of large lending institutions around 2008, eliminated the opportunity to effectively employ the tax credits. The new, Section 1603 grants created by the Recovery Act provided an alternative to ITC and PTC for renewable energy developers. Projects in Hawaii are among about 800 awarded across the Nation spurring private sector investment in renewable energy projects.

Loan Guarantee for First Wind

DOE's Loan Guarantee Program issued a conditional commitment for a loan guarantee to First Wind Holdings, LLC for the construction of a 30 megawatt wind energy facility to be located in the Kahuku area of Oahu. A formal ground breaking ceremony is scheduled for this facility on July 13, 2010. Construction will continue throughout the summer and fall of 2010. If the project is commissioned before January 1, 2011 this it would also be eligible for a Section 1603 grant.

Chairman INOUE. Mr. Roose.

STATEMENT OF LEON ROOSE, MANAGER, SYSTEMS INTEGRATION, HAWAIIAN ELECTRIC COMPANY

Mr. ROOSE. Thank you, Mr. Chairman.

I'd like to first express Hawaiian Electric's appreciation for this opportunity to testify and share with you what we've been doing with our funds and awards we've received. You know, we're very grateful to have been a recipient of approximately \$8.5 million in funds for three projects, three ARRA projects. I'm going to talk about each of them a little bit here.

First project is the one in which we received the largest funding, and that was \$5 million, and it's called our East Oahu Switching Project. This project is essentially designed to utilize new smart grid switching technology on the HECO system, very cutting edge application. It really offers us an opportunity to use a very innovative approach, which will in effect reduce outage time for many of our customers when we have events on our system. It can reduce outage times from hours to minutes, it will significantly lower the implementation costs of the project, which—by roughly about 50 percent based on how we were previously going to do it and how we plan to do it today with the smart grid switching technology. It's going to reduce community impacts, so now we don't have to dig up many streets to put in new lines and infrastructure, again deploying technology as a solution. It will enable the acquisition of

³<http://www.ustreas.gov/recovery/1603.shtml>.

key new skill sets for our utility staff as we move into this future of a more smarter and resilient system.

In particular, this project will create or retain more than 20 jobs on the utility front, and also adds resources from contractors during the planning and implementation stages. It also offers a significant opportunity for HECO to retrain its workforce, again in smart technology solutions. And we really believe that the lessons learned and results from this effort can be utilized to establish, you know, hardware communication, logic foundations for many mainland utilities and applications of a similar manner throughout the country. So I think will really show as a showcase for those kinds of projects.

Another project that we did receive some ARRA funding for was in the amount of \$750,000, and was what we called our Wind Grant. That money was awarded by DOE wind program. We actually got that money back on July 14, 2009. That effort will fund sort of three components, and all three of those are well underway at this point. We're going to be putting out some fairly cutting edge technology to actually forecast the way wind farms and solar, you know, facilities will actually move around as the wind drops off or picks up and the Sun, you know, the amount of solar radiation that is picked up by solar panels changes as clouds move over.

This is a fairly significant issue for utilities in general across the country. And as we increase our penetration of these resources on our system, our ability to effectively operate in that environment is critical. And so the creation of tools like this are really essential for our future operation and keep pushing forward our ability to take on more of this kind of energy.

The second part of the initiative is we're—we're in the process of developing a roadmap for our smart grid future for our utilities. That work is pretty winding up at this point, and we're putting together a documentation of that roadmap. And again, that's a critical element, as that will really establish our foundation as we look forward, not just in the near-term activities, but how they link over the long-term with our initiatives.

And the third area, we're going to be gathering a lot of data from existing facilities that are out there in the field and pulling that data back and giving it to our operators in ways in which they can make good operational decisions. That's another key, sort of, R&D effort, but is crucial as we look forward into the future of our operations.

The third full grant is one that we got very recently, and this was one we worked in conjunction with the University of Hawaii, and it is one we're very proud of. We've got \$2.5 million there, and really a lot of the focus of that money will be to rebuild the curriculum at the University of Hawaii in the Engineering College and beyond that, but in particular in the Engineering College, in the Electrical Engineering Division or department in the area of power—power systems. As a former alumni of the university and having gone to school there, you know, at one time we did have that curriculum at the university. Today it no longer exists. And so this money and initiative is a key part of seeding the restoration of a program at the university to train our future engineers who are going to be vital to us as we move forward into the future in

the power industry and the kind of work that we do at Hawaii Electric.

So again, we find this to be very important, we're working close with the university, we're also providing a lot of staff support. One of the—one of my directors on my staff is going to be serving as an adjunct professor at the university, teaching many of the courses and doing lectures. And they've actually started already this year. It's been very good. Again, this money will help take that to the next level and we can build upon that.

I appreciate the opportunity to testify today and I'd be happy to answer any questions. Thank you.

Chairman INOUE. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF LEON ROOSE

Chairman Inouye and Members of the Committee: My name is Leon Roose and I am the Manager of System Integration at Hawaiian Electric Company (HECO). Thank you very much for the opportunity to brief you in person on the status of Hawaiian Electric Company's projects that have received Federal stimulus funding under the American Recovery and Reinvestment Act (ARRA). HECO is grateful to have been a recipient of these funds as the projects they are funding are helping us to progress towards our clean energy future at a quicker pace.

FOA 58—East Oahu Switching Project (approx. \$5 million)

The East Oahu Switching Project is designed to utilize new smart grid switching technology on the HECO system as a means to reliably and timely restore service to customers after an outage event. In effect, it will intelligently automate high load distribution lines in urban Honolulu. The project offers an innovative approach which will reduce outage times from hours to minutes, lower implementation costs by up to 50 percent and reduce community impacts in comparison to the traditional approach of building new distribution lines, improve safety, and enable acquisition of new skill sets and tools for utility staff.

The new technology to be installed on the HECO grid will address these smart grid characteristics:

- Optimizing asset utilization and operating efficiency of the electric power system. HECO's approach is specifically focused on moving from HECO's distribution grid design of "overbuild for capacity and reliability" paradigm to one of "capacity extension and reliability improvement through monitoring, control, and automation".
- Anticipating and responding to system disturbances by using feeder automation, installing intelligent substation controllers, automated switches, and reclosers to quickly isolate and restore power. This includes advanced control center grid visualization, intelligent information analysis/filtering, and tools for "predictive avoidance" of operational problems.
- Operating resiliently to attacks in the area of cyber security by applying NIST interoperability and cyber security frameworks to the communication backbone used in this project.

The project will secure existing utility "green" jobs and adds resources from contractors during the planning and implementation stages. It also offers a significant opportunity for HECO to retrain its workforce in smart technology solutions. The project exemplifies a significant step in the staged evolution to a smart grid and provides a clear demonstration in support of national smart grid deployment efforts. The lessons learned and results from this effort can be used to establish hardware, communication and logic foundations for mainland utilities and technology vendors throughout the country.

ARRA Wind Grant (\$750,000)

The initiatives funded under this \$750,000 ARRA grant are well underway with various subcontractors engaged in deploying remote sensing equipment (i.e. sodar and lidar) to pilot a real-time ramp event forecasting effort. Three initiatives were funded, all supporting utility focused effort to increase the ability to accommodate more variable renewable technologies such as wind on our island grids.

The first initiative, WindNET as it is called, is supported by AWS TruePower and mainland utilities, SCE, BPA, PG&E and CalISO, all having previously been funded

under Department of Energy (DOE) wind forecasting initiatives known as WindSENSE.

In the second initiative a Smart Grid roadmap is to be completed for the family of Hawaiian Electric Companies (HECO/MECO/HELCO). The development of this roadmap is critical to enabling the effective investment of capital in new smart electrical infrastructure tailored to the needs of the island utility grids. Results and recommendations arising from this initiative which will inform further coordinated work and implementation of smart grid infrastructure.

The third initiative is the integration of grid monitoring and resource data into the operational environment. Hawaii's Big Island utility, HELCO, is leading the piloting of solar, grid based monitoring and visualization capability into the operations environment. Initial pilot efforts will inform the development of refined and tailored pilots and deployment activities funded for HECO and MECO.

FOA 152—University of Hawaii/HECO Workforce Development (\$2.5 million)

HECO is teaming up with the University of Hawaii (UH) under FOA 152, a \$2.5 million workforce development initiative, to initiate responsive and dynamic training programs to develop the existing workforce on clean energy alternatives and improve the workforce pipeline in all sectors from tourism, business, and manufacturing to the Department of Defense. The partnership will leverage industry staff to help train our next generation on energy reliability and provide education and training opportunities to support the education and development of the existing workforce. Through this funding, UH will support reestablishing their power engineering curriculum, internship programs with industry, and broaden educational opportunities to help inform the public. HECO staff will offer support in various initiatives as presenters, adjunct faculty and active feedback to the UH program.

FOA 313—Informing Smart Distributed Management System RD&D Initiatives (approx. \$8.8 million)

HECO just recently submitted its proposal for this 5 year grant. We expect to hear if we have been awarded this grant in the Fall of 2010. As part of this proposal, a multi-disciplinary team of participants including the family of Hawaiian Electric Companies (HECO/MECO/HELCO), Sacramento Municipal Utility District (SMUD), Siemens, BEW Engineering, GL, PowerWorld, University of Hawaii, SAIC, Honeywell, CPower, and Akuacom, has been formed with the goals of supporting utilities in accelerating adoption of reliable transformational technologies and facilitating appropriate consumer behavior modeling and design of capabilities needed to bring an integrated distributed management system (DMS) into operation. We are also looking to support diverse demand-side management (DSM) and consumer energy conservation and efficiency (EC&E) programs.

Three utility focused initiatives, which link together development of accurate distributed resource models and integration capability, design of smarter consumer loads, and demonstration to build user confidence in smart technologies, form the basis of this DMS proposal. The three initiatives include:

Initiative 1—Enhancing Grid Capabilities to Model, Visualize and Control Distributed Resources.—Develop commercially reliable distributed modeling tools and capability to effectively monitor, update, and incorporate a broad spectrum of data (e.g. system, resource and customer) for distributed resources management.

Initiative 2—Engaging Smart Loads.—Build in grid specific customer usage and desired load control characteristics into transmission and distribution planning process, new DMS and DSM energy efficiency programs.

Initiative 3—Building Operational Confidence.—Involve users in a utility-level pilot to demonstrate distributed resource control for grid management utilizing developed models and tools.

The objectives of these initiatives include:

- Developing and integrating into commercially available, utility-based transmission and distribution tools, accurate algorithms for modeling distributed technologies (e.g. inverter-based) and capturing desired attributes (individual or aggregated response) for smart grid operations.
- Evaluating and quantifying appropriate customer usage characteristics and large sector (tourism, residential, military) behavior attributes into utility system models to inform requirements for grid responsive DMS and design of new DSM/EE programs.
- Conducting Sensitivity of Response Analysis (SRA) using new aggregation models to help quantify the level of accuracy and control needed to improve operator confidence in use of DMS for grid operations.
- Developing appropriate pilot implementation of developed models and tools with at least 6 months of demonstration data.

—Gather “lessons-learned” to inform new processes/procedures to best integrate smart technologies for DMS while building operational confidence that improves grid response and reliability.

Thank you again for providing this opportunity to update the Committee on Hawaiian Electric Company’s use of Federal stimulus funds through the American Recovery and Reinvestment Act. I will be happy to answer any questions you may have.

