



HONOLULU AUTHORITY for RAPID TRANSPORTATION

Daniel A. Grabauskas  
EXECUTIVE DIRECTOR AND CEO

BOARD OF DIRECTORS

Ivan M. Lui-Kwan, Esq.  
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Donald G. Horner  
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Robert Bunda  
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Ford N. Fuchigami  
William "Buzz" Hong  
Kestie W.K. Hui  
Damien T.K. Kim  
Carrie K.S. Okinaga, Esq.

**Board of Directors Meeting**  
Kapolei Hale, Conference Room B  
1000 Uluohia Street, Kapolei, Hawaii  
Thursday, June 25, 2015  
9:30 am

**Agenda**

- I. Call to Order by Chair
- II. Public Testimony on All Agenda Items
- III. Approval of the Minutes of the May 21, 2015 Board of Directors Meeting
- IV. Executive Session  
Pursuant to Hawaii Revised Statutes Section 92-4 and Subsections 92-5(a)(4) and 92-5(a)(2), the Board may enter into Executive Session to consider the Annual Evaluation of the Executive Director/CEO where consideration of matters affecting privacy will be involved, and to consult with its attorneys on questions and issues pertaining to the Board's powers, duties, privileges, immunities and liabilities with regard to these matters as well as the eminent domain matters.
- V. Executive Director and CEO's Performance Evaluation
- VI. Eminent Domain
  - A. Resolution 2015-12 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 9-6-004-023 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
  - B. Resolution 2015-13 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-2-003-106 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
  - C. Resolution 2015-14 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-2-003-018 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
  - D. Resolution 2015-15 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-2-003-020 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
  - E. Resolution 2015-16 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-5-028-073 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain



- F. Resolution 2015-17 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-5-015-007 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- G. Resolution 2015-18 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-5-015-017 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- H. Resolution 2015-19 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-5-007-024 by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- I. Resolution 2015-20 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Keys 1-2-009-006, 1-2-009-005, and 1-2-009-016 (Portions) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- J. Resolution 2015-21 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-2-003-014 by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- K. Resolution 2015-22 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-2-003-006 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- L. Resolution 2015-23 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-2-003-101 by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- M. Resolution 2015-24 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-5-015-006 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- N. Resolution 2015-25 Approving Notification to the City Council of Intention to Acquire Easement Over, On, and Across the Real Property Identified as Tax Map Key 1-5-007-032 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Easement by Eminent Domain

- O. Resolution 2015-26 Approving Notification to the City Council of Intention to Acquire Easement Over, On, and Across the Real Property Identified as Tax Map Key 2-3-002-069 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Easement by Eminent Domain
- P. Resolution 2015-27 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 2-3-007-039 by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- Q. Resolution 2015-28 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 2-3-007-045 by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- R. Resolution 2015-29 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Key 1-1-016-007 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- S. Resolution 2015-31 Approving Notification to the City Council of Intention to Acquire the Real Property Identified as Tax Map Keys 1-5-015-005 and 1-5-015-001 (Portions) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Property by Eminent Domain
- T. Resolution 2015-32 Approving Notification to the City Council of Intention to Acquire Easement Over, On, and Across the Real Property Identified as Tax Map Key 2-1-031-030 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Easement by Eminent Domain
- VII. Right of Way Update
- VIII. Construction and Traffic Update
- IX. May Monthly Progress Report
- X. Federal Transit Administration April Quarterly Meeting Summary
- XI. May Project Management Oversight Contractor Report
- XII. Resolution 2015-33 Relating to the Honolulu Authority for Rapid Transportation's Commitment to Meet Regularly with City and State Leaders to Provide Updates
- XIII. Adoption of FY2016 Business Plan
- XIV. Resolution 2015-34 Adopting Operating and Capital Budgets for Fiscal Year 2016
  - A. Public Hearing
  - B. Decision-making



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- XV. Resolution 2015-35 Adopting Six-Year Capital Program for Fiscal Year 2016 – 2021
  - A. Public Hearing
  - B. Decision-making
- XVI. Resolution 2015-36 In Acknowledgement and Appreciation of Carrie K.S. Okinaga
- XVII. Resolution 2015-38 In Acknowledgement and Appreciation of Keslie W.K. Hui
- XVIII. Resolution 2015-37 In Acknowledgement and Appreciation of Robert “Bobby” Bunda
- XIX. Formation of Permitted Interaction Group to Select the Ninth Voting Board Member
- XX. Executive Director and CEO’s Report
- XXI. Adjournment

Note: Persons wishing to testify on items listed on the agenda are requested to register by completing a speaker registration form at the meeting or online on the HART section of the [www.honolulustransit.org](http://www.honolulustransit.org) website. Each speaker is limited to a **two-minute** presentation. Persons who have not registered to speak in advance should raise their hands at the time designated for public testimony and they will be given an opportunity to speak following oral testimonies of the registered speakers.

If you require special assistance, auxiliary aid and/or service to participate in this event (i.e. sign language interpreter; interpreter for language other than English, or wheelchair accessibility), please contact Cindy Matsushita at 768-6258 or email your request to [cmatsushita@honolulu.gov](mailto:cmatsushita@honolulu.gov) at least three business days prior to the event.



HONOLULU AUTHORITY for RAPID TRANSPORTATION

**Board of Directors Meeting  
Ali'i Place, Suite 150  
1099 Alakea Street  
Honolulu, Hawaii 96813  
Thursday, May 21, 2015 9:00 am**

**MINUTES**

**PRESENT:**

Ivan Lui-Kwan	Carrie Okinaga
Donald G. Horner	Robert "Bobby" Bunda
Michael Formby	Keslie Hui
George Atta	Damien Kim

**ALSO IN ATTENDANCE:  
(Sign-In Sheet and Staff)**

Daniel Grabauskas	Ron Tober (via phone)
Brennon Morioka	Elizabeth Scanlon
Lisa Hirahara	Lorenzo Garrido
Joey Manahan	Tom LeBeau
Mark Garrity	Allison Andrade
Barbra Armentrout	Joyce Oliveira
Gerald Fujita	Andrea Tantoco
April Coloretti	Cindy Matsushita
Russell Honma	

**EXCUSED:**

William "Buzz" Hong	Ford Fuchigami
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**I. Call to Order by Chair**

HART Board Chair Ivan Lui-Kwan called the meeting to order at 9:00 a.m.

**II. Public Testimony on All Agenda Items**

Mr. Lui-Kwan called for public testimony.

Barbra Armentrout advised that she would testify after item VI on the agenda.

Mr. Lui-Kwan acknowledged and thanked HART Director of Construction and Design Lorenzo Garrido, who would be leaving HART at the end of the month. Board members

Damien Kim, Keslie Hui, and Don Horner also thanked Mr. Garrido. HART Executive Director and CEO Daniel Grabauskas thanked Mr. Garrido on behalf of the HART staff. Mr. Horner asked about filling Mr. Garrido's position, and Mr. Grabauskas said that HART staff would be able to move forward.

Mr. Lui-Kwan also announced that Board members Carrie Okinaga and Robert "Bobby" Bunda would be leaving the HART Board of Directors. Ms. Okinaga had been nominated to the General Counsel position at the University of Hawaii. He thanked the both of them for their service on the HART Board.

III. Approval of the Minutes of the April 23, 2015 Meeting of the Board of Directors

Mr. Lui-Kwan called for the approval of the minutes of the April 23, 2015 meeting of the Board of Directors. There being no objections or modifications, the minutes were approved as circulated.

Mr. Lui-Kwan suggested taking item V on the agenda out of order. There being no objections, the matter was taken up.

V. Discussion on City Council Resolution 15-79, CD1

Mr. Grabauskas said that HART had been engaged in many conversations with the City Council, regarding a greater focus on transparency. He had testified on behalf of the HART Board in favor of Resolution 15-79, CD1, which had been introduced by Councilmember Joey Manahan. A copy of the resolution is attached hereto as Attachment A. He thanked Mr. Manahan for his leadership on the Council, and as the chair of the Transportation Committee. Mr. Grabauskas said that the resolution, which was unanimously adopted by the Council, ensures continued communication and openness with the Council.

Mr. Lui-Kwan confirmed that the Board had embraced transparency, and invited Mr. Manahan to address the Board.

Mr. Manahan said that the resolution asks HART leadership to meet with leadership of local funding sources, including the Governor, Senate President, Senate Ways and Means Committee chair, House Finance Committee chair, Mayor, City Council and Council Budget Committee chair. He said that the intent of resolution was to create a vehicle for partnerships between the city and state, as well as the state legislature. He said that the City and HART budgets were both significant and affected each other, and that he hopes the resolution will foster discussions regarding extensions into Manoa and Salt Lake.

Mr. Lui-Kwan thanked Mr. Manahan for his leadership. Ms. Okinaga also thanked Mr. Manahan and said that this dialogue would be valuable once rail is in operation. Mr. Hui said he appreciated Mr. Manahan's leadership, and thought the emphasis on stakeholder relationships was particularly appropriate. Mr. Horner said he appreciated Mr. Manahan's fiduciary oversight.

Mr. Horner inquired if this matter would be adopted by the HART Board. Chair Lui-Kwan indicated this is a matter of discussion and that its item will be placed in the next agenda as an action item.

#### IV. FY2016 Business Plan Draft Review

Mr. Grabauskas said that the draft FY2016 Business Plan was being presented to the Board for their comment, and that it would be adopted prior to the adoption of the Operating and Capital Budgets to set the tone for the coming year. He introduced Ron Tober, attending via teleconference, who had helped implement the City Charter provisions regarding HART, and has over 46 years in public transportation, having held four Chief Executive Officer positions, as well as two Chief Operating Officer positions in the field.

Mr. Tober made a PowerPoint presentation on the draft FY2016 Business Plan; a copy of the draft Plan and presentation are attached hereto as Attachment B. He introduced the fifth edition of the Business Plan, which contained the best available information at that time. He said that staff would be updating the plan with final financial information. Mr. Tober summarized the contents of the Business Plan, which he said would function as a historical record for the agency.

Mr. Tober reviewed the agency status during FY2015, which included 60% of contracts awarded, no new litigation, strong continued federal support, high interest in transit oriented development, as well as the passage of the General Excise Tax (GET) extension by the legislature, which was awaiting the governor's signature and will require necessary approvals by the City Council thereafter.

Mr. Tober reported the project status as 32% complete overall, with 145 columns, 2.5 miles of guideway, the Rail Operations Center 65% complete, railcar manufacturing on schedule, an outstanding safety record, 90% of land acquired, utility relocations underway, and 1,400 jobs created. Mr. Tober noted that due to the first nine stations coming in over budget, the shortfall in GET receipts and concerns over the possible use of federal bus system grant funds, HART took a number of mitigating actions. These included an extensive review of the project, re-thinking HART's contracting approach in the remaining half of the alignment, resetting the project budget and making adjustments to schedule.

Mr. Tober went on to report on the positive aspects of the project status, which included over \$1 billion in committed federal funding, \$1.56 billion GET revenues received to date, a clean "no-findings" financial audit, good federal triennial review results, and short term cash flow issues to manage project advancement. He noted that TOD planning was underway, and that HART had been planning for future operations with the Department of Transportation Services, including key fare policy decisions, bus system restructuring planning, and coordination and/or consolidation of administration and support functions.

Mr. Tober went on to highlight the FY2016 work plan. Project implementation was expected to include continued construction and completion of utility relocations on the first ten miles of guideway, and the start of construction on the nine westside stations, completion of the Rail Operations Center and receipt of the first rail cars, obtaining access to all properties required for construction, and awarding \$1.8 billion in remaining construction contracts. He outlined the contracts expected to be let in FY2106. Mr. Tober also detailed the project management areas of focus for FY2016, which include obtaining approvals to implement GET surcharge extension and short-term debt issuance, updating the Financial Plan, and a continued emphasis on safety and security.

Mr. Tober described the policy decisions that would be made. They include decisions on the Pearl Highlands Parking Garage implementation, fare policy, integrating the multimodal rail and bus system, and the timing of future extension planning.

Mr. Tober went on to outline the challenges and risks the project will face in FY2016. These include the high cost of construction, schedule impacts from delays, timely approval of the GET extension and short-term debt issuance, and future GET receipts.

Lastly, Mr. Tober outlined the five appendices to the Business Plan.

Mr. Lui-Kwan thanked Mr. Tober for his presentation. He asked Mr. Tober for his opinion of the \$910 million shortfall, which includes \$100 million in potential GET revenue shortage, and \$210 million in Section 5307 funds that will not be available. Mr. Tober responded that the Business Plan validates the shortfall calculation.

Mr. Lui-Kwan asked Mr. Tober to comment on national increases in construction costs. Mr. Tober said that Hawaii's rising construction costs are well in excess of that on the mainland due the logistics of obtaining materials and equipment.

Mr. Lui-Kwan asked whether HART would continue to be below budget on real estate acquisition, and Mr. Tober deferred to HART staff on the matter. Mr. Lui-Kwan thanked Mr. Tober for his analysis.

Mr. Horner requested that the Business Plan be edited to reflect that HART had control over 90% of the required real estate, but did not yet own all of it. Director of Planning and Right of Way Elizabeth Scanlon confirmed this.

Mr. Horner asked about GET revenues, and Mr. Grabauskas said that at \$30 million behind projections, HART is 95% on budget. Mr. Horner said that the growth rate going forward posed a risk. He indicated that the 5% growth rate may be inaccurate and needs to be discussed. Mr. Lui-Kwan said that GET projections made at the request of the legislature were based on a 4.5% growth rate. Mr. Grabauskas said that the Full Funding Grant Agreement (FFGA) growth rate was 5.4%, which was based on the previous 30-year average. He said that this growth rate was set artificially high because of an error reported to HART by the State Department of Taxation of about \$9 million. Mr. Horner

remarked that he fully agreed with the 4.5% and recommended that the numbers be discussed and reevaluated to reflect current economic conditions.