Chairman INOUE. Dr. Rekoske.

STATEMENT OF JIM REKOSKE, VICE PRESIDENT AND GENERAL MANAGER, RENEWABLE ENERGY AND CHEMICALS, HONEYWELL UOP

Dr. REKOSKE. Mr. Chairman, thank you for allowing me the opportunity to appear before you today in your beautiful State. My name is Jim Rekoske, and I’m the Vice President and General Manager for Renewable Energy and Chemicals at Honeywell’s UOP business. It is an honor for me to be here in Hawaii to discuss the Integrated Biorefinery Project in Kapolei. This exciting project is the result of funding made available by the United States Department of Energy under the American Recovery and Reinvestment Act of 2009.

Honeywell proudly supported the American Recovery and Reinvestment Act because we believed it would stimulate the economy and provide jobs through innovative projects like our project in Kapolei. The Department of Energy has funded the construction of a pilot scale production unit that will use local sources in the production of renewable transportation fuels. This project supports efforts to improve United States energy security and reduce greenhouse gas emissions. It will also help grow the U.S. sustainable biofuels industry, create jobs both in Hawaii and throughout the country.

The Integrated Biorefinery project in Kapolei is led by Honeywell’s UOP business, a global leader in the development and licensing of technologies for the production of fuels and chemicals. Today, 60 percent of the world’s gasoline and 85 percent of the world’s biodegradable detergents are made using technology invented and developed at UOP.

Honeywell’s capabilities, however, are much broader and include technologies and solutions that are helping to solve many of the world’s toughest challenges, such as safety, security, energy generation, efficiency, production, and comfort. Nearly 50 percent of Honeywell’s current product portfolio delivers energy efficiency benefits. If immediately and comprehensively adopted today, these products could reduce the country’s energy usage by 20 to 25 percent.

Throughout its history, UOP has played an important role in every major step change in fuel production. Our commitment to and investment in renewable fuels is no different. In 2006, driven by growing concerns over energy security, rising greenhouse gas emissions and the volatility of fuel prices, we began to focus on developing profitable and efficient methods for the conversion of natural oils and wastes to usable fuels.

Our technologies enable the conversion of natural oils, energy crops, and wastes into real fuels that perform as well as, or better than, their petroleum counterparts. These fuels work as drop-in replacements, meaning they can be used without modification to to-

day's established infrastructure, including refineries, storage, delivery, and engine technology.

The advantages of these fuels have been proven in a number of ways. Honeywell green diesel has been used to power automobiles currently available for commercial use. Honeywell green jet fuel, as a 50 percent blend with kerosene, has powered four commercial airlines in demonstration flights, and was most recently used for test flights with the U.S. Air Force and the Navy F/A-18 Green Hornet. In each case, Honeywell renewable fuels met or exceeded existing specifications for petroleum products.

Our technologies are designed to be feedstock flexible to allow use of a wide range of sustainable natural oils including algae, camelina, animal fats and more. These are nonfood feed stocks that do not use land or water currently set aside for food crops. Over the lifecycle of the products, these feed stocks have the potential to reduce greenhouse gas emissions as much as 80 percent compared with fuels made from crude oil.

The Kapolei facility will demonstrate the scalability of technology that converts biomass into a liquid biofuel known as pyrolysis oil and then upgrades this oil to produce green transportation fuels. Honeywell and its partners will evaluate the fuels produced and perform life cycle analysis of the process to fully understand the environmental implications.

A key element to this project is the potential for job creation. Honeywell has hired local firms to support the permit activities and environmental studies needed for construction of the facility. The construction will utilize local labor and stimulate additional jobs throughout the country, as 80 percent of the materials required will be sourced from within the United States. In addition, Honeywell plans to employ local labor to run the day-to-day operations of the facility.

Beyond plant support, there is significant potential for new jobs in the agricultural sector. The site will process a wide range of local feed stocks, including Guinea grass, sugar cane bagasse, algal residues, sorghum by-products, eucalyptus and more. Anticipating long-term success, Honeywell intends to deploy the technology mastered here on a commercial scale. When deployed commercially, each site would enable the production of up to 50 million gallons of renewable fuel annually, and require approximately 800 construction workers to build and 1,000 production workers to operate the value chain.

Validation of the technology in Kapolei will enable commercial-scale biofuel production throughout the United States using sustainable feed stocks suited to each region's environment and economy. We are confident that the success of this facility will mean future green jobs for the American workforce.

Thank you for your time today. We see tremendous momentum as a result of your support and I commend your interest and dedication to these valuable projects.

Chairman INOUE. Thank you very much, Doctor.

[The statement follows:]

PREPARED STATEMENT OF JIM REKOSKE

Senator Inouye, thank you for allowing me the opportunity to appear before you today in your beautiful state. My name is Jim Rekoske, and I am the Vice President and General Manager for Renewable Energy and Chemicals at Honeywell's UOP business. It is an honor for me to be here in Hawaii to discuss the Integrated Biorefinery Project in Kapolei. This exciting project is the result of funding made available by the United States Department of Energy under the American Recovery and Reinvestment Act of 2009.

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Anticipating long-term success, Honeywell intends to deploy the technology mastered here on a commercial scale. When deployed, each commercial site would en-

able the production of up to 50 million gallons of renewable fuel annually, and require approximately 800 construction workers to build and 1,000 production workers to operate.

Validation of the technology in Kapolei will help enable commercial-scale biofuel production throughout the United States using sustainable feedstocks suited to each region's environment and economy. We are confident that the success of this facility will mean future green jobs for the American workforce.

Thank you for your time today. We have seen tremendous momentum as a result of your support, and I commend your interest and dedication to these valuable projects.

Chairman INOUE. Mr. Yamane.

**STATEMENT OF MICHAEL V. YAMANE, P.E., MANAGER, ENGINEERING,
KAUAI ISLAND UTILITY COOPERATIVE**

Mr. YAMANE. Thank you, Mr. Chair. I'm Mike Yumane on behalf of Kauai Island Utility Cooperative (KIUC). You have my written testimony before you, I would just like to briefly highlight some key points.

In July 2009, along with a consortium of 26 electric co-ops in 11 States, KIUC applied for the Department of Energy's Smart Grid demonstration project. The DOE awarded the project total cost of \$67 million in December 2009. The cost of KIUC's project is \$11 million, of which \$5.5 million is being provided by ARRA funds.

The project will involve replacing approximately 33,000 meters with smart meters along with communication infrastructures that will allow two-way communication between the meter. KIUC anticipates procurement of materials at the end of July 2010, and installation of 33,000 smart meters shortly thereafter. The installation of these meters will take approximately 2 years and involved approximately 40,000 man-hours of local electrical labor on Kauai.

During this process KIUC relied heavily on the National Rural Electric Co-op and the Cooperative Research Network (CRN) to meet DOE requirements for procurement, installation, and reporting. KIUC is a small company with limited resources and expertise in this area and fully appreciates the support by the National Rural Electric Cooperative Association (NRECA).

KIUC would also like to express its sincere gratitude to the Senator for your letter of support to the Department of Energy for KIUC on this matter.

Thank you for the opportunity to testify.

[The statement follows:]

PREPARED STATEMENT OF MICHAEL V. YAMANE

Thank you for the opportunity to testify on Kauai Island Utility Cooperative (KIUC) Smart Grid Initiative funded by the American Recovery and Reinvestment Act (ARRA) funds. My name is Michael Yamane, Engineering Manager for KIUC.

In July 2009, KIUC along with a consortium of 26 electric cooperatives in 11 states, and the National Rural Electric Cooperative Association's (NRECA) research arm, the Cooperative Research Network (CRN) applied for the Department of Energy's (DOE) Smart Grid Demonstrations, Enhanced Demand Side and Distribution System Management Project (DE-FOA-0000036).

The DOE awarded NRECA's CRN half of the project's total cost of \$67 million in December 2009 to test and develop technologies that operate together to make the grid more efficient and reliable.

The cost of KIUC's project is \$11 million, of which \$5.5 million is being provided by ARRA funds. The project will involve replacing approximately 33,000 meters with smart meters along with communications infrastructure that will allow two-way communication between the meter and KIUC. This Advanced Metering Infrastructure (AMI) will enable KIUC not only to do meter readings remotely, but also

allow KIUC to demonstrate the effectiveness of load control and demand response options within households, outage management and detection down to the household level, and evaluate different rate designs depending on usage.

The demonstration project, which includes replacing existing meters with new smart meters at members' homes and installing communications infrastructure, will assess smart grid effectiveness, and is estimated to last 5 years; 2 years for installation and 3 years for data gathering and analysis.

The replacement meter is a communication device that communicates via wireless or Power Line Carrier (PLC) system and sends information back to our substations. The communications between our substations and KIUC will use existing fiber optics, Synchronis Optical Network (SONET), to transmit that information back to our office.

KIUC anticipates procurement of materials at the end of July 2010 and installation of 33,000 smart meters shortly thereafter. The installation of these meters will take 2 years and involve approximately 40,000 man-hours of local electrical labor. Installation of associated hardware and software will be occurring concurrently along with the remaining communication infrastructure.

During this process KIUC relied heavily, and will continue to rely heavily on NRECA and CRN to meet DOE requirements for procurement, installation, and reporting. KIUC is a small company with limited resources and expertise in this area and fully appreciates the support by NRECA.

KIUC would also like to express its sincere gratitude for the Senator's letter of support for KIUC on this matter.

Thank you for the opportunity to testify.

Chairman INOUE. Thank you.

As all of us are aware, we pay more for fossil fuel than people in other States. But in a sense it's been a boon to us, because we have been literally forced to get into alternative sources. And, one of the dream projects we have is this cable, transmission cable. But before we can fund that, I think it's obvious that we must be able to prove that the wind energy and solar energy sources are available, that the use can be made and all of them are connected.

What stage are we in now?

Mr. ROOSE. For that project effort, we have been—and I've been responsible for the study efforts at Hawaiian toward that end. We've just completed and wrapped up about 1½ years of intensive technical engineering work to assess and determine how will we integrate that magnitude of wind and operate the system reliably and effectively, to look at the various types of cable configurations that would make the most sense in that interconnect.

You know, that work is basically wrapped up. We've done it with incredible support from the Federal Government through the National Renewable Energy Lab, of the funded, you know, the creation of what we call the technical review committee. We brought in the best and the brightest from around the world, literally, to sit on this committee, and we've had six meetings through that year now to process those studies to help guide, advise, vet the work that was going on. And I think the work product that came out of that is really leading edge, I think it's something, you know, we're writing papers on it and many things.

But, I think through that effort we have figured out how to integrate, how to make it operate. It's going to require investment, not just in the cable but in other things too, because it fundamentally will change the way the system operates.

Chairman INOUE. Is the military a major partner?

Mr. ROOSE. At this point in time, I think the military's role has been in discussions regarding the potential of cable landing sites on

the bases, but those are among the various alternative sites that are being examined.

Chairman INOUE. I think you should seriously consider them and consider Kaneohe and places like that for a landing site, because if the military is fully committed, funding could be a bit easier.

Mr. ROOSE. I see. Yes, and we've been having many meetings with them and there will be many more for sure, and I'll take your advice very well.

Chairman INOUE. Is the State satisfied that all the plots are being all in place?

Ms. TOME. Yes, we are very happy at the new amount of collaboration and cooperation that we're seeing with National Labs coming in and working together to identify the technical issues and find solutions. They've been very, very helpful and the utility has been very cooperative on the development of the energy agreement in October 2008. That was a great step forward, and we're looking forward to continue to work with them on the policy side as well as the technical side and the financial side and get it all together. Because the continued dependence on oil is an alternative that puts us at great risk. And it's nice to see that pretty much everybody is on the same page on that.

Chairman INOUE. Hawaii is ready because we are the first, I think, of the military to use electric buses. We were the first to consider alternative motion terminal energy conversion. And biofuel, I think we're too early in that, as a result the company went bankrupt, but we're trying.

We are very interested in your Kapolei project. When will that be finished?

Dr. REKOSKE. Construction begins in September of this year, and we will have completion of the project and operations should be at the end of 2011. So, first operation should be December 2011 or no later than January 1, 2012.

Chairman INOUE. And you'll have all in this say, ingredients for your operation here in Hawaii?

Dr. REKOSKE. Yes we will, that's the intent. The facility will be contained here in Hawaii, it will be operated by people here in Hawaii, and the raw materials, some of which will be sourced out of Hawaii for conversion, the biomass conversion, but the majority of it will be sourced here from Hawaii.

Chairman INOUE. This Kapolei project, how much will it cost?

Dr. REKOSKE. The grant from the DOE was about \$25 million, and we expect that it's going to be closer to \$35 to \$36 million complete. The additional funds will be supplied by Honeywell, of course.

Chairman INOUE. Well, on Kauai, you know, I want to see people succeed, but the meter, how would it help?

Mr. YAMANE. The direct benefits would be actually the communications. This meter will allow communications back to the utility. Right now we have communications to the substation, so basically you will be able to remotely read the meters, we'll be able to detect outages by household instead of by feeders, pretty much instantaneously, so that's the direct benefit. It's all part of this communication infrastructure. The meter itself is a communication device,

along with some field routers and collectors, all the way to fiber back to the substation.

Chairman INOUE. When will that be in place?

Mr. YAMANE. We anticipate—well, 33,000, that's pretty much our whole island, so anticipate that installation taking about 2 years and then 3 years of reporting, gathering data to see the effectiveness of these devices. So, it's going to be a long process, it's going to take a while, it's going to involve some labor.

Chairman INOUE. How would you say that your project is moving, fast?

Mr. YAMANE. It's going to move fast. The process of going through the grants and the reporting, we've been kind of buffered by that. We've been fortunate that the Nuclear Regulatory Commission (NRC) has been working directly with the DOE, so we've just been providing information from our company standpoint. We're at that point where things are really going to start moving soon, from about 1 month through this year, we're going to ramp up, we're going to look for local contractors to start installation, within house we're going to start installing some routers. So, from this point on, I think it's really going to move fast.

Chairman INOUE. Well, we don't have fossil fuels, but we've got the Sun, the wind, the waves. So, let's take advantage of that. And I think we can count the pilot an example for the world.

So, I thank you all very much.

Our final panel, made up of the District Director of the Hawaii District Office of the Small Business Administration, Ms. Jane Sawyer; the President of Wilson Homecare, Ms. Shelley Wilson; and the co-owner of Rising Sun, LLC, Mr. Brad Albert.

Mr. Albert is not here?

Voice: I believe he was planning to be here. He had to fly in from Maui and we were expecting him about 11:15.

Chairman INOUE. Well, Ms. Sawyer.

STATEMENT OF JANE SAWYER, DISTRICT DIRECTOR, HAWAII DISTRICT OFFICE, SMALL BUSINESS ADMINISTRATION

Ms. SAWYER. Good morning, sir, how are you? It's a pleasure to see you again. Thank you, Senator Inouye. Hawaii small businesses are really fortunate to have such a strong voice in the U.S. Senate. My name is Jane Sawyer and I'm the Hawaii District Director for the SBA.

Here in Hawaii, we have a district office, as well as a strong network of SBA affiliated partners, as you know. This network includes four small business development centers, and one specialty center, and our SCORE chapters with offices on Oahu and Maui, that leverage the wisdom of experienced executives through its mentoring programs.

I want to thank you, Senator, for supporting this team on the ground by passing the Recovery Act. We know these are tough times for small businesses, making the SBA's mission more important than ever. In particular, the Recovery Act targeted the needs small businesses face in accessing capital during the credit crunch. The Recovery Act allowed us to temporarily raise guarantees on 7(a) loans to 90 percent and to reduce or eliminate fees in our flagship 7(a) and 504 loan programs. The SBA has turned just \$680

million in taxpayer dollars into more than \$30 billion in lending to small businesses. That's an excellent bang for the taxpayer buck.

In addition, over 1,300 lenders who had not issued SBA loans since at least 2007, have once again started issuing SBA loans. Obviously, this provides more points of access to capital for small businesses, and that's our experience in Hawaii also. We're seeing great success with these programs here in Hawaii where the SBA's average weekly loan volume has increased by nearly 80 percent compared to the weeks before the Recovery Act. The SBA has approved more than 400 Recovery Act loans that have supported over \$100 million in lending to Hawaii small businesses. This includes 290 loans in Honolulu county supporting over \$85 million in lending, 62 loans in Hawaii County supporting over \$5 million in lending, 45 loans in Maui County supporting over \$13 million, and 29 loans in Kauai County supporting over \$4 million in lending. And we know that this means jobs.

Our borrowers nationwide are reporting that SBA-backed recovery 7(a) and 504 loans will help them create or retain over 700,000 jobs. Here in Hawaii, small businesses report that they are creating or retaining over 2,800 jobs as a result of these recovery loans. Shelley Wilson of Wilson Home Care and Brad Albert of Rising Sun Solar LLC—hopefully he'll arrive—will personally attest to the positive impact stimulus funding has had right here in Hawaii.

The Recovery Act has also provided the Federal Government with increased opportunities to get contracts into the hands of small businesses. Our goal is to help small businesses win at least 23 percent of prime contracts. Put simply, this is a win-win situation. Small businesses get increased volume, sales, and hires. Federal agencies get to work with the most innovative, nimble, and responsive companies in the world.

I am pleased to report that we are well on our way toward hitting many of our Recovery Act contracting targets. As of June 25, over 30 percent of Federal Recovery Act contracting dollars, totaling nearly \$9 billion, have gone into the hands of small businesses. Here in Hawaii, small businesses have received a total of about \$100 million. Hawaii businesses have received contracts from the Department of Defense, Department of Commerce, and the Department of Labor, to name just a few.

Now that's good news with capital and contracts now. The bad news is our recovery loans are so popular that we ran out of money 1 month ago, a bit ahead of schedule. The President has consistently called on Congress to extend these loans through this fiscal year, but it has yet to act. Our message is clear, now is not the time to pull back from recovery loans. Small businesses still need our help. The credit market is still too tight, even for good, credit-worthy borrowers. SBA recovery loans will help them regain traction in an economy that is still working toward full recovery. In fact, we received new data showing that SBA loan volume dropped dramatically the week of June 14 by about 50 percent. It proves that SBA lenders still need that little extra bit of support to make good loans to businesses like Wilson Homecare and Rising Sun LLC.

We also look forward to working with the Senate to permanently increase the size of SBA loans to \$5 million. We find that that trend is increasingly important to small businesses.

With that said, we are here to listen and work with you to help America's small businesses create jobs, increase competitiveness, and drive our economy. Senator, thank you very much for the opportunity to speak on behalf of the SBA, and I'm pleased to answer any questions I might be able to.

Chairman INOUE. Thank you very much, Ms. Sawyer.
[The statement follows:]

PREPARED STATEMENT OF JANE SAWYER

Thank you Senator Inouye and Senator Akaka. The small business communities in Hawaii and throughout the country are fortunate to have such strong voices for them in the U.S. Senate. My name is Jane Sawyer and I am the Hawaii District Director for the Small Business Administration (SBA). I am honored to be testifying before you to report on the impact the Recovery Act has had in helping small businesses survive and grow during these difficult times. In addition to updating you on the SBA's Recovery Act efforts to date, I also look forward to hearing from you and the other witnesses about ways to improve our programs to provide small businesses with the tools and resources they need to help continue our economic recovery.

Here in Hawaii, we have an SBA district office as well as a strong network of SBA-affiliated partners. This network includes three Small Business Development Centers and our SCORE chapter—with offices on Oahu and Maui—that leverages the wisdom of experienced executives through its mentoring program.

I want to thank Senator Inouye and Senator Akaka for supporting this team that is "on the ground" by passing the Recovery Act. The condition of small business is critical to our economic recovery because more than half of Americans own or work for a small business, and about two of every three new jobs in America each year are created by small businesses. And we know these are tough times for small businesses, making the SBA's mission more important than ever. In particular, the Recovery Act targeted the needs small businesses faced—and continue to face—in accessing capital during the credit crunch. This money has successfully been put to work in the place where it can make the biggest impact—the hands of entrepreneurs and small business owners.

The Recovery Act allowed us to temporarily raise guarantees on 7(a) loans to 90 percent and reduce or eliminate fees in our flagship 7(a) and 504 loan programs. The SBA has turned just \$680 million in taxpayer dollars into more than \$30 billion in lending to small businesses. That is an excellent bang for the taxpayer buck. In addition, over 1,300 lenders who had not issued SBA loans since at least 2007 have once again started issuing SBA loans. Obviously, this provides more points of access to capital for small businesses.

We're seeing great success with these programs right here in Hawaii where the SBA's average weekly loan volume has increased by nearly 80 percent compared to the weeks before the Recovery Act. The SBA has approved more than 400 Recovery loans that have supported over \$100 million in lending to Hawaii small businesses. This includes 290 loans in Honolulu county supporting over \$85 million in lending, 62 loans in Hawaii county supporting over \$5 million in lending, 45 loans in Maui county supporting over \$13 million in lending, and 29 loans in Kauai county supporting over \$4 million in lending.

And we know that this means jobs. Our borrowers nationwide are reporting that SBA-backed Recovery 7(a) and 504 loans will help them create or retain over 700,000 jobs.¹ Here in Hawaii, small businesses report that they are creating or retaining over 2,800 jobs as a result of these Recovery loans. After my testimony, you will hear from two local small business owners who have directly benefited from the SBA's Recovery Act lending programs. Shelley Wilson of Wilson Home Care and Brad Albert of Rising Sun LLC can personally attest to the positive impact stimulus funding has had right here in Hawaii.

The Recovery Act has also provided the Federal government with increased opportunities to get contracts into the hands of small businesses. There are approximately \$60 billion in Federal Recovery Act prime contracting opportunities. Our goal is to

¹Data is self-reported by the borrower and appears in the SBA loan application form.

help small businesses win at least \$13 billion of these contracts to meet the statutory goal of awarding 23 percent of prime contracts to small businesses. Put simply, this is a win-win situation. Small businesses get increased volume, sales, and hires. They get a “lift” to be competitive in the global marketplace and help lead the nation in its economic recovery. In addition, Federal agencies get to work with the most innovative, nimble, and responsive companies in the world.