Ms. Okinaga thanked Mr. Tober for drafting the Business Plan. She asked about staffing. Mr. Tober replied that Mr. Grabauskas had done a good job of utilizing embedded staff and consultants, as well as city staff, and that the level of staffing was appropriate to this type of project. Ms. Okinaga said that the fact that 63% of jobs created by the project were local should be communicated to the public. Mr. Grabauskas added that HART defined “local” as living in Hawaii at the time of hire. He pointed out that over 80% of construction jobs are local, and over 90% of jobs at HART are local.

Mr. Horner asked about the current number of full-time staff at HART, in relation to the authorized 139 positions. Mr. Grabauskas responded that the number was approximately 130.

Board member George Atta said that he would like to see comprehensive mitigation measures to counteract rising construction costs, such as public-private partnerships (PPP). He suggested employing staff to structure PPPs. Mr. Grabauskas agreed that expertise is needed, and said that the Pearl Highlands parking structure presented a good opportunity for PPP.

Board member Mike Formby requested that the Business Plan reflect coordination of the inter modal fare system decision making process include the Department of Transportation Services, Oahu Transit Services, City Council and HART. Mr. Grabauskas requested that Mr. Tober augment the report to reflect this discussion topic. Mr. Lui-Kwan indicated that City Council partnership would be required.

Mr. Lui-Kwan thanked Mr. Tober for including TOD as an important item, which will require partnership between the City, State, and HART.

Mr. Hui said that he would like to highlight oversight of the project delivery, particularly the impact of construction on communities and businesses.

Mr. Atta noted that TOD will increase land value, and opined that HART should be able to capture that value. He suggested that Mr. Grabauskas look into possible value capture mechanisms. Mr. Lui-Kwan agreed, and said that both Mr. Horner and the Mayor have been discussing value capture. Mr. Atta said that highlighting the added value of the project will put its cost into perspective. Mr. Horner agreed and said that rail is an investment for the city.

Mr. Lui-Kwan asked when the Business Plan would be finalized. Mr. Grabauskas said that members could provide comments, and the final draft would be presented to the Board for adoption in June.

Mr. Kim said that although the 63% local job rate was good news, he suggested that HART be cautious about accepting future low bids just to reduce costs as it may risk quality and safety, and add to further costs in the long run.

Mr. Lui-Kwan called for public testimony.

Ms. Armentrout provided testimony questioning rail's operating and maintenance costs, as well as HART staffing and security on the rail system. She asked whether the cost to test the rail system were included in HART's budget. She asked about staff and whether staff would be let go after construction was complete. She asked about the purchase of Alii Place by the State of Hawaii, and whether HART would have to move.

Russell Honma congratulated Ms. Okinaga, and thanked the Board and Mayor Kirk Caldwell for their efforts regarding the GET extension.

Natalie Iwasa urged the Board to consider a separate bus-only fare. She asked the Board to examine operations and maintenance costs, which may need to be refreshed. She suggested that the data cutoff dates by the Project Management Oversight Contractor Reports be changed to the end of the month to allow easier comparison with financial data. She also asked about the zero incurred amount for the Airport Utilities contract on page 51 of the April Monthly Progress Report. She requested that the Buy America audit be posted on HART's website. She had additional suggestions for posting items on HART's website and HART Board agendas. Mr. Horner thanked Ms. Iwasa for her thoroughness.

Mr. Lui-Kwan noted that there was a typographical error on the agenda, which would have indicated that the discussion would be on the FY2016 Business Plan, not the FY2015 Business Plan.

Mr. Horner stated that HART was authorized 139 full time employees (FTEs), and the operating plan assumes no extensions. Mr. Grabauskas agreed and said there would be 59 FTEs when rail was in operations. Mr. Horner asked Mr. Grabauskas to detail the timeline between the delivery of the train cars to revenue service. Mr. Grabauskas said that the car shells were being manufactured in Italy, and would be shipped to California for assembly. HART staff would conduct periodical inspections, which have been satisfactory to date. Rail cars would be shipped to Hawaii in approximately a year. Extensive testing would follow, for 22 to 24 months, over three miles and between three stations. The cost of testing is included in the Ansaldo contract. Testing is pursuant to new federal requirements under MAP-21. Mr. Grabauskas also indicated that HDOT would certify to the safety of the system.

Mr. Lui-Kwan asked Mr. Kim for his opinion regarding escalating construction costs. Mr. Kim said that there would be a lot of construction on Oahu in the next four to five years in Kakaako, Waikiki, Hoopili, and Koa Ridge, and that costs would continue to rise.

VI. HART/Ansaldo/DTS/OTS Working Group Update

Ms. Armentrout testified that the use of smart cards would render many seniors without credit cards unable to ride. She asked how many seats there would be on rail for the elderly and disabled, those in mobility devices, and those with service animals. Ms. Armentrout suggested that the Working Group include a representative from the Disability Ride Center.

Mr. Horner and Mr. Formby thanked Ms. Armentrout for her advocacy. Mr. Horner noted that per capita, Handi-Van is the most expensive mode of transportation and that Rail would lower costs overall, which could lead to better Handi-Van service.

Mr. Grabauskas introduced Department of Transportation Services Deputy Director Mark Garrity, who gave a PowerPoint presentation on the Working Group's activities. The presentation is attached hereto as Attachment C.

Mr. Horner asked whether the smart card would have the potential to be used as a bus-only fare. Mr. Grabauskas confirmed it would, and that the smart card could also be used to ride rail and the Handi-Van.

Mr. Garrity outlined the background and purpose of the Working Group, which was formed to create seamless intermodal operations. He said that the group included representatives from DTS, HART, Oahu Transit Services, the Department of Information Technology, the Department of Planning and Permitting, Ansaldo Hawaii Joint Venture, the Department of Budget and Fiscal Services, the Hawaii Community Development Authority, and the U.S. Navy.

Discussion topics included traffic mitigation, bus-rail integration, fare collection system, information technology and communications system integration, TOD, rail station design, rail station access, wayfinding and signage, and website coordination.

Regarding traffic mitigation, Mr. Garrity said that DTS had adjusted bus routes in Waipahu in coordination with several agencies and stakeholders, in response to the rail construction occurring in the area.

Bus-rail integration planning activities included a proposed bus circulator for the Kakaako, Ala Moana and Waikiki areas, which will connect rail stations with high-ridership employment and education centers.

A request for proposals was being prepared for the multimodal fare collection project, with the expectation that a vendor would be hired during the summer.

On the rail station access program, physical needs for rail access were being identified. Work was being conducted at the Waipahu Transit Center and in Chinatown.

Mr. Formby thanked Mr. Garrity, and said that the Working Group always kept system users in mind. He reported that DTS had applied for a Tiger Grant with the Federal Government, for a mix of hybrid electric and electric buses, with partner Hawaiian Electric, to install the electrical charging infrastructure. He also touched up on the purpose of the modification of the circulator bus routes and explained that it is modified to maximize what the US DOT calls the “Ladders of Opportunity.” He asked Mr. Garrity to provide an update on the Pearlridge Station area.

Mr. Garrity said that the City was considering the purchase of a site surrounding the HART property for the Pearlridge Station to provide intermodal transportation and mauka/makai access. He said that it would be a great opportunity for a transit center or for TOD. Mr. Horner registered his approval of the use of shuttles as a connector to rail, which Mr. Garrity said were very successful in other cities. Mr. Lui-Kwan that the Japanese Consul General had expressed interest in the project for visitors, and Mr. Garrity said that the reliability, capacity and frequency of the shuttles would meet visitors’ needs. Mr. Horner commented that the fare system would also allow HART to charge visitors a premium.

#### VII. Construction and Traffic Update

Mr. Grabauskas introduced Deputy Director of Construction Tom LeBeau, and Kiewit’s Allison Andrade, who would be making a PowerPoint presentation, attached hereto as Attachment D.

Mr. LeBeau gave a brief overview of the alignment and its sections. He detailed the progress at the Rail Operations Center (ROC), which was 71% complete and on time and on budget. Mr. LeBeau said that Ansaldo, who holds the design-build-operate-maintain contract, was expected to begin installing communications and systems equipment soon. Once the ROC is complete, the keys will be handed over to Ansaldo’s operations and maintenance folks. Mr. Horner asked about staffing at the ROC, and Mr. Grabauskas said that the ROC would be the headquarters for Ansaldo JV. Mr. LeBeau said HART would provide oversight. Mr. LeBeau continued with the status of the Operations and Service and Maintenance of Way Buildings, and the laying of trackbed in the ROC yard.

In the West Oahu/Farrington Highway section, the guideway is 62% complete. Mr. LeBeau said that the construction over Fort Weaver Road was expected to be complete in August. He said that clearances over Fort Weaver Road will be within the Department of Transportation standards.

Mr. LeBeau said that construction on the balanced cantilever continued on schedule. He assured the public that construction was safe, and that contractor Kiewit had taken additional measures to ensure that debris would be mitigated, such as nets and filling in any gaps. He said that HART was attempting to settle claims as expeditiously as possible.

In the Kamehameha Highway Guideway section, schedule concerns regarding third party utilities continued, although work was progressing. In order to mitigate schedule concerns, Kiewit would be employing a third truss beginning in June or July.

Moving forward, Airport section advanced utilities was 10.5% complete, and the seven piers were 100% complete. HART continued to work cooperatively with the U.S. Navy on obtaining site access.

Ms. Andrade provided a traffic update along Farrington Highway. She detailed the lane closures associated with balanced cantilever construction, and reported on traffic impacts along Kamehameha Highway. Ms. Andrade said that lane closures near Aloha Stadium and the Neal Blaisdell Center would be delayed to accommodate commencement ceremonies.

Mr. LeBeau concluded with the ways that HART was staying connected with the community, and said that of the 106 project hotline calls received the previous month, 56% of the were traffic related. He said that HART continued to hold public meetings to inform the public of traffic impacts, and thanked Mr. Formby for his participation. Mr. LeBeau added that there would be an additional balanced cantilever lane closure that Saturday night on the H-1 freeway, in conjunction with a Hawaiian Dredging closure.

Mr. Formby registered his appreciation for HART's outreach efforts. He said that community meetings have revealed that although traffic-related issues are often due to the other agencies' work, HART is often the face of traffic. He said that the mayor had requested that a traffic mitigation consultant be hired, and emphasized that DTS and HART continue to coordinate with DOT and third party utilities.

Mr. Horner asked about HART's interface with Hoopili developers, and Mr. Grabauskas confirmed that HART was working with D.R. Horton/Schuler, as the guideway will go straight through the development of approximately 14,000 homes. He said that the station had been moved so that it would be better placed within the development, and that D.R. Horton/Schuler would build station access at their cost. He added that moving the station resulted in a lower cost to HART, and a better location for the developer. Mr. Formby said that DTS would also work with the developer on intermodal connections.

Mr. Lui-Kwan said that he would skip the next three items in order to address the executive session precedent to the eminent domain matters, in order to address the items requiring action.

VIII. April Monthly Progress Report

IX. March Project Management Oversight Contractor Report

X. Right of Way Update

XI. Executive Session

Mr. Lui-Kwan called for a motion to enter into executive session pursuant to Hawaii Revised Statutes Section 92-4 and Subsection 92-5(a)(4), to consult with its attorneys on questions and issues on a matter pertaining to the Board's powers, duties, privileges, immunities and liabilities. Mr. Formby so moved, and Mr. Kim seconded the motion.

Mr. Lui-Kwan asked for any discussion regarding the motion. Mr. Horner asked for clarification as to what was the purpose of the Executive Session.

Mr. Grabauskas said that five eminent domain matters would be presented to the Board that day. He reminded the Board that four matters had previously been approved by them, two of which had been at the request of landowners. He said that one of them, Stuart Plaza, had been settled recently. He said that HART continued to have conversations with landowners after condemnation proceedings began. Mr. Grabauskas said that regarding the last property in condemnation, the Lee property, HART was negotiating mitigative measures for the land with an eye towards settlement.

Mr. Lui-Kwan called for a vote on the pending motion. All being in favor, the motion carried unanimously.

The Board entered into executive session at 11:44 a.m.

The Board re-entered public session at 11:55 a.m.

XII. Eminent Domain

- A. Resolution No. 2015-7 Approving Notification to the City Council of Intention to Acquire Easement Over, On, and Across the Real Property Identified as Tax Map Key 9-9-003-026 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Easement by Eminent Domain
- B. Resolution No. 2015-8 Approving Notification to the City Council of Intention to Acquire Easement Over, On, and Across the Real Property Identified as Tax Map Key 1-1-016-017 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Easement by Eminent Domain
- C. Resolution No. 2015-9 Approving Notification to the City Council of Intention to Acquire Easement Over, On, and Across the Real Property Identified as Tax Map Key 1-1-016-016 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Easement by Eminent Domain
- D. Resolution No. 2015-10 Approving Notification to the City Council of Intention to Acquire Easement Over, On, and Across the Real Property Identified as Tax Map Key 1-1-016-012 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Easement by Eminent Domain

E. Resolution No. 2015-11 Approving Notification to the City Council of Intention to Acquire Easement Over, On, and Across the Real Property Identified as Tax Map Key 1-1-016-018 (Portion) by Eminent Domain and Publication of a Resolution Authorizing Acquisition of Said Easement by Eminent Domain

Director of Planning and Right of Way Elizabeth Scanlon gave a PowerPoint presentation on the eminent domain matters being presented. The presentation and resolutions are attached hereto as Attachment E.

Ms. Scanlon said that a 222-square foot electrical easement was being sought from the property owned by Halawa View Housing Partners. A settlement had been negotiated, but may not close in time to meet HART's construction schedule.

Regarding the Waiwai Loop Rental property, a 1,581-square foot easement was being sought, which would require the demolition of the front half of the building and a modification to a fence. Ms. Scanlon said that the acquisition cost included the partial demolition cost.

Ms. Scanlon emphasized that negotiations continue on all five properties being presented for eminent domain.

Ms. Scanlon said that a 1,641-square foot easement was being sought in the International Express property, which is a 24 hour per day, 7 days per week, refrigeration business. The owner had rejected HART's offer, and presented a counteroffer for the acquisition of the entire property.

HART was seeking a 1,121-square foot easement from the Window World property; HART had presented an offer, and had not received a response.

Ms. Scanlon reported that a 193-square foot utility easement and 1,307-square foot temporary construction easement was being sought in the Ahualoa Aina property. An offer had been made, and HART was awaiting a response.

Mr. Horner noted that there was a substantial number of properties still left to be acquired, and requested a future presentation on right-of-way areas of concern and risk.

Mr. Lui-Kwan invited a motion for adoption of Resolutions 2015-7, 2015-8, 2015-9, 2015-10, and 2015-11. Mr. Horner so moved, and Mr. Hui seconded the motion. All being in favor, the resolutions were adopted unanimously.

XIII. Executive Director & CEO's Report

Mr. Grabauskas reported that Nan, Inc.'s bid protest in the Farrington Highway Station Group procurement had been dismissed the previous day, and that the procurement process would be allowed to move forward. Hawaiian Dredging had been the lowest

bidder, and Nan, Inc., the second lowest bidder. As a result of the protest, the June 2018 interim opening would now be moved to September 2018.

Mr. Grabauskas reported that the Federal Transit Administration had recently issued a letter regarding claims by John Bond of the Kanehili Cultural Hui, stating that the issues raised warranted no action.

Mr. Grabauskas reported that the Construction, Engineering and Inspection east contract that had been previously canceled had been resolicited. HART had received four bids. Since the last meeting, the H2R2 Pearl Highlands ramp solicitation bids had been opened. Mr. Grabauskas reminded members that the ramp had been part of the nine station group that was broken up, based on contractor feedback that doing so would result in lower prices and greater local competition. HART had received six bids, with Royal Contracting being the apparent low bidder at \$4.8 million. When originally solicited as part of the nine station package, the H2R2 ramp had been bid at \$7.3 million, \$11.8 million, and \$10.2 million.

Mr. Grabauskas reported that, in response to Mr. Formby's suggestion at the previous meeting, HART had included a "Mythbusters" section on its website, which debunks myths regarding the rail project.

Mr. Grabauskas displayed a photo of first rail car shell produced in Italy, a copy of which is attached hereto as Attachment F. He said that the first rail cars would begin arriving in Honolulu the following year.

#### XIV. Executive Director & CEO's Performance Evaluation

Mr. Lui-Kwan said that as the Chair of the Human Resources Committee had to leave for the University of Hawaii Board of Regents meeting, the Executive Director and CEO's performance evaluation would be deferred.

#### XV. Executive Session

There was no need for executive session.

#### XVI. Adjournment

Mr. Lui-Kwan adjourned the meeting at 12:17 p.m.

Respectfully Submitted,

---

Cindy Matsushita

---

Board Administrator

Approved:

---

Ivan Lui-Kwan, Esq.  
Board Chair

---

Date

DRAFT

# HART

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## Right-of-Way Status Update June 25, 2015

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# Meeting our Goals

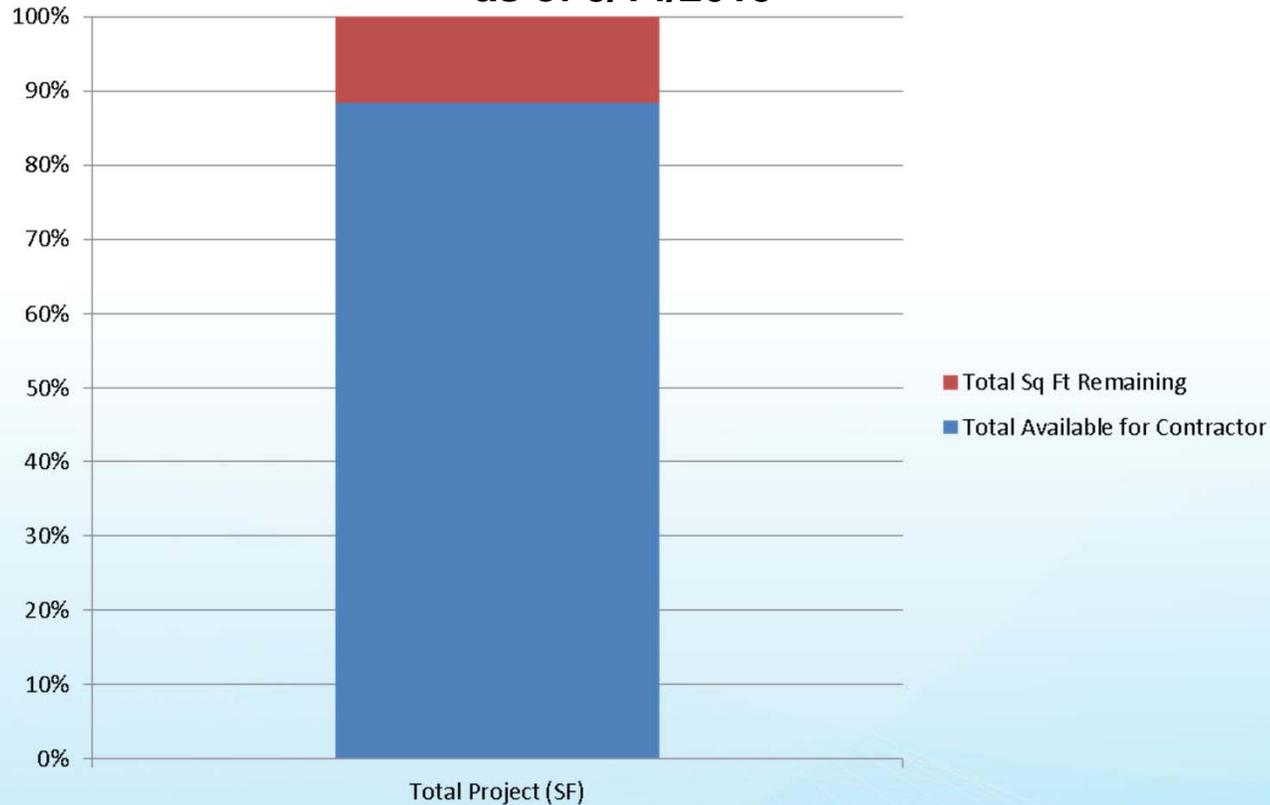
- **Balance respect for property owner with schedule needs and project budget**
- **Balance responsibility of staying within the budget in a changing real estate market**
- **Continue to communicate and educate effectively**
- **Negotiate fairly**
- **Meet requirements of the Uniform Act**

# Status Summary

- **HART received programmatic construction Right-of-Entry from the U.S. Navy ahead of the anticipated date**
- **ROW team continues to meet the schedule for City Center acquisitions relative to program procurement needs**
  - **Intense focus on Airport and Dillingham Parcels to support upcoming procurement**
- **Eminent domain pending**
- **Current total site access available for contractor is 88.40%**

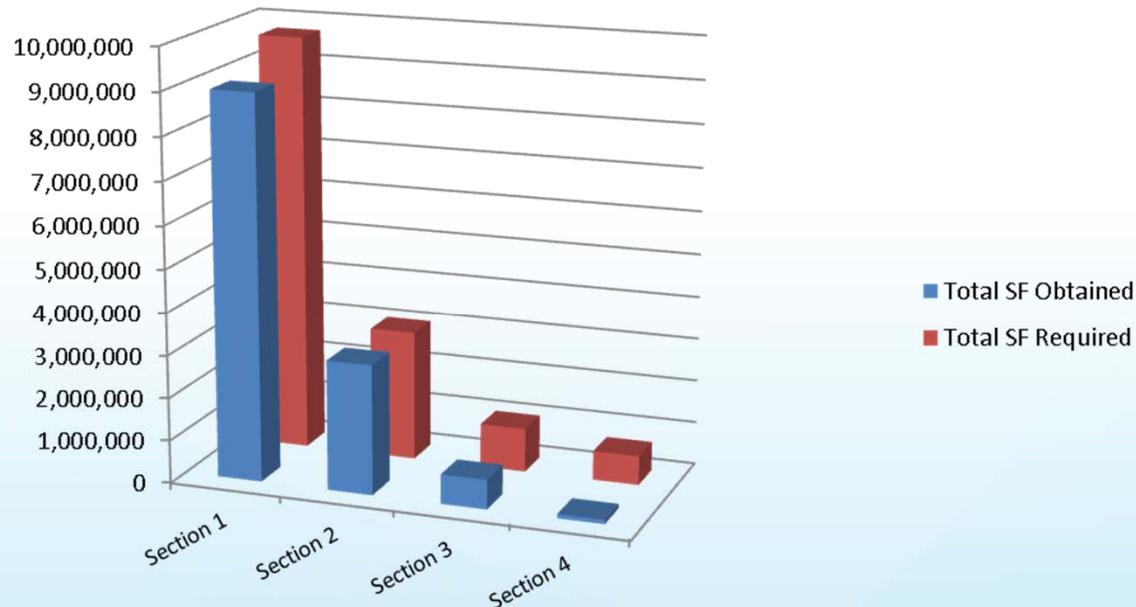
# Progress Site Access Available by Land Area

as of 5/14/2015



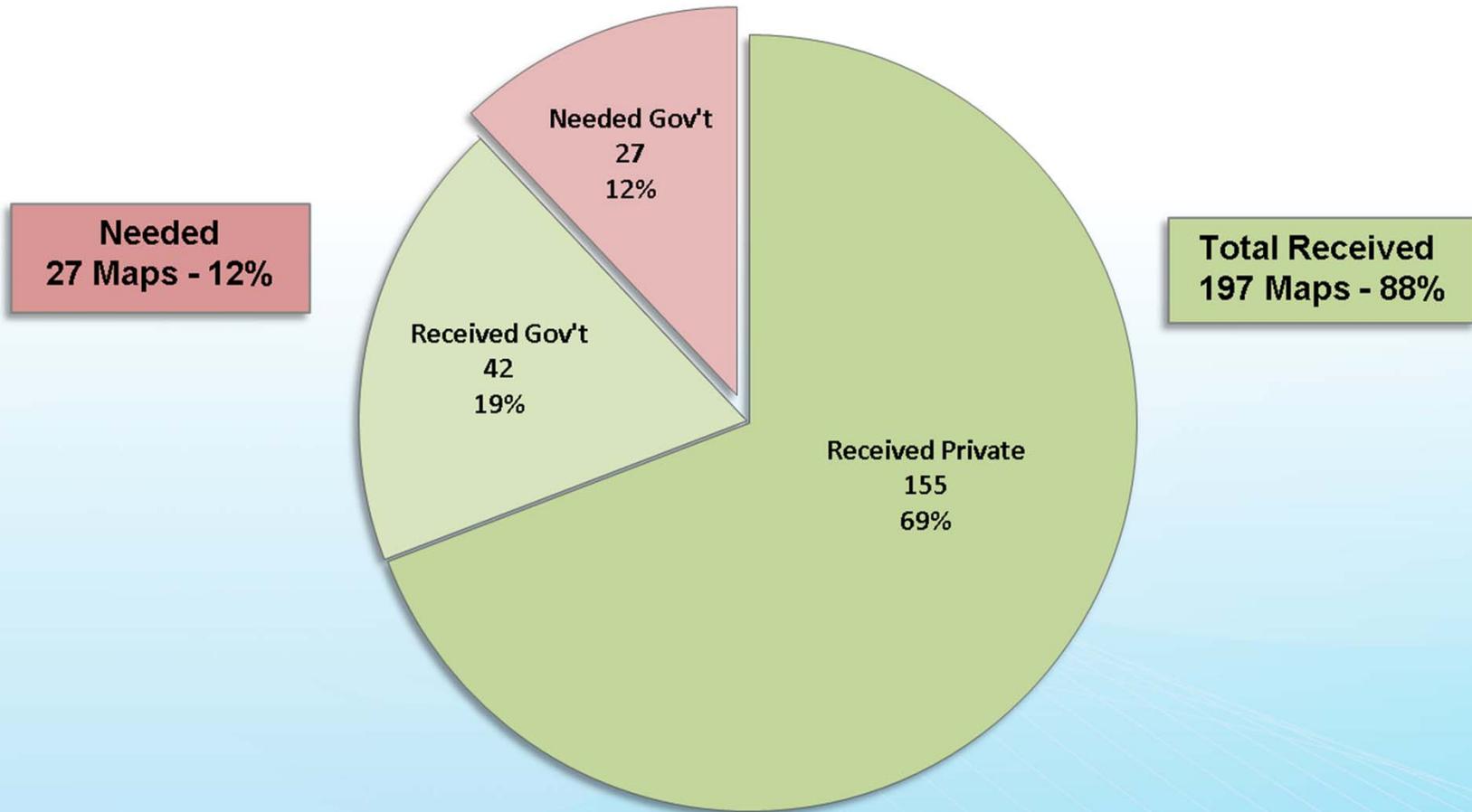
Total Project Sq Ft	Total Sq Ft Requirement	14,449,894
	Total Available for Contractor	12,773,904
	Total Sq Ft Remaining	1,675,990
	% Available for Contractor	88.40%
	Reported Last Month	88.38%