I am pleased to report that we are well on our way towards hitting many of our Recovery Act contracting targets. In fact, so far we have exceeded the overall 23 percent goal for stimulus contracts. As of June 25, over 30 percent of Federal Recovery Act contracting dollars, totaling nearly \$9 billion, have gone into the hands of small businesses. Moreover, various disadvantaged groups have received significant Recovery Act contracting dollars. We are currently achieving over two times our goal of 5 percent for Small Disadvantaged businesses, which have received over 12 percent of Recovery Act contracting dollars. Here in Hawaii, small businesses have received nearly 45 percent of Hawaii’s Recovery Act contracting dollars, for a total of about \$100 million.² Hawaii small businesses have received contracts from the Department of Defense, Department of Commerce, and the Department of Labor, to name just a few.

That is the good news we are happy to share. The bad news is that these Recovery loans are so popular that we ran out of money a month ago. The President has consistently called on Congress to extend these loans through this fiscal year, but it has yet to act. Our message is clear: the lesson we have learned from the Recovery Act is that now is not the time to pull back. Small businesses still need our help. The credit market is still too tight, even for good, creditworthy borrowers. SBA Recovery loans will help them regain traction in an economy that is still working toward full recovery. In fact, we received new data showing that SBA loan volume dropped dramatically the week of June 14—by 50 percent. It proves that SBA lenders still need that little extra bit of support to make good loans to good businesses like Wilson Homecare and Rising Sun LLC.

With that said, we are here to listen and work with you to help America’s small businesses create jobs, increase competitiveness, and drive our economy. Senator Inouye and Senator Akaka, I thank you again for the opportunity to speak on behalf of the SBA. At this time, I am pleased to take your questions.

Chairman INOUE. Ms. Wilson.

STATEMENT OF SHELLEY WILSON, PRESIDENT, WILSON HOMECARE

Ms. WILSON. I don’t have a formal presentation for you, and I did prepare the testimony that your offices have received, but I’m here as a witness and a example of how wonderful the SBA funding can be. And for a business like Wilson Homecare, it’s a win-win situation in our community.

I’ve been in business for about 15 years, servicing the Kapuna in our community, and my home healthcare company employees about 300 employees statewide, and we provide about 5,000 hours a week in care to individuals primarily in their homes. And for many, many years, the community continually asks us for additional resources to provide services for those in need. And as you are well aware, our infrastructure and healthcare is challenged in itself, and the SBA made one of my long-term dreams possible last year when they funded the first senior living home for Wilson Homecare. And so not only will we be able to provide for services in individuals homes, we will have our own senior that’s currently under construction in Kilauea. The monies that we received were about \$2 million and the bank paid for the other portion of the loan that we received.

And with that money we’ll be able to create additional jobs. I know the construction industry has been very, very happy with me and with my project, and I’ve not really had any experience with construction workers before, but they’re awfully friendly. And we

²According to the Federal Procurement Data System (FPDS).

have more than enough people that have been offering to help us with our project. There's so many people that need a job in the construction industry, and it's kind of a sad situation that we can't—we can't be building more. But the SBA certainly has made it possible for us to build this home. And by the end of the year we'll be moving in our very first residents into that property.

Chairman INOUE. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF SHELLEY WILSON

Thank you Senator Inouye and Senator Akaka for your continued support of the business community in Hawaii. The appreciation for the tremendous work that is being done in Washington on behalf of the State of Hawaii is in abundance throughout the islands. I'm honored to provide testimony that brings true life to the impact from the American Recovery and Reinvestment Act of 2009 in Hawaii and on my business.

My name is Shelley Wilson and I am the president and founder of Wilson Homecare, a home healthcare agency that serves the island of Oahu. Wilson Homecare provides services in homes and facilities to individuals of all ages with many different personal care needs ranging from home assistant and nurse aide to skilled nursing care. The hours providing care to individuals range from 4 hours a week to 24 hours a day. Wilson Homecare currently provides an average of 5,500 hours per week in care. The 2009 annual revenues were \$4.6 million, employing 343 staff, and we were ranked as the 15th largest woman-owned business in Hawaii.

I am active in the local business community, as the incoming chair of the Chamber of Commerce of Hawaii beginning July 2010, current chair of the Chamber Small Business Committee, a board member for Kapi'olani Medical Center for Women and Children, a board member for Kahi Mohala Behavioral Health, and a recent addition to the board of the East West Center, and past president of the Organization of Women Leaders.

I was inspired to start my business in 1996 after moving to Hawaii from Iowa. I was injured in 1992 while on active duty with the Iowa Army National Guard. I spent several years recovering from an accident that left me incapacitated for much of the time. I developed a true appreciation for the homecare model during my recovery at home. Most days, I hoped the caregiver wasn't one of my family members. After it became too difficult to stay in a cold climate with my plethora of injuries, I decided to relocate to Hawaii in 1994. Sixteen years later, my family still asks when I'm moving back.

At the age of 21, when I started Wilson Homecare, my passion to provide homecare services to others in need was borne from my own personal experiences. I wasn't an entrepreneur; I just wanted to provide people with options when they required care as I once did. I didn't have the arsenal of life experience that MBA programs speak about when embarking on developing one's business infrastructure. I didn't know about taxes, insurance, management, payroll, and the like. I was a feisty young person that had a life changing experience that only wanted to better the lives of others.

My first few years as president of this company were anything but glamorous nor did it come with a paycheck. Headquarters was my living room in my tiny apartment and with one employee, me. It was challenging and most people told me to "get a real job." I had three "real jobs" while I was trying to get the job I have now! Fortunately, I'm stubborn and was driven by my vision. I never lost sight of what my focus was in changing the lives of others. My first big break came when I received a modest SBA loan to help me get off the ground. That money assisted in developing collateral to sell my services to prospective clients, and enabled me to purchase basic office supplies, a reliable phone, and provided my first "real" debt. I was on my way!

Flash forward to 2010 and Wilson Homecare has become the largest licensed private home healthcare company in Hawaii employing more than 300 staff. The vision I once had became a reality in caring for thousands in our community and truly changing lives. I would not be here if it weren't for my first starter loan from the SBA. The initial investment the SBA made has provided so much to so many, from employing members of our community to helping care for their family needs, putting money back into our local business, and of course, providing the much needed home healthcare to those in need and giving the relief desperately needed to families and loved ones.

I've continued to expand and grow the resources available to our aging community by starting another company that is currently building a senior living home in Kailua. Once again, my vision was made possible by the SBA through the 504 loan program which I received last year. I'm currently underway with construction and hope to welcome my first client by Thanksgiving. The Wilson Senior Living Home has invested approximately \$4 million in the Windward communities, created dozens of construction jobs, will create another 30 healthcare jobs, and will provide a beautiful home where seniors will be cared for in a home environment with dignity and respect close to their loved ones.

In essence, the American Recovery and Reinvestment Act of 2009 have built the first Wilson Senior Living Home and my second company. The approval of the loan for Wilson Senior Living came during a very difficult time in our economy when our community needed resources more than ever before. It was serendipity. The process was straight forward, and the SBA was incredibly supportive in guiding my way. I received a fairly quick reply from the loan committee, and I've been so thankful for the cost savings recently realized in loan fees. At the end of a construction project, every little bit counts!

I often share my SBA success story with other small business owners so they're aware of the possibilities and seek out opportunities for their business to be successful, just as I did many years ago and again last year. I have continued to receive the support from the SBA as a partner in helping to carry out my vision and provide the care models our community desperately needs. I appreciate the opportunity to bring life to the ARRA funds I've received from the Small Business Administration and provide validation to the work that has been done to make it possible. I'm indebted.

Aloha.

Chairman INOUE. I'm glad you made it.

STATEMENT OF BRAD ALBERT, OWNER, RISING SUN, LLC

Mr. ALBERT. Yeah, thanks, I was actually downstairs talking to Senator Gabbard's office about some other related issues.

So, my name is Brad Albert, and I'm from Maui. I have a solar business on Maui. We started it in 2003, and before that we were an electrical contracting company. Since about 2005, we've been able to be 100 percent focused on installing solar systems, and that's what we do. We no longer do general electric work. We're the largest company—we've done the most number of installations on Maui, but we do other installations. Actually, I think I met you at the—we were the company that installed the system at NELHA, the Natural Energy Gateway Center—and we've benefited through our—we were awarded a job at the Maui Supercomputing Center, a research project for concentrated PV systems.

So I guess part of my testimony is that the money that ARRA is providing to the military that's being spent on research for renewable energy is actually impacting our business in a positive way. And there was another solar contracting company that was originally awarded the bid that was owned, majority owned now by a Chinese manufacturer, so they had to step out—step away from it and we got it, so I guess they're towing the line as far as making there are U.S. owned companies as well.

I'm also a member of the Hawaii PV Coalition, or I'm the Chairman of the Hawaii PV Coalition, which is a nonprofit that looks at solar electric specifically, and then there's another group called the Hawaii Solar Energy Association that I'm also on the board of that organization. And that's the main lobbying group in Hawaii, in terms of policy and—and regulation.

And right now, if I could, you know, kind of give you a few bits of testimony. I think the first thing is just to support Jane, like we were the recipient of a 7(a) loan, and our business is, you know,

doing well, we're growing year to year. However, in order to finance our growth, we need access to capital. And so, we've been able to achieve that through the 7(a) loans, and I'm pretty—I mean, 1 year ago I was really chewing my fingernails and I'm doing it again this year, in terms of going to the bank and asking for more money. Like I'm going to ask them to double our money this year, and we need it because we're doubling our business. And there's a proportionality to what you need in a line of credit to do business and hire more people and run a business.

And I don't think that we would have gotten it if it wasn't for the ARRA money, and I really—it's hard to, you know, kind of judge, just everything I was reading and hearing on TV would suggest that the banks were not going to give us money, and we were like, "Well, what are we going to do?" And we got it, and so we were successful and we, you know, kept—at least kept everyone employed that we had employed and we did employ some more people towards the end of the year.

One of the downfalls of having a tax-based policy, you know, we get tax credits and that motivates people to do their systems, is that it becomes seasonal and people do their systems toward the end of the year, so we typically have to hire on additional labor at the end of the year and then let them go at the beginning of the year. We'd like to try and smooth that out. And one of the—section 1603 of the Treasury Grant Program is making the tax credit that was a tax credit a grant. So you have to apply and say, "I'd like to take the 30 percent Federal tax credit for renewable energy as a grant," so that 60 days after you finish your project you get that in cash. That's been something that potentially helps smooth out the year, allows us to do more systems, and keep people employed year round.

So, the way—that is due to expire at the end of this year, and part of my testimony is that we really feel like it could be—if it was extended, it would mean jobs and more renewable energy installed, not only in Hawaii but across the country. It's in my written testimony, but just to point out a few numbers. It would mean about 400 new jobs in Hawaii, and that's next year in 2011, but by 2016 it would actually mean 450 jobs, as well as retaining jobs. I think we'd actually lose some jobs if we didn't extend this program.

The State of Hawaii put forth a feed-in tariff, which hasn't actually gone into effect yet, but all of those—I would say the large majority of those projects are counting on the Treasury Grant Program to fund their projects. In other words, the developers of these projects are going to have a hard time getting access to capital to fund these, you know, what amounts to primarily solar projects. And, you know, the solar energy that's being produced would be being sold into the grid, so through the feed-in tariff program—I don't know how familiar you are with the feed-in tariff because there really isn't a lot of feed-in tariff programs in the United States. I think there's one in Florida that was sold out in the first day that it came out. And there is a limited amount of feed-in tariff grid access here, it's 5 percent of the grid and I don't believe that it would be sold out in the first, you know, day. It really depends on how aggressive the pricing is.