# Progress Site Access Available to Contractors by Land Area by Section as of 5/14/2015



	Section 1	Section 2	Section 3	Section 4
<b>Total SF Obtained</b>	<b>8,964,000</b>	<b>3,023,851</b>	<b>687,103</b>	<b>98,950</b>
<b>Total SF Required</b>	<b>9,728,200</b>	<b>3,027,020</b>	<b>1,015,436</b>	<b>679,238</b>
<b>% Progress</b>	<b>92.14%</b>	<b>99.90%</b>	<b>67.67%</b>	<b>14.57%</b>

# Survey Maps for Remaining Parcels (Privately Owned + Government Parcels) as of 5/14/2015

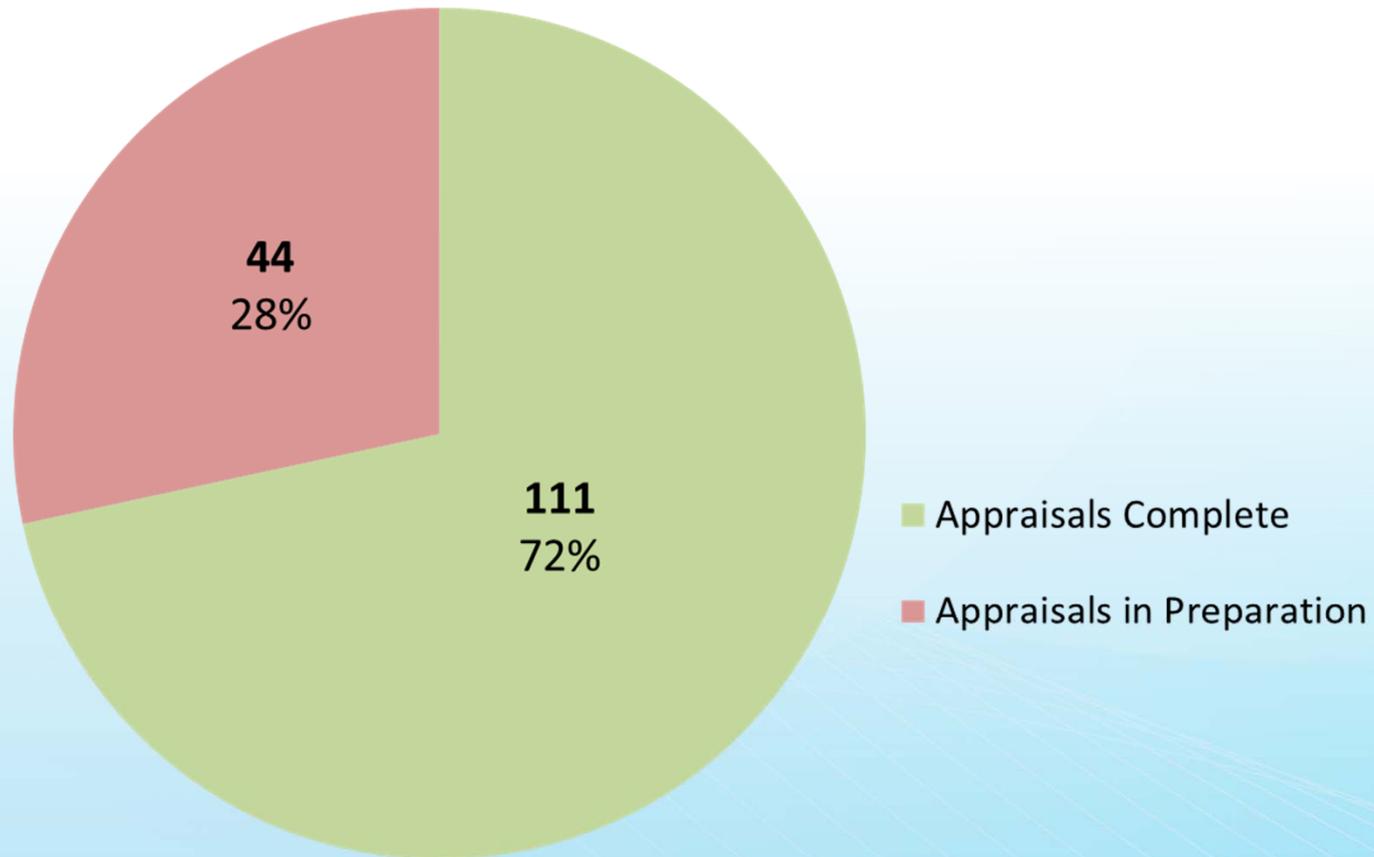


# Appraisal Status

## Remaining Parcels to be Acquired

### Privately Owned Parcels

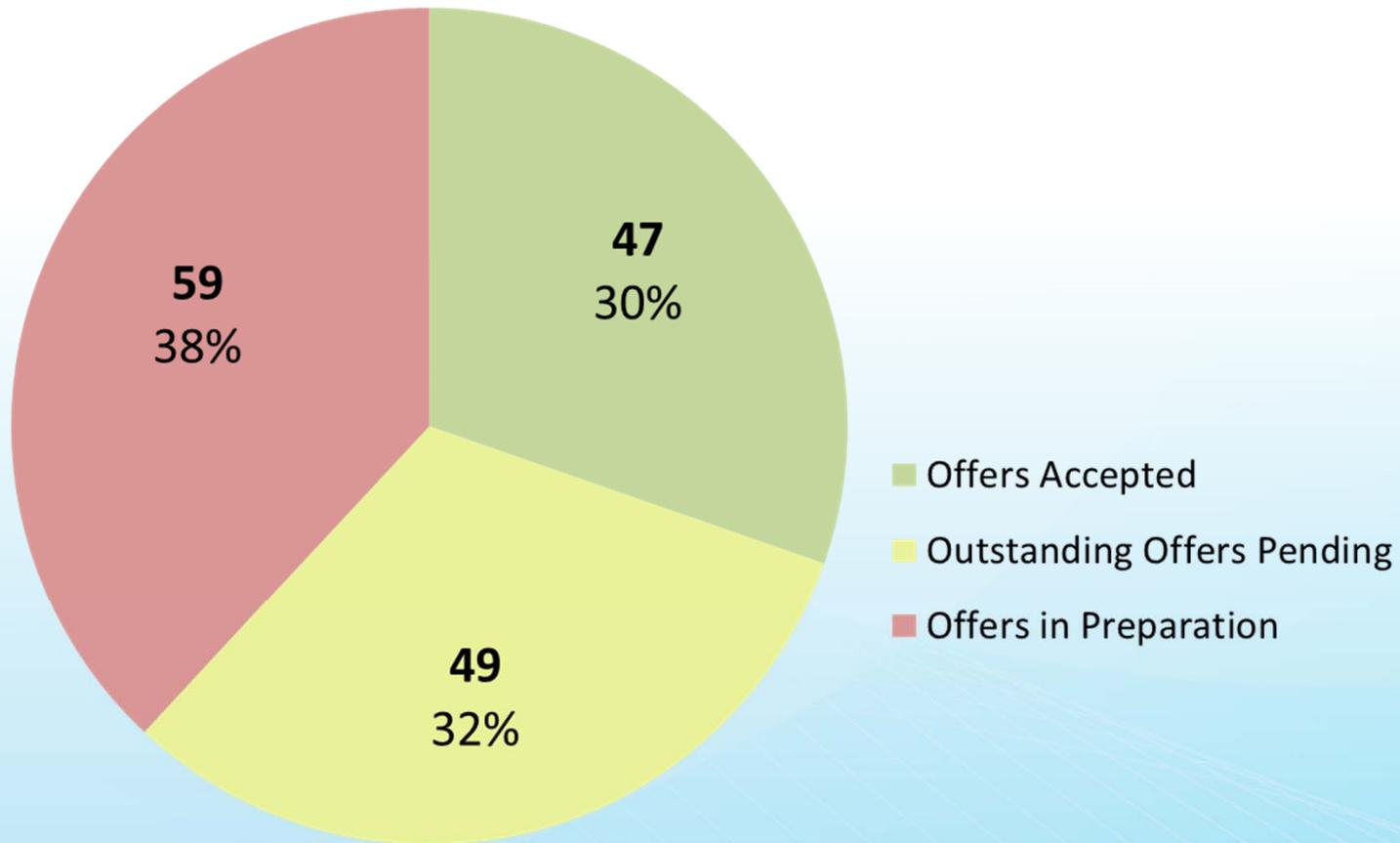
as of 5/14/2015



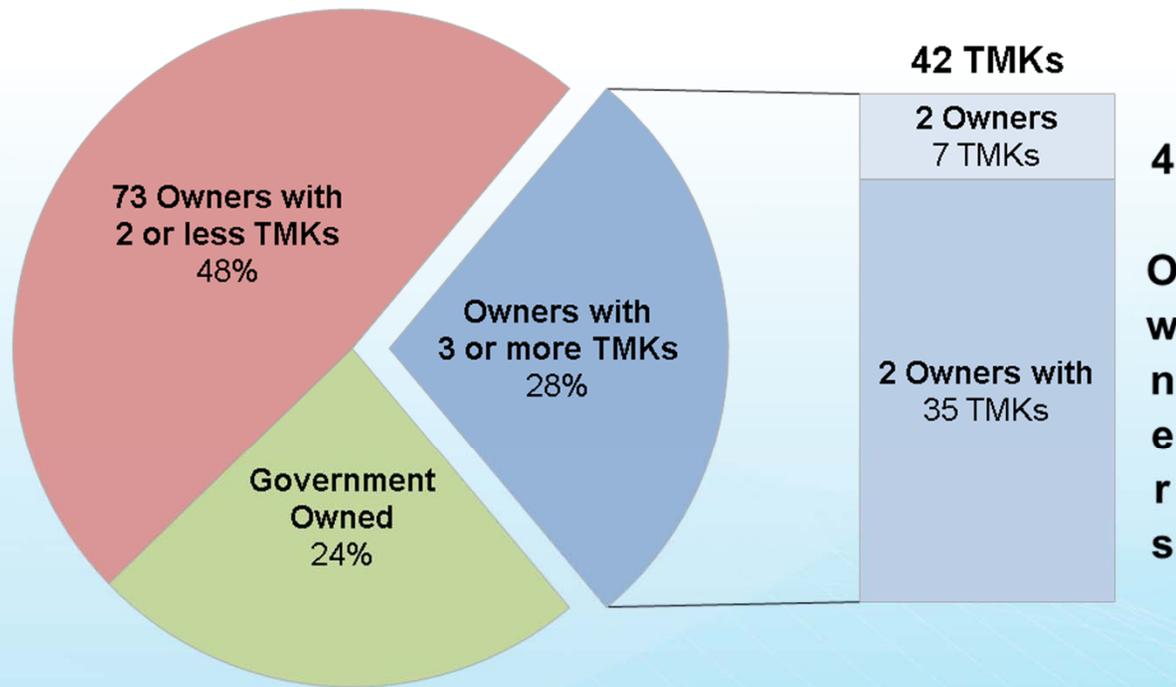
# Offer Status

## Remaining Parcels to be Acquired

Privately Owned Parcels  
as of 5/14/2015



# Parcels to be Acquired by Tax Map Key (TMK) (Privately Owned + Government Parcels) as of 5/14/2015



# Right-of-Way Cost Estimate Update

## as of 5/14/2015

	Budget	Expended	Remaining Budget Balance	Estimate at Completion	Forecast Variance
Acquisition	\$201.70	\$73.20	\$128.50	\$112.90	\$15.60
Relocation	\$20.50	\$7.50	\$13.00	\$17.20	(\$4.20)
<b>Total (Million)</b>	<b>\$222.20</b>	<b>\$80.70</b>	<b>\$141.50</b>	<b>\$130.10</b>	<b>\$11.40</b>

Notes:

- Administrative overhead costs aggregated with the Acquisition and Relocation numbers
- Estimate at completion based on offers, appraisals or assessed values

# Right-of-Way Risks to Budget

- **Volatility of Real Estate Market, especially in the Kakaako-Ala Moana area**
- **Managing the number of conversions from partial acquisition to full acquisition**
- **Unanticipated relocation costs for complex relocations, particularly unexpected full takes**

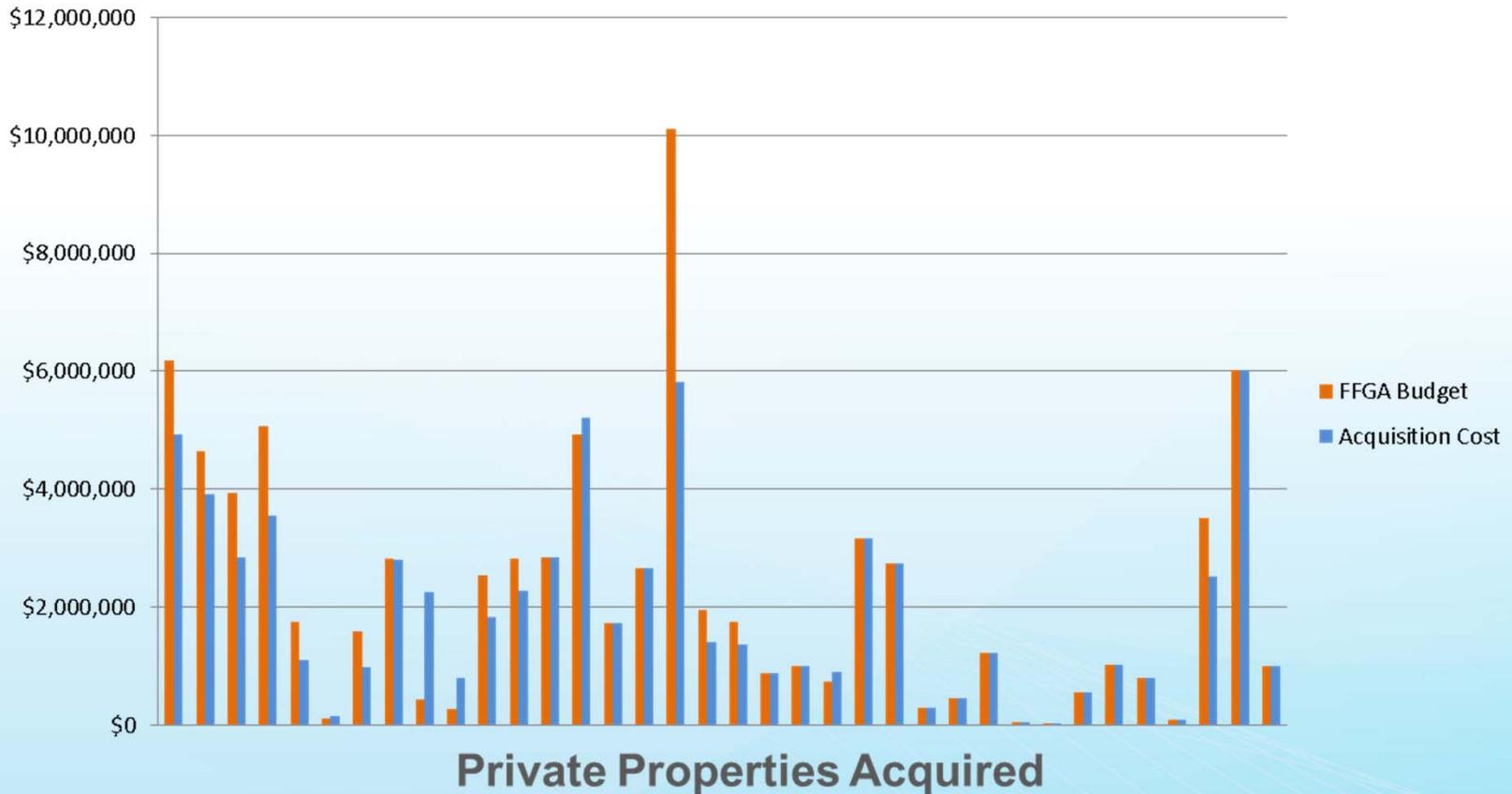
# Private Property Acquisition Summary as of 5/14/2015

No	TMK	Take	Address	Recordation Date	Total Acquisition (\$)	FFGA Budget	Note	Remaining Balance in Budget
1	1-1-016-005	Full	2676 Waiwai Loop	7-Mar-14	4,924,144	6,173,973		1,249,829
2	1-1-016-006	Full	2668 Waiwai Loop	28-Mar-14	3,918,089	4,648,445		730,356
3	1-1-016-014	Full	479 Lagoon Drive	21-Mar-14	2,843,274	3,930,328		1,087,055
4	1-1-016-015	Full	515 Lagoon Drive	3-Jun-13	3,551,508	5,067,659		1,516,151
5	1-2-003-016	Full	1819 Dillingham Boulevard	21-Apr-14	1,106,416	1,741,689		635,273
6	<b>1-2-003-017</b>	<b>Partial</b>	<b>1815 Dillingham Boulevard</b>	<b>11-May-15</b>	151,758	<b>111,258</b>		-40,500
7	1-2-003-082	Full	1825 Dillingham Boulevard	31-Jul-14	984,299	1,596,625		612,326
8	1-2-009-001	Full	1901 Dillingham Boulevard	16-Aug-12	2,805,135	2,814,000		8,865
9	1-2-009-017	Full	1953 Dillingham Boulevard	16-Dec-14	2,257,359	436,620	**	-1,820,739
10	1-2-009-018	Full	1927 Dillingham Boulevard	18-Nov-14	804,686	261,258	**	-543,428
11	1-2-010-068	Full	1900 Dillingham Boulevard	4-Dec-12	1,831,279	2,529,000		697,721
12	1-5-007-021	Full	545 Kaaahi Street	11-Oct-14	2,285,004	2,819,500		534,496
13	1-5-007-023	Full	533 Kaaahi Street	23-Apr-10	2,850,000	2,850,000	*	0
14	1-7-002-026	Full	902 Kekaulike Street	1-Nov-12	5,219,351	4,927,000	**	-292,351
15	2-3-004-048	Full	1156 Waimanu Street	21-Mar-12	1,730,578	1,730,578		0
16	2-3-004-069	Full	1168 Waimanu Street	10-Feb-12	2,660,398	2,658,317		-2,081
17	2-3-007-033	Full	1169 Kona Street	13-Oct-14	5,824,643	10,102,669		4,278,026
18	2-3-007-036	Full	1174 Waimanu Street	8-Oct-14	1,407,845	1,951,386		543,541
19	2-3-007-044	Full	1201 Kona Street	3-Oct-14	1,357,540	1,751,700		394,160
20	9-4-017-011	Full	94-818 Moloalo Street	4-Aug-11	870,000	870,000	*	0
21	9-4-019-050	Full	94-819 Farrington Highway	1-Aug-12	1,004,277	1,005,000		723
22	9-4-047-008	Partial	94-144 Farrington Highway	13-Mar-15	898,742	743,278		-155,464
23	9-4-048-046	Full	94-119 Farrington Highway	25-Jul-11	3,159,142	3,159,142	*	0
24	9-4-048-047	Full	94-136 Leonui Street	25-Jul-11	2,749,142	2,749,142	*	0
25	9-6-003-012	Full	96-171 Kamehameha Highway	29-Jun-11	287,030	287,030	*	0
26	9-6-003-013	Full	96-165/169 Kamehameha Highway	7-Sep-11	455,588	455,588	*	0
27	9-6-003-014	Full	96-157 Kamehameha Highway	27-Jun-11	1,216,787	1,216,787	*	0
28	9-6-003-015	Full	96-159 Kamehameha Highway	10-Aug-11	53,304	53,304	*	0
29	9-6-003-016	Full	96-149A Kamehameha Highway	10-Aug-11	22,304	22,304	*	0
30	9-6-003-017	Full	96-149 Kamehameha Highway	15-Sep-11	559,914	559,914	*	0
31	9-6-003-018	Full	96-137 Kamehameha Highway	25-Jan-12	1,017,915	1,017,915	*	0
32	9-6-004-002	Full	96-93 Kamehameha Highway	5-May-11	790,000	790,000	*	0
33	9-6-004-017	Full	Kamehameha Highway	29-Jun-11	90,000	90,000	*	0
34	9-8-009-017	Full	98-077 Kamehameha Highway	14-Jun-13	2,509,030	3,512,500		1,003,470
35	9-8-010-002	Full	98-080 Kamehameha Highway	1-May-12	6,027,021	6,027,021	*	0
36	9-9-003-068	Full	99-140 Kohomua Street	13-Sep-11	993,783	993,783	*	0
					71,217,283	81,654,714		10,437,430

**Notes:**

- \* Baseline assumes zero variance (budget = actual) during FFGA approval process.
  - \*\* Cost exceeded budgeted amount due to conversion from partial to full acquisition.
- Bold print reflects most recent acquisition

# Private Property Acquisition Cost as of 5/14/2015



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## Construction and Traffic Update June 25<sup>th</sup>, 2015

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# Project Map

## 20 Miles – 21 Stations



# Rail Operations Center Design-Build



<b>Physical Construction Completion</b>	<b>72%</b>
<b>Contract Billed to Date</b>	<b>75%</b>
<b>Contract Billing Planned Per Schedule</b>	<b>80%</b>

*\* ROC construction currently tracking to the planned Substantial Completion date.*

*\* Contractors Billings may lag behind physical work completed due to milestone based payment contract.*

# Operations Services Building (OSB)



# Maintenance of Way (MOW) Building



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# Train Wash Facility (TWF)



# Rail Operations Center Trackwork



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# West Oahu Farrington HWY Guideway

**Construction Completion 64%**

**Contract Billed to Date 64%**

**Contract Billing Planned Per Schedule 75.7%**

- *WOFH construction currently tracking 4 - 6 months behind the planned Substantial Completion date.*
- *Contractors RFC for Time Extension recently submitted and is currently under review.*



# Balanced Cantilever Work



# KHG Design-Build



Physical Construction Completion	38%
Contract Billed to Date	37%
Contract Billing Planned Per Schedule	76%

- *KHG construction currently tracking 6-7 months behind the planned Substantial Completion date.*
- *Lack of HECO Productivity Creating the potential additional schedule impacts.*
- *Contractors RFC for Time Extension schedule for submittal in July.*



# Farrington HWY Stations

**Construction Completion** 0%

**Contract Billed to Date** 0%

**Contract Billing Planned Per Schedule** 0%

- *Contract awarded to Hawaiian Dredging*
- *Kickoff and Preconstruction Meeting being scheduled*
- *Notice to Proceed (NTP) forthcoming*



# H2R2 Ramp

**Construction Completion** 0%  
**Contract Billed to Date** 0%  
**Contract Billing Planned Per Schedule** 0%

- *Contract awarded to Royal Contracting*
- *Kickoff and Preconstruction Meeting*
- *Notice to Proceed (NTP) Issued*



Pearl Highlands Station

# Moving Forward: The Next 10 Miles



## Airport Advanced Utilities

**Physical Construction Completion 16.78%**

**Contract Billed to Date 8.82%**

- *Airport Section Utility Construction currently is tracking 5 months behind the planned Substantial Completion date due to Navy right-of-entry issues.*
- *The Navy has recently released right-of-entry for construction activities to commence.*
- *HART Noise variance has been submitted to DOH for approval.*

## Airport 7 Piers

**Physical Construction Completion 100%**

**Contract Billed to Date 84.0%**

- *Airport 7-Piers Contract is currently being closed out.*
- *Site has been turned over to HDOT Airport.*