But the point anyway, is that there will be some jobs and 81 megawatts of solar projects by 2016 is the estimate if this grant is extended. Nationally it would mean 65,000 new jobs by 2016, and 5,100 megawatts of green energy installed.

And so, I think the overall theme, aside from some of the stuff to do with, you know, the details with 7(a) or this Treasury Grant Program, is that like, you know, what's happening in the gulf and really what's happening around the world politically, it only like highlights, underlines, and bolds that America needs to continue to invest in renewable energy. And we're just a part of that. And my testimony, like there's all these little pieces, but anything that's involved in ARRA, whether it's money to the Government to research renewable energy, we're benefiting from that, whether being able to finance our business through this, you know, 7(a) loan program, which isn't really related to renewable, but it does relate, or the Treasury Grant Program.

Like, you know, we need to stop talking how we're going to like, you know, do renewable energy and go solar, you know, and everyone's really good at campaigning and saying they're for renewable energy, but we need to, you know, there needs to be the means. You know, we need the money and the—and the determination to really go for it. Because this is what America needs, it's really what's going to, you know. I wrote in my written testimony here. "America's success or failure to create clean energy policy will determine America's financial success and national security." And so, I think that's pretty clear.

There's one other thing, which is the Solar Manufacturing Jobs Creation Act, and I would just ask you to support that as well. That will also create 160,000 additional jobs in the solar industry and related sectors by 2016. And, while also supporting 5,600 megawatts of additional solar installations by 2016. So the point is, not that we should just be installing renewable energy and solar projects in the United States, but that we should be making the products that we're installing.

Thank you for the opportunity to testify.

[The statement follows:]

PREPARED STATEMENT OF BRAD ALBERT

Thank you for the opportunity to testify. I am co-owner of Rising Sun Solar a Maui based licensed electrical contracting company C-28184 specializing in the design and installation of residential and commercial solar electric systems. In addition to being a business owner I am president of the Hawaii PV Coalition and a board member of the Hawaii Solar Energy Association. My testimony will hopefully give you insight into how ARRA funds have helped to grow the Hawaii solar market creating jobs and reducing dependence on foreign oil.

First and foremost as a an overriding and urgent priority the gulf oil spill only highlights and underlines in bold that: America needs to continue to invest in renewable energy!

America's success or failure to create clean energy policy will determine America's financial success and national security.

Rising Sun has benefitted from the ARRA SBA 7a loan guarantees. Access to capitol has been essential for our company to grow and manage cash flow. We have increased our SBA guaranteed line of credit year to year as our business has grown. Without the SBA loan guarantee our business would not be able to fund growth and create new jobs. Extending the loan guarantee will provide access to capitol for small businesses including many new businesses such as ours involved in renewable energy.

The solar industry has also benefitted from Section 1603 Treasury Grant Program (TGP). As you know the TGP is scheduled to end this year. Extending the TGP for two more years is necessary and critical to make renewable energy projects happen in Hawaii and nationally. To date the TGP has funded 19 solar projects in Hawaii worth \$10 million. In Hawaii a 2 year extension of the TGP would create 400 new jobs in 2012 and 450 jobs by 2016 and would also result in an estimated additional 81 megawatts of solar projects in Hawaii by 2016 (see attached report named TGP Hawaii.pdf).

Nationwide the TGP will create nearly 65,000 new jobs to the solar workforce resulting in 5,100 megawatts of new solar installations by 2016. The benefits of the TGP are just beginning to take hold as the application and guidance for the program were only made available in the summer of 2009; less than 1 year ago. It is clear that the program is effective and should be extended. (See attached TGPUSA.pdf)

According to Solar Energy Industries Association (SEIA) Solar Energy creates more jobs per megawatt of energy produced than any other form of energy (renewable or fossil). However the United States has lost its leadership in the manufacturing of solar cells. As recently as a decade ago, the United States accounted for 40 percent of global solar photovoltaic (PV) cell production. In 2008 the United States accounted for only 5 percent of world solar cell production. ARRA created a limited short-term incentive, but it isn't enough to support long term job growth in solar manufacturing.

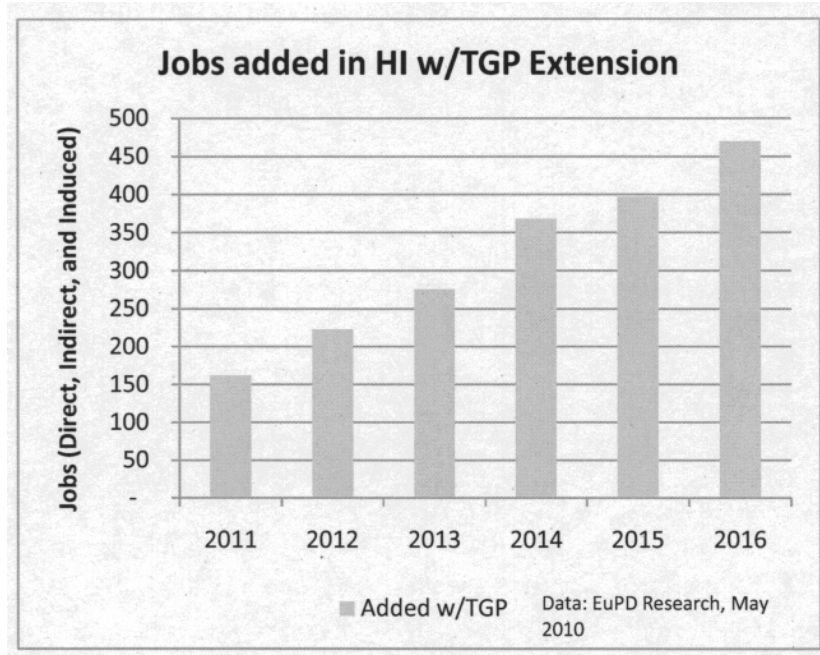
The Solar Manufacturing Jobs Creation Act H.R. 4085 and S. 2755 would add equipment used to manufacture solar energy generating property to the eligible property list of the existing section 48 commercial solar investment tax credit (ITC). Current law provides a 30 percent tax credit for solar energy generating property placed in service in the United States before January 1, 2017. The legislation would allow a 30 percent credit for investments in equipment placed in service in U.S. Solar manufacturing facilities before January 1, 2017. An independent study by EuPD Research found that the proposed legislation would create nearly 160,000 additional jobs in the solar industry and related sectors by 2016, while also supporting 5,600 MW of additional solar installations through 2016. (See attached MITC.pdf)

In conclusion economic recovery has begun and the solar industry is growing and creating jobs. However, from the perspective of a small solar business in Hawaii, our continued success will depend on the commitment and support of both Federal and state incentives. Clean energy and specifically PV solar needs to be a major focus for the America and Hawaii's energy future.

Thank you for your consideration.

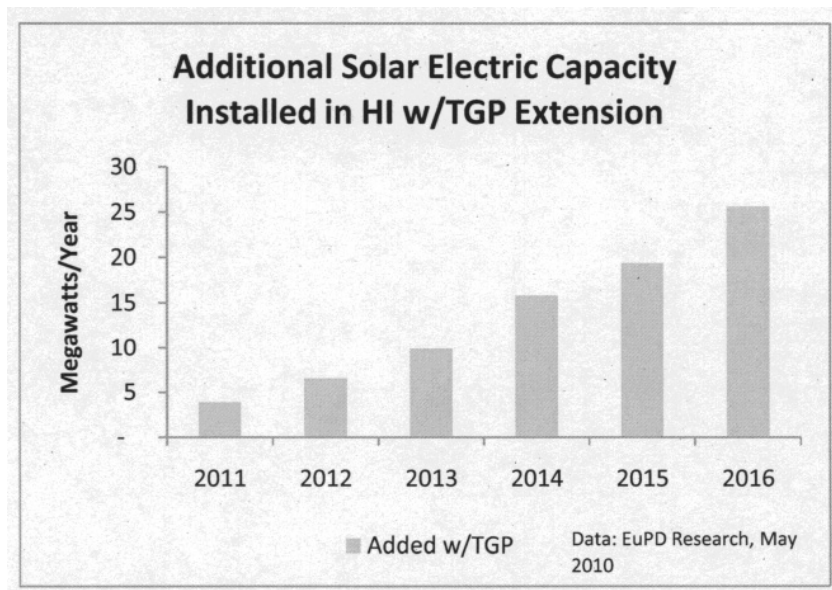
ECONOMIC IMPACT OF TREASURY GRANT PROGRAM EXTENSION IN HAWAII

Hawaii stands to realize significant benefits from an extension of the section 1603 Treasury grant program. Currently, this program allows developers of renewable energy projects to claim a grant in lieu of tax credits for projects that commence construction before the end of 2010. However, the financial market conditions that necessitated this program continue and are not expected to clear before this program expires. Extending the commence construction deadline by 2 years will enable more projects in Hawaii; that's more jobs and more clean energy.



According to a recent study by EuPD Research:

- A 2-year extension of the 1603 grant program will support 400 additional jobs in Hawaii in 2011 and over 450 additional jobs in 2016. (The job impacts extend beyond 2012 because of continued plant construction and ongoing operations and maintenance positions. See chart above for more on employment impacts on extending the grant program.)
- Extending the grant program would also yield an additional 81 MW of solar power in Hawaii by the end of 2016. See lower right chart for more on the impacts of extending the grant program.



Current Impact of TGP

To date, companies in Hawaii have received nearly \$10 million in TGP funding for 20 renewable energy projects, 19 of which are solar electric and solar thermal projects. With a 2-year extension of the TGP commence construction deadline, these numbers will continue to grow.

EXTEND THE TREASURY GRANT PROGRAM

65,000 new jobs will be added.

5,100 megawatts of additional solar power to be deployed across the United States.

\$400 million in government savings.

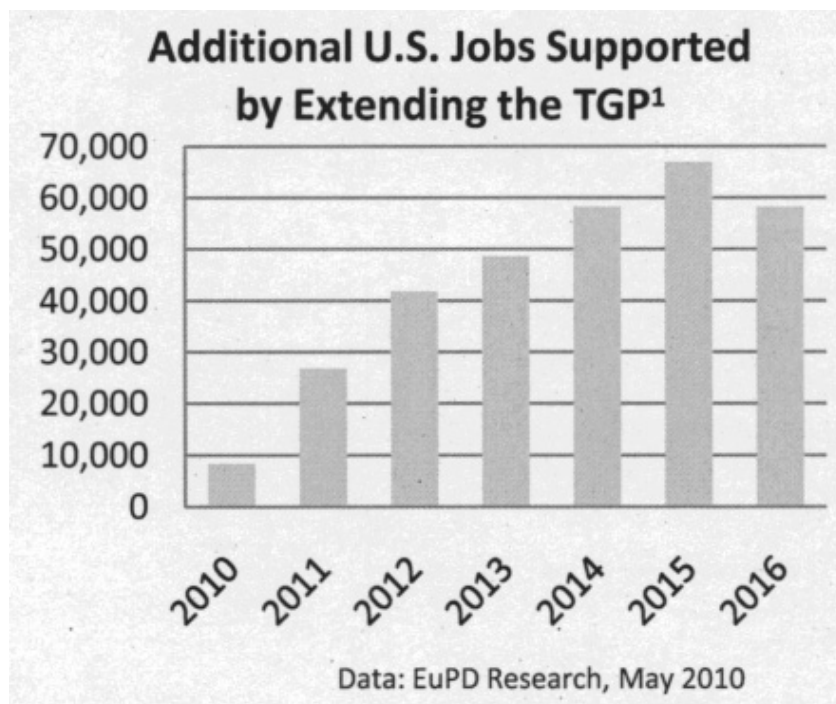
Extending the existing Treasury Grant Program (TGP) by 2 years will add nearly 65,000 new jobs to the solar workforce and supporting industries across the United States in 2015.¹ Such an extension to the program, which allows grants to be issued in lieu of tax credits for renewable energy, would also accelerate solar deployment across the United States, resulting in 5,100 megawatts (MW) of new solar installations through 2016—enough to power more than 1 million homes.