# Traffic Update



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# Farrington Highway Detour

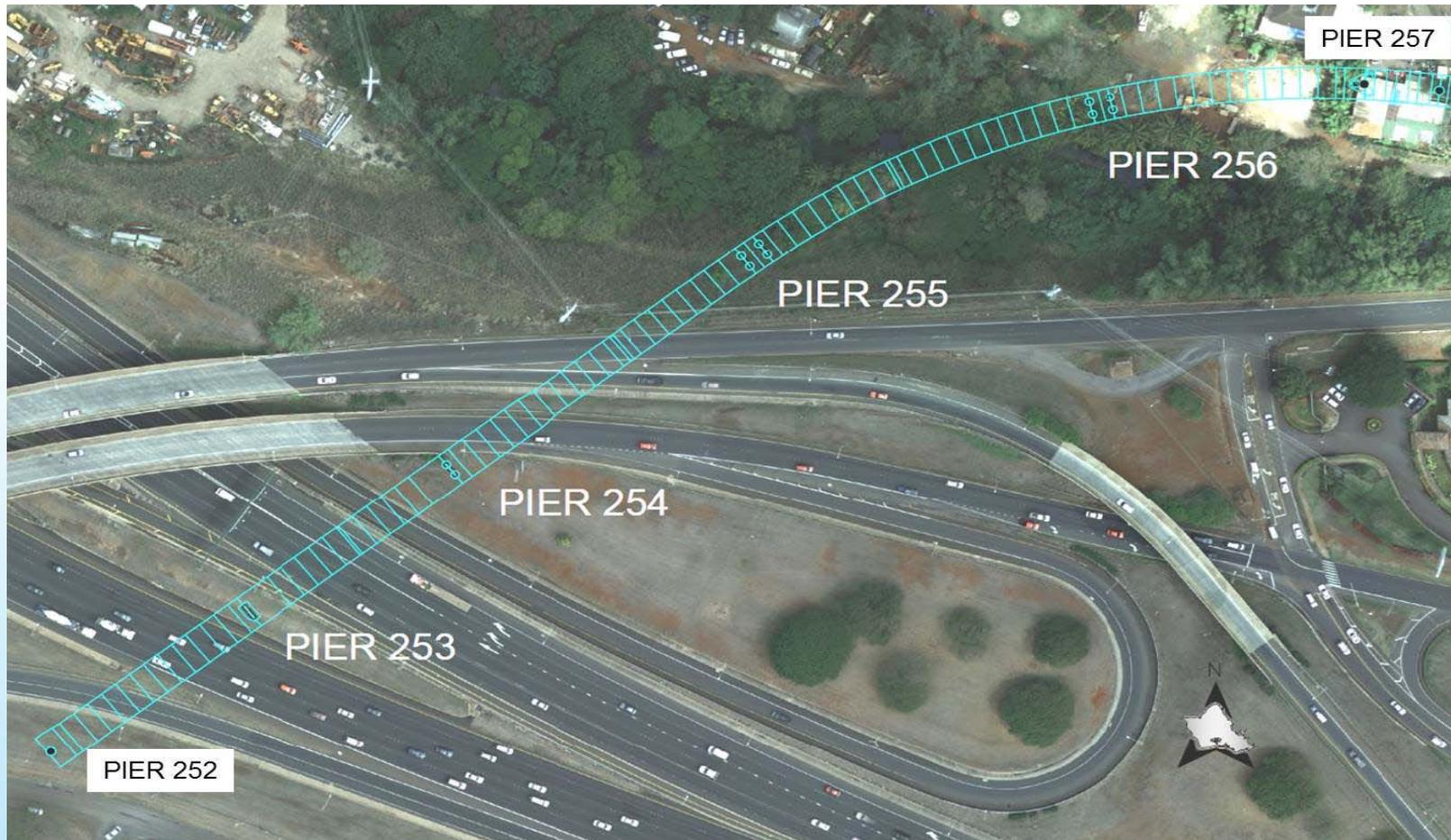


# Farrington Highway in Waipahu





# Balanced Cantilever Work



# Balanced Cantilever Work



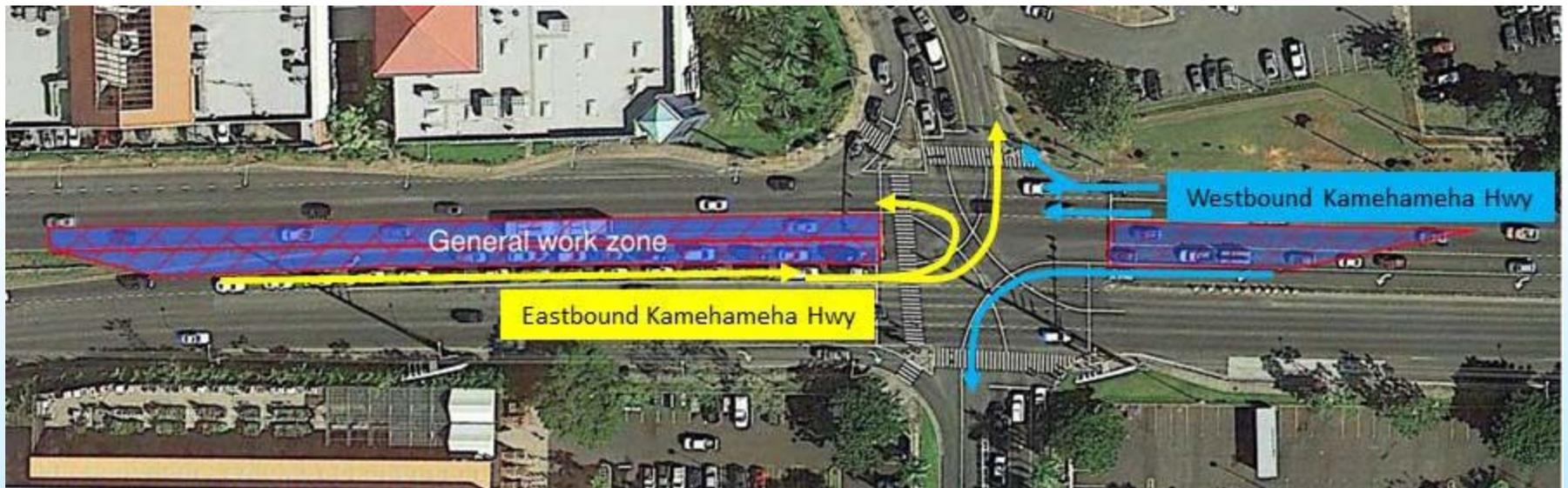
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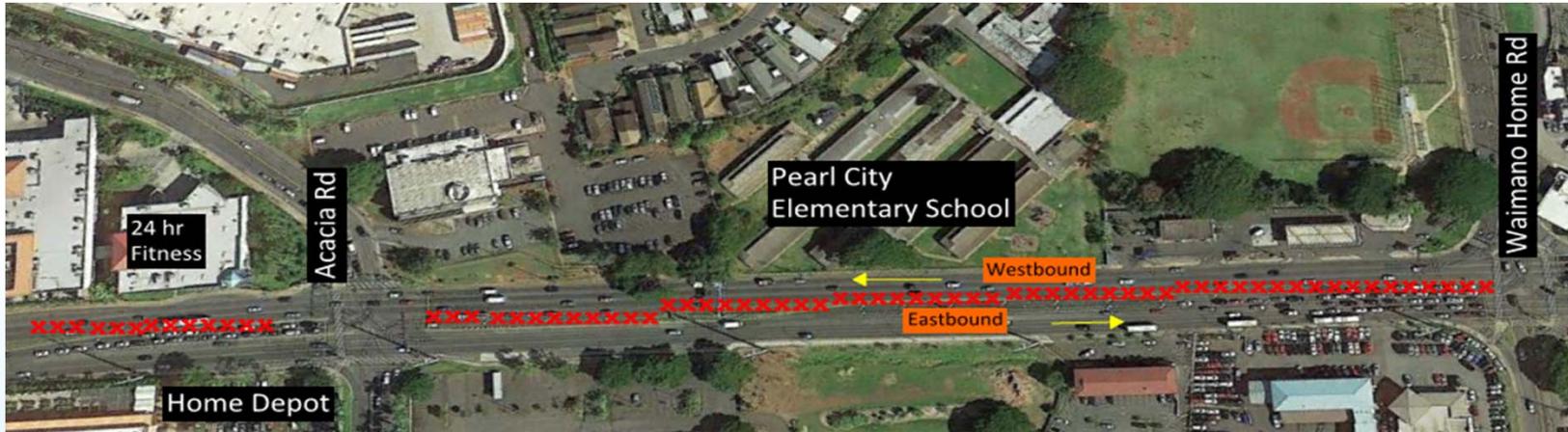
# Kamehameha Highway in Pearl City



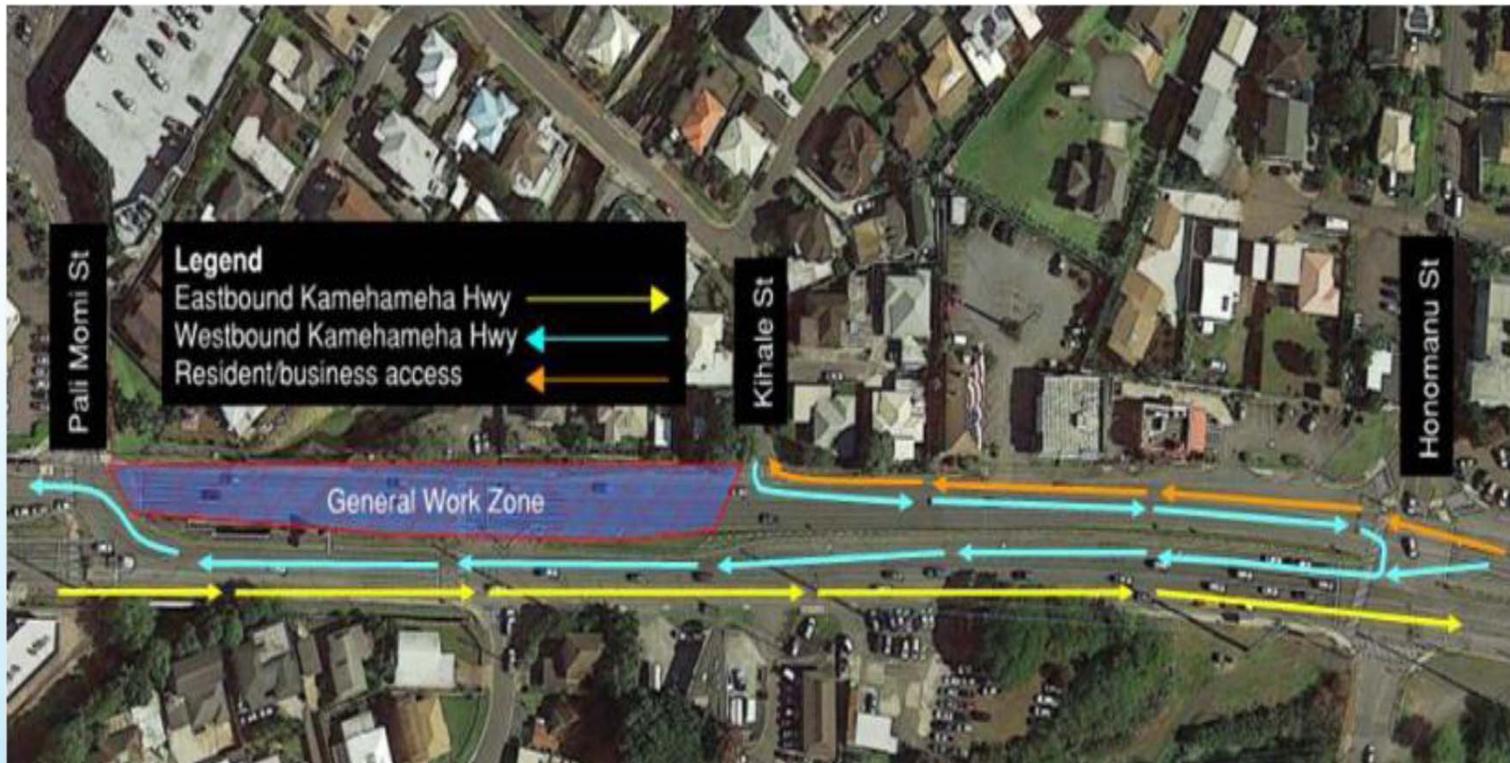
# Kamehameha Highway in Pearl City



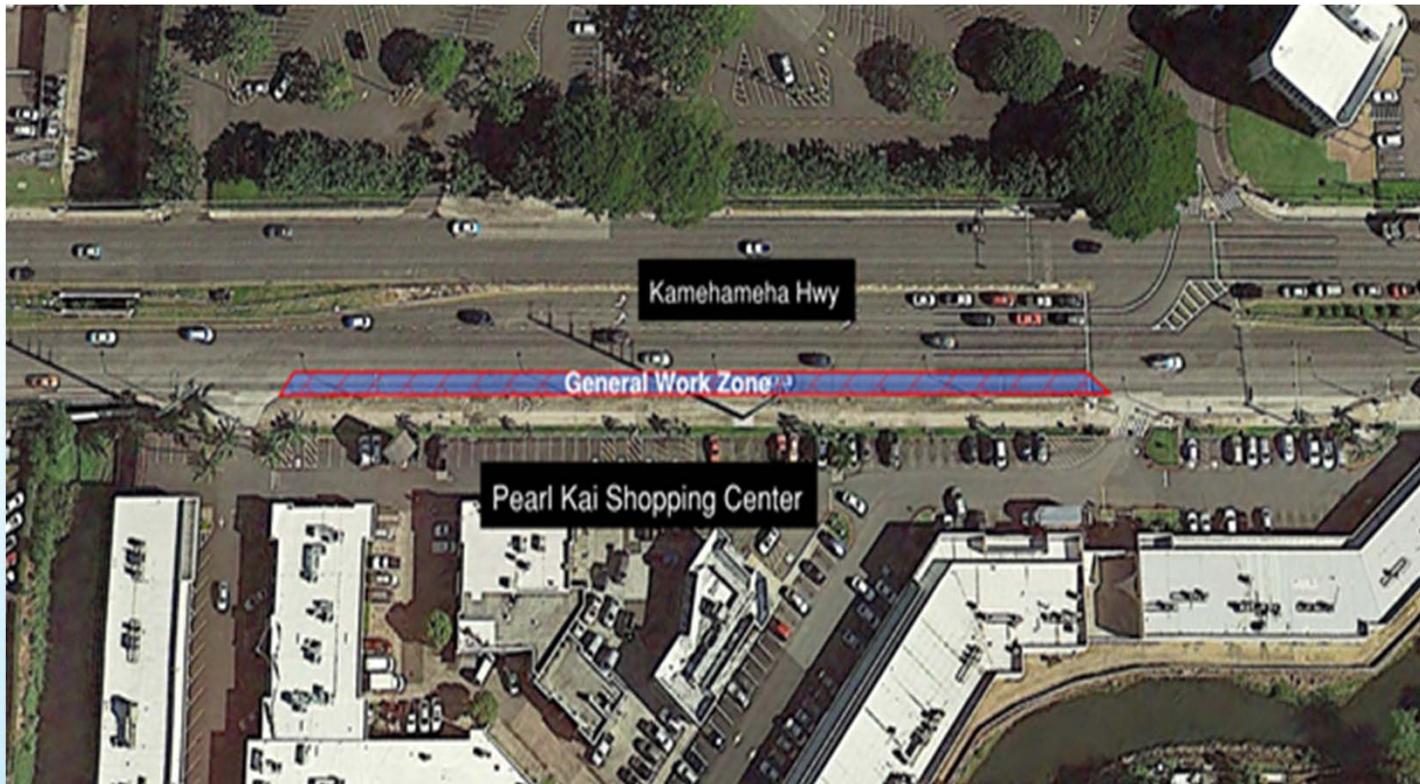
# Kamehameha Highway in Pearl City



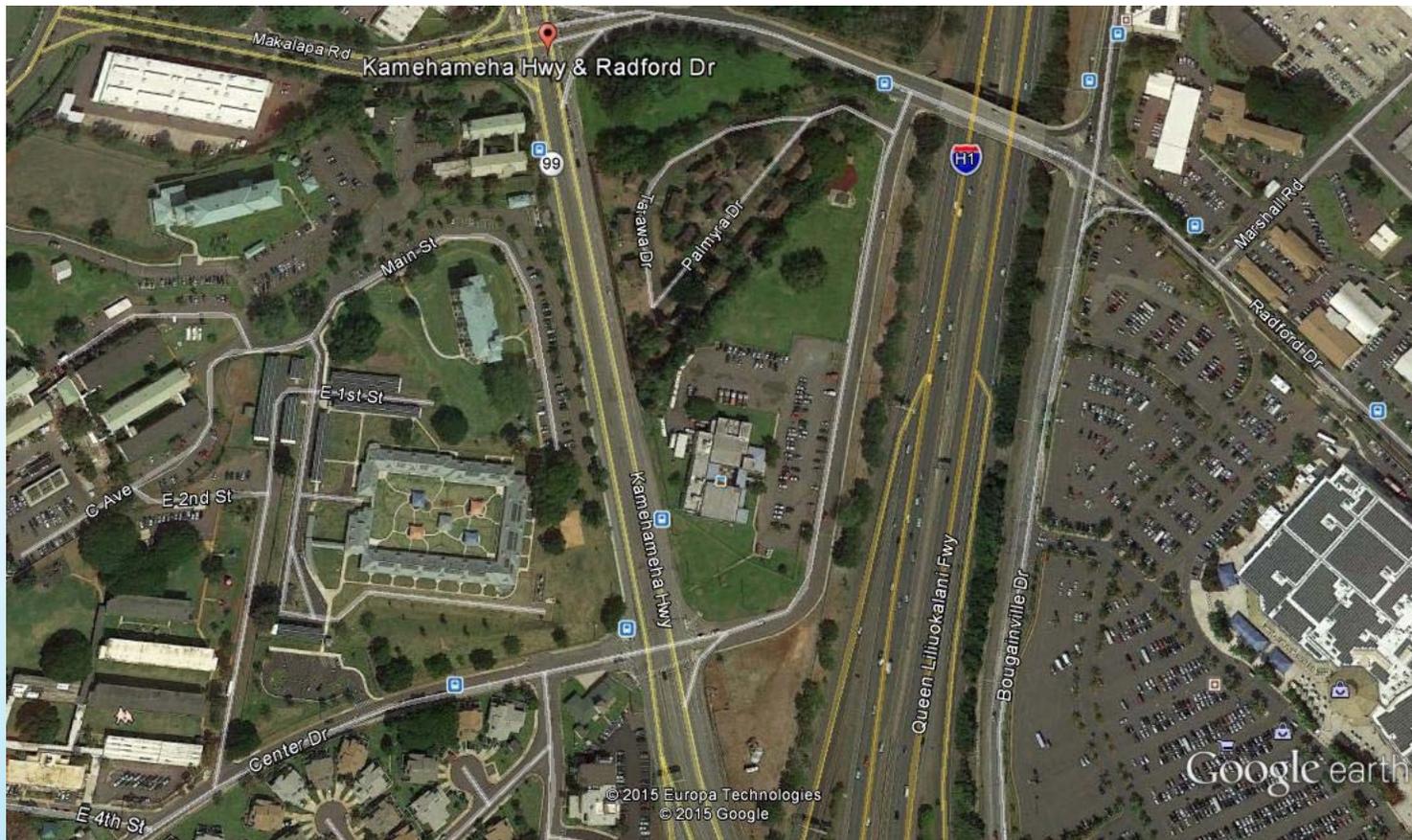
# Kamehameha Highway in Aiea



# Kamehameha Highway in Aiea



# Kamehameha Highway near Pearl Harbor



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# HONOLULU RAIL TRANSIT PROJECT



## May 2015 MONTHLY PROGRESS REPORT

# HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

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This report and all subsidiary reports are prepared for the Federal Transit Administration (FTA). This report should not be relied upon by any party, except the FTA or HART, in accordance with the purposes as described below.

For projects funded through the FTA Full Funding Grant Agreements (FFGAs) program, the FTA and its Project Management Oversight Contractor (PMOC) use a risk-based assessment process to review and validate a project sponsor's budget and schedule. This risk-based assessment process is a tool for analyzing project development and management. Moreover, the assessment process is iterative in nature; any results of an FTA or PMOC risk-based assessment represent a "snapshot in time" for a particular project under the conditions known at that same point in time. The status of any assessment may be altered at any time by new information, changes in circumstances, or further developments in the project, including any specific measures a sponsor may take to mitigate the risks to project costs, budget, and schedule, or the strategy a sponsor may develop for project execution. Therefore, the information in the monthly reports will change from month to month, based on relevant factors for the month and/or previous months.

**REPORT FORMAT AND FOCUS**

This report is submitted in compliance with the terms of FTA Contract No. DTFT60-09-D-00012, Task Order No. 2. Its purpose is to provide information and data to assist the FTA as it continually monitors the grantee's technical capability and capacity to execute a project efficiently and effectively, and hence, whether the grantee continues to be ready to receive federal funds for further project development.

This report covers the project and quality management activities on the Honolulu Rail Transit Project managed by the Honolulu Authority for Rapid Transportation (HART) with HART as the grantee and partially financed by the FTA FFGA.

**ON THE COVER:**

Left: West O'ahu Farrington Highway Guideway along Kualakai Parkway looking Diamond Head.

Upper right: West O'ahu Farrington Highway Guideway along Farrington Highway looking Waianae.

Lower right: Rail Operations Center (aka Maintenance and Storage Facility) site.

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**LIST OF ACRONYMS**

AB	AnsaldoBreda	DTS	Department of Transportation Services
AFE	Authorized for Expenditure	ECP	Environmental Compliance Plan
AGS	Airport Guideway and Stations	E/E	Elevator/Escalator
AHJV	Ansaldo Honolulu Joint Venture	EMC	Electromagnetic Compatibility
AIS	Archaeological Inventory Survey	EMF	Electromagnetic Forces
APTA	American Public Transportation Association	EMI	Electromagnetic Interference
ARRA	American Recovery and Reinvestment Act	EMP	Environmental Management Plan
ASG	Airport Station Group	EOR	Engineer of Record
ASU	Airport Section Utilities	EOS	Electrically Operated Switches
ATC	Automated Train Control	ESA	Engineering Services Agreement
ATO	Automated Train Operation	FAA	Federal Aviation Administration
AVA	Anil Verma Associates, Inc.	FAI	First Article Inspections
BA	Buy America	FAT	Factory Acceptance Tests
BAC	Buy America Compliance	FD	Final Design
BACM	Buy America Compliance Matrix	FDC	Field Design Change
BCS	Balanced Cantilever System	FEIS	Final Environmental Impact Statement
BFS	Budget and Fiscal Services	FFC	Fixed Facility Contractors
BMP	Best Management Practice	FFGA	Full Funding Grant Agreement
BUE	Bottom-Up Estimate	FHSG	Farrington Highway Station Group
CAR	Corrective Actions	FLSWG	Fire Life Safety Working Group
CCGS	City Center Guideway and Stations	FTA	Federal Transit Administration
CCO	Contract Change Order	FTE	Full-Time Equivalent
CCTV	Closed Circuit Television	FWS	Fish and Wildlife Service
CE&I	Construction Engineering and Inspection	GAT	Great Aleutian Tsunami
CEL	Certifiable Elements List	GDR	Geotechnical Data Report
CIL	Certifiable Items List	GEC	General Engineering Consultant
CM	Construction Manager	GET	General Excise Tax
CMP	Corrugated Metal Pipe	GIS	Geographic Information System
CMS	Contract Management System	GSA	General Services Administration
CMU	Concrete Multiple Unit	GT	General Terms
COI	Conflict of Interest	HA	Hazard Analysis
CONRAC	Consolidated Rental Car Facility	HABS	Historic American Buildings Survey
COR	Corporation Counsel	HAER	Historic American Engineering Record
CPM	Critical Path Method	HALS	Historic American Landscape Survey
CPP	Contract Packaging Plan	HART	Honolulu Authority for Rapid Transportation
CSC	Core Systems Contract	HCC	Honolulu Community College
CSSC	Construction Specification Conformance Checklists	HCDA	Hawai'i Community Development Authority
CSL	Cross Hole Sonic Logging	HCSO	Hawai'i Capital Special District
CSOC	Core Systems Oversight Consultant	HDOE	Hawai'i Department of Education
CSSP	Construction Safety & Security Plan	HDOH	Hawai'i Department of Health
CTS	Communications Transmission System	HDOT	Hawai'i Department of Transportation
CZM	Coastal Zone Management	HDPE	High-density polyethylene
DAGS	Department of Accounting & General Services	HECO	Hawaiian Electric Company
DB	Design-Build	HFD	Honolulu Fire Department
DBB	Design-Bid-Build	HHF	Historic Hawai'i Foundation
DBE	Disadvantaged Business Enterprise	HHPRB	Hawai'i Historic Places Review Board
DBEDT	Department of Business, Economic Development and Tourism	HIE	Hawaii Independent Energy
DBOM	Design-Build-Operate-Maintain	HP	Historic Preservation
DCAB	Disability and Communication Access Board	HPC	Historic Preservation Committee
DCN	Design Change Notice	HPCA	Historic Preservation Certification Application
DDC	Department of Design and Construction	HPD	Honolulu Police Department
DES	Department of Environmental Services	HPF	Historic Preservation Fund
DFIM	Design Furnish Install Maintain	HRHP	Hawai'i Register of Historic Places
DHHL	Department of Hawaiian Homelands	H RTP	Honolulu Rail Transit Project
DHR	Department of Human Resources	HTI	Hawaiian Telcom
DIT	Department of Information Technology	HTL	Hazard Tracking Log
DKSG	Dillingham and Kaka'ako Station Group	IAMR	Interstate Access Modification Report
DLIR	Hawai'i Department of Labor and Industrial Relations	ICCS	Interface Communications Control System
DLNR	Department of Land and Natural Resources	ICD	Interface Control Documents
DOE	Department of Education	ICE	Independent Cost Estimate
DOH	Department of Health	ICM	Interface Control Manual
DOL	Department of Labor	INMS	Integrated Network Management System
DPM	Deputy Project Managers	ITP	Inspection and Test Plan
DPP	Department of Planning and Permitting	ITS	Intelligent Transportation Systems
DPR	Department of Parks and Recreation	JTMS	Joint Traffic Management System
DPS	Department of Public Safety	JU&O	Joint Use & Occupancy
DS	Downstream	JUOA	Joint Use and Occupancy Agreement

KCDD	Kaka'ako Community Development District	RE	Resident Engineer
KHG	Kamehameha Highway Guideway	READ	Real Estate Acquisition Database
KHSG	Kamehameha Highway Station Group	RFC	Request for Change
KIWC	Kiewit Infrastructure West Company	RFI	Requests for Information
KKJV	Kiewit/Kobayashi Joint Venture	RFID	Requests for Interface Data
LCC	Leeward Community College	RFMP	Rail Fleet Management Plan
LEED	Leadership in Energy and Environmental Design	RFP	Request for Proposals
LPR	License Plate Reader	RFQ	Request for Qualifications
LRV	Light Rail Vehicle	ROC	Rail Operations Center
MIM	Manufacture-Install-Maintain	ROD	Record of Decision
MMIS	Maintenance Management Information System	ROE	Right of Entry
MMP	Mitigation Monitoring Program	ROW	Right-of-Way
MOT	Maintenance of Traffic	RR	Risk Register
MOU	Memorandum of Understanding	RSD	Revenue Service Date
MOW	Maintenance of Way	RTM	Requirements Traceability Matrix
MPS	Master Project Schedule	RTSA	Regional Transit Stabilization Agreement
MPSS	Master Project Schedule Summary	S1	Segment 1
MPV	Multiple Purpose Vehicle	SAIS	Supplemental Archaeological Inventory Survey
MS4	Municipal Separate Storm Sewer System	SCADA	Supervisory Control and Data Acquisition
MSE	Mechanically Stabilized Earth	SCAP	Stream Channel Alteration Permit
MSF	Maintenance and Storage Facility	SCC	Standard Cost Category
MTM	Modern Track Machineries	SHPD	State Historic Preservation Division
NCE	Non-Conformance Evaluation	SIC	Sandwich Isle Communications
NCR	Non-Conformance Report	SLAN	Station Local Area Network
NDC	Notice of Design Change	SOG	Slab on Grade
NEPA	National Environmental Policy Act	SOI	Secretary of the Interior
NHL	National Historic Landmark	SOW	Scope of Work
NOI	Notice of Intent	SP	Special Provisions
NPDES	National Pollution Discharge Elimination System	SQP	Supplemental Quality Plan
NPS	National Park Service	SSC	Safety Security Certification
NR	National Register	SSCP	Safety and Security Certification Plan
NRHP	National Register of Historic Places	SSCWG	Safety and Security Certification Working Group
NTP	Notice to Proceed	SSI	Sensitive Security Information
NTS	Network Time Server	SSMP	Safety and Security Management Plan
O&M	Operations and Maintenance	SSRC	Safety and Security Review Committee
OCC	Operational Control Center	SSSP	Site Safety Security Plan
OCIP	Owner-Controlled Insurance Program	SWPPP	Storm Water Pollution Prevention Plan
OIBC	O'ahu Island Burial Council	T&M	Time and Material
OIL	Open Items List	TCCR	Train Control and Communications Room
OSB	Operations and Servicing Building	TCP	Traffic Control Plan
OSHA	Occupational Safety and Health Administration	TES	Traction Electrification System
OTS	O'ahu Transit Services	TIGER	Transportation Investment Generating Economic Recovery
OTW	Oceanic Time Warner	TOC	The Outdoor Circle
OTWC	Oceanic Time Warner Cable	TOD	Transit-Oriented Development
PA	Programmatic Agreement	TPO	Thermoplastic Olefin
PAIS	Programmatic Agreement Implementation Schedule	TPSS	Traction Power Sub-Station
PARs	Preventative Actions	TSA	Transportation Security Administration
PB	Parsons Brinckerhoff, Inc.	TSI	Transportation Safety Institute
PE	Preliminary Engineering	TVA	Threat and Vulnerability Analysis
PHA	Preliminary Hazard Analysis	TVM	Ticket Vending Machine
PICM	Project Interface Control Manual	TWF	Train Wash Facility
PIG	Permitted Interaction Group	UCA	Utility Construction Agreement
PIM	Project Interface Manager	UFCRA	Utility Facilities Relocation and Cost Reimbursement Agreement
PLA	Project Labor Agreement	UH	University of Hawai'i
PM	Project Managers	UHWO	University of Hawai'i West O'ahu
PMC	Project Management Consultant	UL	Underwriters Laboratories
PMOC	Project Management Oversight Contractor	UPS	Uninterrupted Power Supply
PMSC	Program Management Support Consultant	USACE	U.S. Army Corps of Engineers
PPE	Personal Protective Equipment	USDOT	U.S. Department of Transportation
PSG	Platform Screen Gate	VE	Value Engineering
PV	Passenger Vehicle	WA	Work Area
QA	Quality Assurance	WHS	Waipahu High School
QAM	Quality Assurance Manager	WOFH	West O'ahu/Farrington Highway
QAP	Quality Assurance Plan	WOSG	West O'ahu Station Group
QC	Quality Control	WSS	West Side Stations
QMP	Quality Management Plan	WSSG	West Side Station Group
QMS	Quality Management System	WTB	Wheel Truing Building
QTF	Quality Task Force	WYL	West Yard Lead
RCMP	Risk and Contingency Management Plan	YOE	Year of Expenditure

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**\*HIGHLIGHT OF THE MONTH: DOWNTOWN STATION**  
 Serving the Downtown Honolulu, Aloha Tower, Capitol District, and Outlying Residential and Business Areas



- Station Features:**
- ADA Pedestrian Access
  - Bicycle Parking
  - Elevators, Escalators and Stairs
  - Public pedestrian bridge over Nimitz Highway
  - TheBus – Local and express services to Kaneohe, Kailua and Waimanalo. Local services to Nu‘uanu, Pauoa Valley, Kaka‘ako and Makiki.
  - TheHandi-Van Pick-up/Drop-off
  - Platform Type: Side
  - Planned # of Entrances: 2

\*Each month a different station will be highlighted with architectural renderings and key information.