Moreover, extension of the Treasury Grant Program will yield a net savings to the government of \$400 million between 2010 and 2016, as the public cost of the extension is more than offset by the avoided unemployment costs to the government and additional income tax revenue generated by new jobs resulting from the extension.

A 2-year extension is projected to create significant new jobs in the solar industry and supporting sectors across the United States. For example, California would gain more than 25,500 new jobs; Arizona would add approximately 7,200 new jobs; Texas would gain more than 6,700 new jobs; Michigan would add over 5,100 new jobs; New Mexico and Nevada would each gain more than 3,000 new jobs; Ohio and Oregon would each add more than 2,000 new jobs; Colorado and Florida would each add over 1,800 new jobs; and New Jersey, New York, North Carolina, and Pennsylvania would each gain more than 1,000 new jobs.

¹ These are jobs supported by the solar industry above baseline forecasts. Total industry employment increases from 2015 to 2016, but the added benefit of the Treasury Grant diminishes. This estimate is for solar energy only, it does not account for jobs created by other renewable energy technologies. Read the full report at [http://seia.org/galleries/pdf/EuPD Research Solar Report.pdf](http://seia.org/galleries/pdf/EuPD%20Research%20Solar%20Report.pdf).

Extension of the Treasury Grant Program will also result in substantial increases in solar technology deployment. California could add over 2,500 MW of new solar installations; Arizona, nearly 1,000 MW; and Colorado, Connecticut, Florida, Nevada, and New Jersey each adding more than 100 MW of new solar power. 100 MW is enough to power 20,000 American homes.



Background

In 2009, the American Recovery and Reinvestment Act created the Treasury Grant Program, allowing a cash grant to be used in lieu of tax credits for renewable energy projects. Although the U.S. unemployment level remains high, the program is set to expire in December 2010. SEIA hired independent consulting firm EuPD Research to analyze the economic impact in the United States during 2010–2016 of extending the Treasury Grant Program by 2 years. The findings of the EuPD study complement the results of a Lawrence Berkeley National Laboratory study from April 2010 showing strong employment levels in renewable energy industries during the first year (2009) of the TGP.

Recommendation

Based on the EuPD study, SEIA recommends a 2-year extension of the Treasury Grant Program. Not only will this extension yield a fiscal benefit to the government, but it will result in over 65,000 new jobs in 2015 and support the manufacturing and installation of 5,100 MW of clean, reliable solar energy technologies during 2010–2016.

THE SOLAR MANUFACTURING JOBS CREATION ACT

H.R. 4085 (THOMPSON, CAMP, DOGGETT, TIBERI) AND S. 2755 (MENEDEZ, STABENOW)

Overview

The Solar Manufacturing Jobs Creation Act would add equipment used to manufacture solar energy generating property to the eligible property list of the existing Section 48 commercial solar investment tax credit (ITC). Current law provides a 30 percent tax credit for solar energy generating property placed in service in the United States before January 1, 2017. The legislation would allow a 30 percent cred-

it for investments in equipment placed in service in U.S. manufacturing facilities before January 1, 2017. An independent study by EuPD Research found that the proposed legislation would create nearly 160,000 additional jobs in the solar industry and related sectors by 2016, while also supporting 5,600 MW of additional solar installations through 2016.¹

Supporting Points

The United States is losing the global race for solar manufacturing jobs.

—As recently as a decade ago, the United States accounted for more than 40 percent of global solar photovoltaic (PV) cell production. In 2008, the United States produced only 5 percent of the world's solar cells, with Europe and Asia leading global production.

Other countries are racing to create domestic demand for solar cells and to attract solar manufacturing jobs. Many nations offer generous incentives to locate solar manufacturing in-country.

—Philippines: 6-year income tax holiday.

—Malaysia: 15-year income tax holiday.

—Germany: Grants of 30 percent of investment costs for large enterprises.

—Singapore: Multi-year tax holidays.

ARRA created a limited short-term incentive—but it isn't enough to support long-term job growth in solar manufacturing. The 2009 American Recovery and Reinvestment Act (ARRA) included a competitive tax credit capped at \$2.3 billion in total tax expenditures for advanced energy manufacturing projects (new code Section 48C). The 48C credit is a very good start to increase domestic solar manufacturing; however:

—Firms must apply and are not guaranteed to receive a 30 percent credit unless certified as a recipient by Treasury; the program will be oversubscribed and only a fraction will receive a credit.

—Now that the \$2.3 billion cap is exhausted, the program is due to sunset.

SEIA supports the Administration's proposed \$5 billion in additional funding for the Section 48C program.

An improved tax incentive for solar manufacturing will create long-term growth and U.S. jobs.

—Independent consulting firm EuPD Research analyzed the economic impact in the United States during 2010–2016 of amending Section 48 to include solar manufacturing equipment. The results of the study show that nearly 160,000 domestic jobs would be created by 2016 as a result of this policy change. Additionally, 5,600 MW of additional solar PV and CSP capacity would be installed between 2010 and 2016.¹

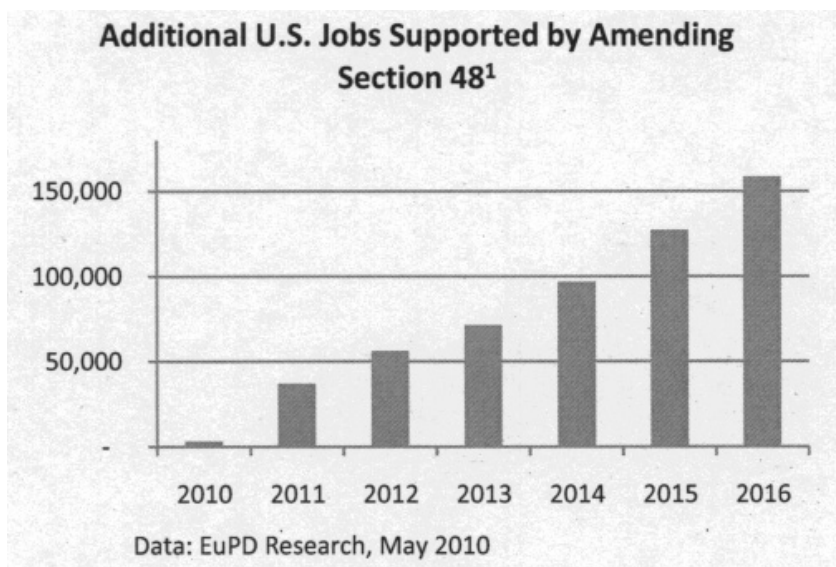
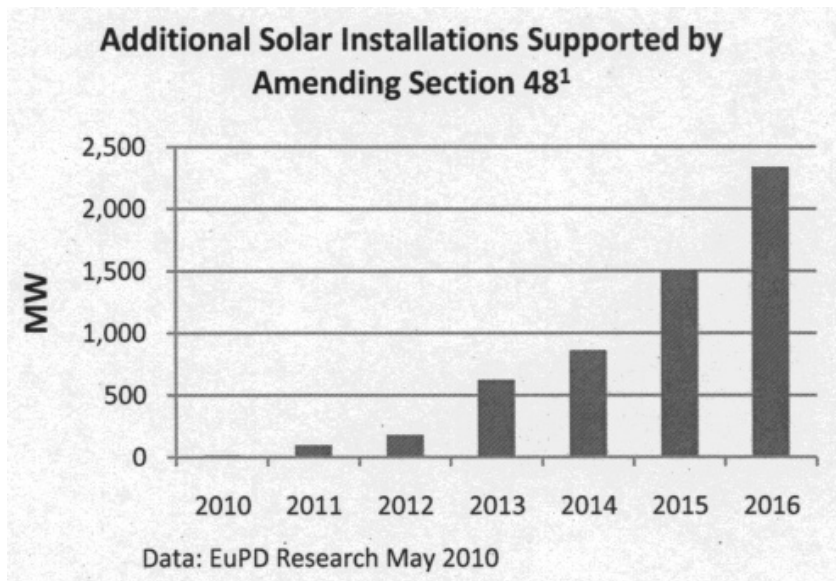
—Solar energy creates more jobs per megawatt of energy produced than any other form of energy (renewable or fossil). Tax incentives to support U.S. solar manufacturing will ensure a strong solar manufacturing base and maximize renewable energy employment.

—Amending Section 48 (the commercial solar ITC) to include solar manufacturing equipment would create a generally available and immediately reliable 30 percent credit for the tools used to create solar panels.

—New U.S. solar manufacturing facilities could begin construction soon after date of enactment with the 30 percent credit definitively in their financial calculations. Firms would have an incentive to make their investments early in order to capitalize on the grant program, greatly increasing the amount of investment and new jobs in the near term.

—The solar industry also strongly supports the extension of the Section 48C program and the Administration's proposed funding level of \$5 billion.

¹ Graphs show the number of jobs and installations supported by the solar industry above baseline forecasts without a Section 48 amendment. This estimate is for solar energy only; it does not account for the impact of other renewable energy technologies. Read the full report at [http://seia.org/galleries/pdf/EuPD Research Solar Report.pdf](http://seia.org/galleries/pdf/EuPD%20Research%20Solar%20Report.pdf).



ABOUT THE SOLAR ENERGY INDUSTRIES ASSOCIATION

Established in 1974, the Solar Energy Industries Association is the national trade association of the U.S. solar energy industry. As the voice of the industry, SEIA works with its 1,000 member companies to make solar a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy. For a referenced version of this factsheet and more information, please visit www.seia.org.

Chairman INOUE. You have to believe I'm with you on everything you've said.

Mr. ALBERT. I know that you are.

Chairman INOUE. I won't discuss this here, but there are elements in Congress that just don't want us to move. Your products—your projects are being seriously considered, and I can assure you that the majority of the Congress looks upon small business as an important part of the backbone of our economy. And, in order to make certain that these measures like yours are passed and implemented—we ordinarily have recesses in August to give us a little break. I just got notified yesterday that it's going to be 1 week less. But it's just as well, because if there's work to do we'll do the work. And I can assure you we're with you.

Ms. SAWYER. Thank you.

Chairman INOUE. Only thing, Mr. Albert, if you succeed too much, you won't be small business.

Ms. SAWYER. And he has been very successful. We're really pleased. Brad and his partner started their business using an SBA Partner Small Business Development Center for counseling when they were setting up their business, helped them with their first proposal to get funding, and both times they've gone for funding they've been able to secure SBA financing. The second round was a significant increase and they took the credit for the fee waiver with the 7(a) line of credit they established with one of our local banks. So that was a significant amount of money for them.

And likewise, with Shelley's project, the fee waiver left her enough money to put either back into the project or even to make sure that she could create those jobs. So, it's about 3 percent of the total amount of the loan, which for—can be a—with our programs, up to \$60,000, depending on the amount of the loan.

Chairman INOUE. Ms. Wilson, did you say you have 300 employees?

Ms. WILSON. In my home healthcare business that I've had for the last 15 years.

Chairman INOUE. And when is this home going to be finished?

Ms. WILSON. I'm hoping in September. I've been taking very good care of the construction workers, so I understand how that works now. So every Friday I show up with lunch and some beverages.

Chairman INOUE. I can see why you've succeeded.

Ms. WILSON. Actually, I'm using the additional money and I'm negotiating my solar this week, so we might need to talk after this. I have extra money to actually install some of the perks and the things that weren't within our budget initially.

Ms. SAWYER. And now I know where to go on Friday afternoon or Friday for lunch because your care home is about 1 mile away from my residence, over on Kanuawei Bay Drive. It's a great facility.

Chairman INOUE. How many rooms will you have there?

Ms. WILSON. We'll have 20 private bathrooms and bedrooms, they're suites, and it's in a residential—it's a residential model, so the State licensing, adult residential care home type II, so it's within the neighborhood and not, you know, in the boonies, as far as most of the nursing homes or nursing facilities. So it's a smaller family type model that I intend to replicate in other areas in our island so people can stay within their communities.

Chairman INOUE. How much would it cost for anyone to be one of your tenants?

Ms. WILSON. One of our neighbors, the residents that will move in, the fees start around \$8,000. And for home healthcare services, the rates within—the average rate is about \$20 an hour, and so that adds up pretty quickly. And so some of our home healthcare patients pay \$15,000 to \$20,000 a month. So the long-term care figures are outrageous.

Chairman INOUE. Fifteen or \$20,000 a month?

Ms. WILSON. For home healthcare, for \$20 an hour. And so, this residential model is about one-half of what it costs if you have in-home care. And the other nursing homes and facilities within our island have pretty substantial wait lists. And the fees, the long-term care component that people are not prepared for, it's pretty shocking for most of our families and residents.

Mr. ALBERT. I would add one thing, just that, you know, a lot of people think Brad is doing great in renewable energy, they don't need any help, right. I just would say that while we're doing well on paper, in terms of growing number of installations and so forth, we're so vulnerable each year, you know, year to year, that a tax credit is going to get taken away. And here in Hawaii regulatory issues that we don't have any more grid access, although there's a demand for solar systems, that we're kind of in a little bit of a debate with the utility over how many more solar systems we can install.

So, I was listening on the monitor about smart grid, that's part of the solution too, so it's not just about installing more renewable energy, it's about making the grid capable of accepting all these renewable energy systems.

Chairman INOUE. Hawaii has a law, if I'm not mistaken, that requires all new construction to have solar energy.

Mr. ALBERT. That's solar hot water, and so that's more of an energy efficiency device, whereas the systems that we sell primarily are systems that generate energy on site and sometimes export to the grid. So, you know, solar hot water is part of the solar industry, but it's more of something that's just having the homes use less energy, whereas what we're selling is something that's generating clean energy instead of importing oil, which if you use less energy you do that, too.

Chairman INOUE. Thank you very much, Mr. Albert.

Mr. ALBERT. Thank you.

Ms. SAWYER. Thank you.

Ms. WILSON. Thank you.

ADDITIONAL SUBMITTED STATEMENTS

Chairman INOUE. Before we recess, I'd like to announce that we'll keep the record open until July 22, so if you have any additional testimony you'd like to make, feel free to do so.

And I hope that the other witnesses have been advised of that.

So, thank you very much, appreciate it. Wish you very great success.

[The statements follow:]

PREPARED STATEMENT OF ABRAHAM Y. WONG, ADMINISTRATOR, HAWAII DIVISION,
FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

Chairman Inouye, Ranking Member Cochran, and Members of the Committee, thank you for the invitation to appear before you today to discuss the impact on Hawaii's economy of funding for highway infrastructure under the American Recovery and Reinvestment Act of 2009 (Recovery Act). The Federal Highway Administration (FHWA) Hawaii Division Office has been working very closely with the Hawaii Department of Transportation (HDOT) to ensure that Recovery Act highway projects are implemented efficiently to put more people to work.

Signed into law by President Obama on February 17, 2009, the Recovery Act was an unprecedented effort to jumpstart our economy, create or save millions of jobs, and put a down payment on addressing long neglected infrastructure challenges so our country can thrive in the 21st century. The Recovery Act has been a lifeline for Americans who work in construction and have been especially hard hit by the recession.

Today, I want to update you on FHWA's activities for effectively administering the Recovery Act in Hawaii.

OVERVIEW

Overall, the Recovery Act provided \$48.1 billion for transportation programs to be used for improvements to our Nation's highways and bridges, transit systems, airports, railways, and shipyards. The single largest investment of Transportation Recovery Act dollars—\$27.5 billion—was targeted at improving highways and bridges. This included \$125.7 million for highway investment in Hawaii. Across the United States, FHWA has committed more than \$26 billion from the Recovery Act to over 12,700 highway projects.

We have six times more Recovery projects underway this summer than we did last. We are going to improve more than 30,000 miles of highway this summer—three times as many miles as we improved last summer and enough to make 10 trips across the country.

We are going to make travel safer and easier for millions of people, and we are going to create jobs. Overall, the Recovery Act is already responsible for about 2.5 million jobs, with tens of thousands of those in the transportation sector.

RECOVERY ACT IMPACT IN HAWAII

The FHWA has been working hard to ensure that the \$125.7 million in highway funds Hawaii received under the Recovery Act are invested quickly and wisely. Our partnership with HDOT to administer the Recovery Act started before the Act was passed. Anticipating passage of the bill, the FHWA Hawaii Division Office worked with HDOT and coordinated with local agencies to identify projects that could be started and completed expeditiously while striking the best balance between funding and needs. The Hawaii Division Office used regularly scheduled meetings, video conferences, and various program planning scenarios to consider the most effective and efficient way forward for Hawaii.

The Recovery Act dollars in Hawaii are being used to improve pavements, rebuild traffic signals and intersections, reduce congestion, and preserve and make bridges safer. The Hawaii Division Office has now authorized 23 projects in Hawaii, which we estimate will provide approximately 200 full time jobs. Of these authorized projects, 20 have been awarded for a total of nearly \$95 million, and HDOT has issued a notice to proceed with work starting on 17 of these projects totaling nearly \$85 million. Hawaii has expended over \$20.5 million of its highway dollars.

The Recovery Act included a requirement that States obligate 100 percent of their highway funds by March 1, 2010. Working with our State partners, all States met this ambitious deadline. In fact, Hawaii beat the deadline by nearly a week.

The Recovery Act additionally requires States to give priority to projects located in Economically Distressed Areas (EDAs), and FHWA has oversight responsibility to ensure that the States fulfill this requirement. Currently, of the funds already obligated in Hawaii, 39 percent are directed toward EDAs for 5 projects totaling over \$48 million. Our Hawaii Division Office will continue to work with the State to ensure that the State is giving priority to EDAs in the selection of any additional projects.

Projects Completed

Eight of the State's projects have already been completed, and Hawaii's residents and visitors have begun to enjoy the benefits. For example, construction has been completed for seismic retrofit of two critical overpass bridges on the H-1 freeway in the Kapolei area of Oahu. This \$865,000 Recovery Act project used fiber rein-

forced polymer wrap technology to ensure seismic safety for these key bridges. Another project has been funded that will provide a similar seismic resistance to a third bridge that carries Mokapu Boulevard over H-3 on the Windward side of the island.

The Maunaloa Highway resurfacing project on Molokai provided new pavement to 1.96 miles of the island's roadway. This \$2.6 million project provided work for an estimated 18 individuals in this Economically Distressed Area. The project started in August 2009 and was completed in December 2009.

The Farrington Highway resurfacing provided 3.7 miles of new paving on Maui. This \$5.4 million project provided employment opportunities for 18 individuals in this area. Work started in December 2009 and was completed last month.

The Kalae Highway slurry seal was a \$1 million pavement preservation project that provided employment for eight workers on Molokai. This approximately five-mile project will increase the service life of the roadway by preventing water intrusion into the pavement. This project was completed in January 2010 after approximately 3 months.

Projects Under Construction

Many important Recovery Act projects are also well underway throughout the State. For example, the \$15.3 million South Punaluu Stream Bridge project is providing a new structure to carry the Kamehameha highway to Oahu's northwest shore. By replacing a structure that has been in service for 85 years, the new concrete bridge will meet current vehicle load, safety, and seismic standards. The new bridge will include 8-foot shoulders and a separated pedestrian path.

Construction has also started on the \$30 million Ane Keohokalole Mid-Level Highway, which will help ease increased traffic congestion in the rapidly growing Kailua-Kona area on Hawaii's west coast. The route, which serves an estimated 22,700 daily drivers, is home to Kealakehea High School, a community center, and will soon be home to a new campus of the University of Hawaii. Though the university's "West Hawaii Center" is not yet open, 1.5 miles of new road—the Ane Keohokalole Mid-Level Highway—must be built to accommodate traffic which is projected to increase by nearly 50 percent by 2029. The initial phase creates a two-lane, limited-access roadway that will also include bike lanes, sidewalks, a multi-use path, and be used as a transit route by the county's bus service. In addition to reducing congestion, the new road will make Kailua-Kona safer for pedestrians and bicyclists while improving the area for planned businesses and housing developments. The project is also opening up approximately 300 acres of state land for future development.

A clean and paint project has started in the Paauila area on Hawaii Belt Road. This \$4.3 million Recovery Act investment will protect and preserve four historic steel trestle bridges by removing the existing lead-based paint and repainting the bridges with a zinc-rich moisture cure polyurethane paint system.

These are just a few examples of how, in Hawaii, Recovery Act dollars are providing needed investments for our people and infrastructure. This is happening throughout the entire United States. The Recovery Act projects will save lives on our Nation's highways, while strengthening the economy by helping our highway system move people and goods more efficiently and effectively.

Discretionary Transportation Investment Generating Economic Recovery Grants

In February, Department of Transportation (DOT) Secretary Ray LaHood announced the 51 award recipients of the \$1.5 billion Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program that was provided in the Recovery Act for surface transportation projects of national, regional, or major metropolitan area significance. The DOT received over 1,400 TIGER Grant applications totaling nearly \$60 billion.

Hawaii received \$24.5 million in TIGER funds for the reconstruction of Pier 29 in Honolulu Harbor. In 2008, the Pier 29 container yard at the Honolulu Harbor suffered structural failures, displacing the international carrier that used it. The TIGER funds will be used to reconstruct Pier 29, adding approximately 12 acres of upgraded cargo yard while also increasing efficiency and safety in Honolulu Harbor. Reconstructing Pier 29 will allow the international carrier that was displaced to return to Pier 29. Reconstructing Pier 29 will reduce truck traffic on busy and congested roadways in downtown Honolulu near Piers 1 and 2 by moving much of the traffic west toward the reconstructed Pier 29. Because Pier 29 is closer to Nimitz Highway and the primary intermodal highway routes, reconstructing Pier 29 helps reduce fuel consumption and greenhouse emissions from cargo movements at Piers 1 and 2 in the downtown Honolulu area.

TRANSPARENCY, ACCOUNTABILITY, AND RISK MANAGEMENT

FHWA has moved forward aggressively to fulfill the President's commitment to transparency and accountability for Recovery Act funds. In Hawaii, the Division Office has been actively involved in assisting State and local partners to deliver the most challenging and complex projects in Hawaii's Recovery Act program. The Hawaii Division Office has also carried out 20 project reviews and, in some cases, recommended procedural changes to improve the quality or efficiency of meeting a requirement.

While FHWA has established 4 National Review Teams to carry out in-depth reviews in our identified risk areas across all 50 States and Puerto Rico, FHWA is depending on its Division Offices to carry out spot checks on the front lines of the agency's risk management. As we move forward with Recovery Act implementation, we will continue to employ risk mitigation strategies to fulfill our mandate that these funds are prudently spent.

CONCLUSION

At FHWA, we are mindful of the importance of ensuring the successful investment of highway dollars under the Recovery Act. In addition to the near-term employment impacts, these highway infrastructure investments will return economic benefits to Hawaii for many years to come. In the Hawaii Division Office, we are doing our part to work with HDOT to ensure that the State's remaining Recovery Act funds are invested as quickly and effectively as possible.

Mr. Chairman, thank you for the opportunity to appear before you today. I would be happy to answer your questions.

 PREPARED STATEMENT OF LAURA M. DIERENFIELD, CHAIR, SAFE ROUTES TO SCHOOL NATIONAL PARTNERSHIP, HAWAII STATE NETWORK

Chairman Inouye, Ranking Member Cochran, and Members of the Committee: Thank you for hosting this open session on the "American Recovery and Reinvestment Act of 2009—Invest in Hawaii" program. We have many talented public and private sector leaders presenting here today who are working hard to make good use of ARRA funds.

I represent a thriving coalition of bicycle and pedestrian advocates focused on restoring our keiki's (children's) most basic right to be safe and healthy in their own communities, reviving Hawaii's economy, renewing bonds between family and friends, and building resilience into our energy and transportation systems through investments in pathways and bikeways that connect us all as a community to one another in safe, equitable and efficient manner.

We have been actively engaged in advocating for the completion of key bicycle and pedestrian projects using Federal stimulus dollars as well as tracking FHWA funds through SAFETEA-LU and the HIRE Act as well as EECBG funds for transportation energy efficiency initiatives. It is in these two areas we wish to make comments and recommendations about how to best invest in the future energy security, livability, health and happiness of Hawaii's people, especially our children.

THE NEED FOR BICYCLE AND PEDESTRIAN INVESTMENTS IN HAWAII

As an isolated society in the middle of the Pacific Ocean, we must be able to move people and goods effectively to maintain a strong economic future. We also desire communities that allow people to live actively and safely as part of their daily life. We also have a kuleana (responsibility) to manage the impacts of infrastructure, energy consumption and emissions on the environment. For these reasons, transportation becomes a critical cornerstone of Hawaii's economic viability, public health, and environmental sustainability. A balanced transportation network allows for the effective movement of people and goods, helps to reduce demand for expensive imported energy, enables healthy and active living, and preserves our natural environment by sharing mobility among many modes of transportation including driving, walking, bicycling and transit.

Achieving an effective, healthy and sustainable balanced transportation network is not an easy task. Decades of transportation planning and land use have created a car-dominated culture that is becoming more and more expensive to maintain. Hawaii's families spend more on transportation than on food or clothes, combined. Fully one-third of our residents do not drive due to age (too young or too old) or disability. Land use patterns have created neighborhoods separated from the workplace by severely congested freeways causing significant delays to and from work, school, shopping. Funding for roads and infrastructure is rapidly declining in these

difficult economic times and it will become increasingly difficult to judiciously distribute funding for roadways throughout our many isolated island communities. Resident and visitor car fuel demand accounts for nearly one-third of the expensive imported gas to Hawaii and fossil fuel burning vehicles emit the majority of the carbon pollution in our state. But perhaps most concerning is the rapid rise of obesity in our state, both in adults and children. Hawaii spends over \$290 million each year treating diseases related to inactivity and poor nutrition. By designing our transportation network around the needs of a car, we have created communities that are unfriendly, and at times hostile, to walking or bicycling. Hawaii families must be very diligent in finding opportunities to exercise or finding places for kids to play. It is rare to be able to step out your front door and enjoy a walk with your spouse or a bike ride with your kids.

Together, we as a community must thread the powerful strands of sustainable land use practices, wise transportation investments, diligent planning and thoughtful design together into a healthy tapestry of productive, active, sustainable communities.

The ARRA program, through your leadership, Chairman Inouye, is the needle that is weaving these powerful strands together for the future of Hawaii's people. And while Hawaii has been exemplary in seeking out and spending ARRA funds for transportation and energy projects, we continue to leave great opportunities on the table due to lack of internal leadership at the state and county levels to carry out these bicycle and pedestrian projects that carry such promise for energy security, natural resource preservation, healthy families and communities.

We are increasingly concerned with the lack of a State Bicycle Coordinator and the understaffed Safe Routes to School (SRTS) program. This lack of leadership has kept Hawaii from fully capitalizing on ARRA funds and other FHWA funding for bicycle and pedestrian projects that are long overdue and have great promise for economic development, increased health and improved energy security. We can ill afford to keep these worthwhile dollars on the table, especially in a energy-vulnerable and tourism-driven economy like ours where transportation efficiency and safe, scenic routes are critical to maintaining energy security and a strong visitor industry.

The State Bicycle Coordinator position itself is also highly undervalued at an entry-level position, prompting those who get the position to soon leave for a promotion with HDOT, as happened with the three Coordinators during my tenure in transportation advocacy over the last 7 years. We have been told for several years now that the HDOT is working on upgrading that status, but there never seems to be any progress on that front.

In a similar vein, we understand that the 100 percent federal funded Safe Routes to School program is funded with two half-time staff in the Traffic Branch, and much of that work is left to one person who also handles van pool and other demanding programs. This important Federal program continues to languish and stall, denying schools and communities important funding for local jobs and long overdue infrastructure improvements. Schools that applied for these funds in 2007 are rapidly losing their in-kind community partners and their own will to continue to wait, now almost 3 years, for a notice to proceed with their projects.

We want to be clear that the leadership at HDOT under Director Morioka has been exemplary in their openness to hear from groups like ours, and they have taken on some promising planning initiatives to advance pedestrian and bicycle infrastructure projects across the State. We applaud them on these efforts and we appreciate being involved. However these planning efforts will fall short without the internal leadership to carry out the plans.

Our recommendation would be to upgrade the HDOT Bicycle Coordinator to a Senior Level Planner and conduct a legitimate national search for the position and fill it as soon as possible. We also feel that the SRTS program would be much better served with a full time SRTS Coordinator housed the Planning Branch of HDOT so that the SRTS Coordinator and the Bike Coordinator can work closely together to make best use of Federal stimulus dollars and Federal transportation aid.

BICYCLING AND WALKING BELONG IN HAWAII'S CLEAN ENERGY FUTURE

Hawaii's extreme energy vulnerability as isolated Pacific islands nearly wholly dependent on imported fuels, and abundant, but fragile, natural environment capable of harnessing the energy of wind, solar, wave and bio fuels, has positioned Hawaii as a magnet for alternative energy research. Federal, state and county leaders have recognized Hawaii's energy insecurity and existing "natural capital" and have taken bold steps to make Hawaii a test bed for alternative fuel technologies, including

launching the Hawaii Clean Energy Initiative¹, an unprecedented partnership between the U.S. DOE and Hawaii that has brought expertise and leadership to solve Hawaii's energy challenge as a model for the rest of the country. However, experts and existing stakeholders in the energy debate agree that true energy self-sufficiency cannot solely rely on alternative generation. Demand reduction through increased energy efficiency must also be a key component of Hawaii's energy security strategy.

Transportation accounts for the largest amount of energy utilization in the islands, with resident and visitor fuel demand accounting for one-third of imported oil. Aviation, shipping and commercial trucking industries are dependent upon these imports. Where we can make the biggest difference is in personal household trips, half of which are 5 miles or less.² For these short trips, bicycling is a great choice. As an oil-free, simple (no expensive research and development required), independent (not constrained by a fixed transit schedule), inexpensive (affordable mobility for all) and off-the-shelf technology (ready to deploy now), bicycling should be a major component of Hawaii's and of the United State's energy self-sufficiency and green house gas reduction plan.

Bicycling was once a viable transportation option in Hawaii. Eki Cyclery, still a profitable bike shop in Honolulu today, opened its doors in 1911 to "meet Honolulu's growing demand for inexpensive, urban transportation".³ Many of Hawaii's first bicycle plans were created following the oil shocks of the 1970's. Unfortunately, once the oil prices fell and the long lines at the gas pumps dwindled, these plans were shelved to make way for a system almost entirely reliant on personal motor vehicles. Bicycling could be safe and efficient options again as they were in the early 1900's, especially for short trips, if the right combination of engineering, education, encouragement and enforcement practices were in place.

We recommend that USDOE and DBEDT through the HCEI look at ARRA funds to accelerate planning, design and construction of existing bicycle and pedestrian projects in Bike Plan Hawaii, O'ahu's Bicycle Master Plan and other county bicycle and pedestrian plans.

PREPARED STATEMENT OF SUSAN MILLER

Mahalo for the opportunity to provide testimony: I am Susan Miller. I work on a federal funded Medicaid Infrastructure Grant (Hire Abilities Hawaii) at the University of Hawaii. The nature of the grant is removing barriers to employment for persons with disabilities, and building infrastructure to promote access to competitive employment pathways in Hawaii.

I have good news and bad news to share regarding our stimulus spending in Hawaii. The bad news first: in all of the challenges we have faced as a state, including all of the budget cuts, the losses of jobs and services in state government, and the reductions in funding in critical areas, like education, we have been slow to spend our stimulus funding. I am here to tell you that in this tough environment, people with disabilities have not been adequately included in the stimulus funding for employment.

The good news is that we still have time to include the disability community in our stimulus funding. Projects in the following areas still need funding:

- Benefits education, which helps persons with disabilities to understand the impact on employment to their benefits so those who are able may join the workforce and give up their benefits.
- Job Accommodations in public sectors, which is new to Hawaii, provides the technical support for people with disabilities to gain and retain employment.
- Employment First, which will create "Yes We Can" environment for people with Development Disabilities in Hawaii, with an assumption that all people who wish to work can find a place in the job market, with the use of job coaching and supported employment.
- Medicaid Buy-in, which if enacted in Hawaii, will enable people with disabilities to keep their Medicaid when they go to work, which will provide them with the level of healthcare needed for them to successfully remain in the job market.
- Transition for at-risk youth, including youth with disabilities, who are often left behind since the summer jobs program by Department of Labor is funded by

¹Hawaii Clean Energy Initiative, Information available at: <http://www.hawaii-cleanenergyinitiative.org/>.

²RITA National Household Transportation Survey, 2001, Available at: <http://www.bts.gov/programs>.

³Hawaii Business Magazine, February 2009.

TANF, and TANF funds are prohibited from being used for people with disabilities.
Let me repeat, there is still time to allocate funding toward programs that can serve people with disabilities.
Mahalo again for the opportunity to give you my testimony.

CONCLUSION OF HEARING

Chairman INOUE. And the committee will stand recessed.
[Whereupon, at 12:30 p.m., Wednesday, July 7, the hearing was concluded, and the committee was recessed, to reconvene subject to the call of the Chair.]

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