# 1 EXECUTIVE SUMMARY

## KEY ACTIVITIES THIS MONTH

### Project Overview

More than 160 columns now stretch from the eastern edge of the town of Kapolei and into Waipahu east of Fort Weaver Road as construction work progresses.

This summer, the rail guideway – which is now nearly three miles long – will be built over the Fort Weaver Road/Kunia Road overpass.

Balanced cantilever construction over the H-1 Freeway is also well underway. Between the support columns, several concrete segments have been erected, which will eventually form a bridge for the rail to travel from the Leeward Community College station in Waipahu to the Pearl Highlands station in Pearl City.



Work on the construction Maintenance and Storage Facility (MSF) site in Waipahu is on target to be substantially completed by next year. Crews at the 43-acre site between Waipahu High School and Leeward Community College are busy constructing the four main buildings where the fleet of 80 rail cars will be maintained and from which the rail system will be operated and monitored.

### HART Board

Carrie Okinaga and Robert “Bobby” Bunda will be leaving the HART board of directors.

Okinaga will step down from the board of directors in June, when she will become University of Hawai‘i Vice President for Legal Affairs and General Counsel. Okinaga most recently served as the General Counsel of First Hawaiian Bank, and was former chief-in-house legal counsel for the City and County of Honolulu as its Corporation Counsel. In July 2011, Okinaga began a five-year term on the HART board of directors. Mayor Kirk Caldwell will appoint her replacement on the board.



Bunda will be resigning from the agency’s board of directors to spend more time with his family. He will step down on June 30. Bunda was first appointed as the tenth board member in 2011, and was re-appointed to serve a second term in July 2013. His term was set to expire on June 30, 2018.

According to the City Charter, the tenth HART board member is selected by the other HART board members through a public process. The HART board will issue a call for nominations from the public in July and begin the public hearing and selection process shortly thereafter.

### Downtown TOD Plan Moving Ahead

The Downtown Neighborhood Transit-Oriented Development Plan is being finalized for review by the Honolulu City Council. In May, the Department of Planning and Permitting held a community meeting to discuss the Downtown Neighborhood TOD Plan.

The plan for public improvements around the Iwilei, Chinatown and Downtown rail stations includes recommendations for enhancements and preservation in Chinatown, an urban mixed-use district in Iwilei with a range of housing choices and expanded hours of activity in Downtown Honolulu.



For more information on the city’s TOD plans, please visit [www.todhonolulu.org](http://www.todhonolulu.org)

### Cost:

Project Costs Summary Through April 24, 2015		
	Current Budget (\$M)	Incurred To Date (\$M)
Project Budget	\$4,438.2	\$1,490
Project Contingency	\$510.4	\$0.4
Finance Charges*	\$173.1	\$0.0
<b>TOTAL</b>	<b>\$5,121.7</b>	<b>\$1,490.4</b>

\* \$173.1 million represents the project debt financing costs that are federally eligible. The total estimated debt financing costs of the project is \$215 million, per the FFGA Financial Plan.

### Schedule:

Project Progress Through April 24, 2015				
	Actual		Early Plan	Late Plan
Overall Project Progress	34.3%		56.8%	47.8%
Overall Construction Progress	26.0%		49.5%	40.0%
Overall Design Progress	84.7%		97.8%	94.5%
Overall Utilities Progress	23.0%		57.8%	38.6%

**Overview:**Core Systems Contract (CSC)

The CSC contractor is continuing to progress through Interim Design into Final Design. Qualification and design verification tests are ongoing. Major Pre-Shipping tests are taking place in May and June for Communication Systems and Train Control subsystems. Construction interface and mobilization is ongoing in preparation for the initial work schedule to begin at the MSF. CSC continues to coordinate mobilization plans with the MSF team. CSC has mobilized trailers on-site at the MSF and continues preparation to start work on the Yard Control Bungalow in June (pending approval of design documents). Passenger vehicle manufacturing, key system manufacturing, design verification and qualification testing activities are ongoing. Carshell assembly continues to progress at the Reggio Calabria, Italy facility. AnsaldoBreda is ramping up the production facilities in Pittsburg, CA. (See Section 4.1.A for details)

Elevators and Escalators Manufacture-Install-Maintain Contract

The Elevator/Escalator contract is on schedule to meet the requirements of the Farrington Highway Station Group contract and the West O'ahu Station Group contract. The manufacturing and installation of the escalators and elevators is dependent on the award and construction of the individual stations. The release for manufacturing dates is in concert with the actual bid and award date for the various stations. The FHSG contract protest has been denied. The contract award will proceed once a formal ruling has been written by the ruling agency. Contract award is expected to be mid-June 2015. (See Section 4.1.B for details)

West O'ahu Farrington Highway (WOFH) Contract

HART and Kiewit Infrastructure West Company (KIWC) continue to work together to ensure that quality and safety are the highest priorities. HART continues to monitor KIWC production rates as it relates to potential schedule impacts. KIWC submitted a revised baseline schedule in December of 2014 in which production is measured against. The schedule reflects a four month delay to the contractual substantial completion date specific to the LCC portables, parking lot and access structure operations. KIWC and HART continue to work together to mitigate the impacts to the critical path activities. At the time that the LCC Construction Right of Entry Agreement with the University of Hawai'i (UH) is received, it is anticipated that the Contract Change Order needed to update the substantial completion date and associated baseline acceptance will be achieved. (See Section 4.2.A for details)

Maintenance and Storage Facility (MSF) Contract

Stem walls commenced for the Train Wash Facility as well as cable trough installation north of the storage tracks. Work on utilities and track is progressing in the yard with the completion of the storage track turnout installation. Work in the OSB, MOW and WTB is ongoing with roofing, siding and interior partitions and utility service rough-ins. Work on mechanical, electrical and plumbing installations continues to progress. Overall, this contract is progressing per plan with expected completion in April 2016. (See Section 4.2.D for details)

Kamehameha Highway Guideway (KHG) Contract

Construction of the drilled shafts will be moving to the balanced cantilever area in order to maintain progress while HECO clearance issues are resolved. Discussions with HECO are being held at an elevated level to resolve concerns about horizontal/vertical clearances and schedule certainty. Elevated discussions are also ongoing to clarify the scope and funding source of the HDOT betterments. The KHG team continues to explore mitigation measures to a reduced construction work window that would balance MOT and noise impacts to the community. The contract is seven months behind schedule. (See Section 4.3.A for details)

Airport Section Utilities Construction Contract

The Airport Section Utilities Construction contract is behind schedule, due to Navy right of entry issues. ITS system and various duct bank installations are current activities occurring in the field. Water and sewer line relocations have begun in some areas along Kamehameha Highway, but are being monitored for impacts by ongoing Navy ROE issues where access has yet to be secured. (See Section 4.4.B for details)

Airport Seven Piers Construction Contract

The Airport Seven Piers construction work, including final paving and concrete curbs, was completed on April 17. Project Substantial Completion inspection was performed on April 22, 2015; two days ahead of the Contract Substantial Completion. Hawaiian Dredging Construction Company/Condon-Johnson & Associates (HDCC/CJA) completed all punch list items on May 2, 2015 and have demobilized from the work site. Contract Closeout is currently in progress. (See Section 4.4.C for details)

**Board Meeting Q&A:**

Listed below are questions raised by community members at the May 21 HART Board meeting:

- **Question:** Are there estimates for operating and maintenance costs?  
**Answer:** Yes. HART's Financial Plan includes projected operating and maintenance costs for rail, for the bus system and for HandiVan through fiscal year 2030. Details of each year's operating and maintenance costs can be found in Chapter 3 of the project's Financial Plan, which is posted on the project's website at <http://www.honolulutransit.org/media/112797/20120628v1-hrtp-ffga-financial-plan-final.pdf>.
- **Question:** Will 5307 funds be removed from budget by June?  
**Answer:** Yes. HART will remove 5307 funds from its budget. That change should be reflected in the updated Financial Plan that will be released this summer, provided an alternative revenue source is secured.
- **Question:** Does HART's budget include the cost to test rail (vehicles)?  
**Answer:** Yes, the cost of testing is included in the Core System's contract.
- **Question:** Will HART have to move if the state purchases Alii Place?  
**Answer:** We do not know at this time.
- **Question:** Who will provide security for rail?  
**Answer:** HART will have a security plan in place prior to operations. HART is working closely with all first responders, including police, fire, and other law enforcement agencies, as well as federal entities, such as the Transportation Security Administration (TSA) and the Department of Homeland Security.
- **Question:** How many seats will the rail cars have for people with disabilities?  
**Answer:** There are 8 wheelchair spaces on each four-car train, with an additional 68 flip-up seats that would be priority seating made available for people with disabilities.
- **Question:** In the April Monthly Progress report on page 51, for the utility relocation contract of \$28 million, why is the cost to date zero?  
**Answer:** The incurred cost is reported as "0" for the April report because the contractor's first invoice was not submitted until April 20<sup>th</sup> and therefore was not processed at the time the April report was compiled. The May report shows \$1,279,386 for this contract.

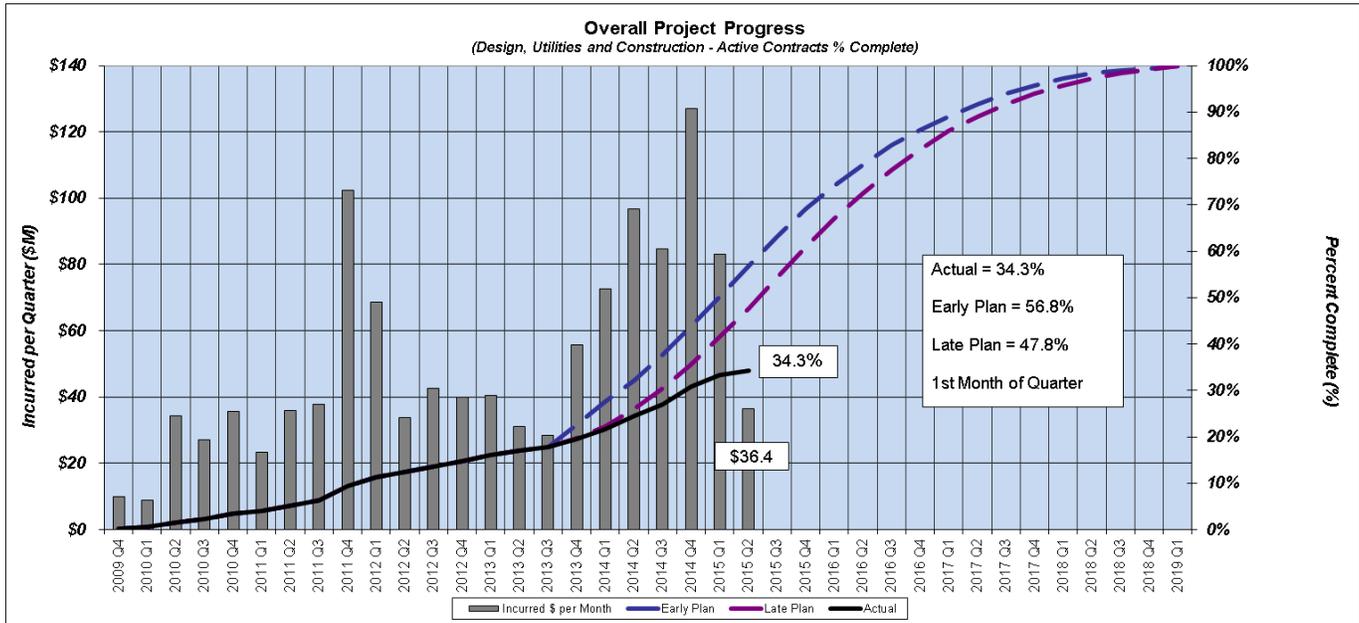
## 2 OVERALL PROJECT PROGRESS AND FINANCIALS

### 2.1 Project Progress (data as of April 24, 2015)

Progress charts reflect early program expectations regarding the award and execution of western stations and eastern guideway work. Both contracts have been rescheduled to later dates and once the overall schedule is rebaselined, the cost curves will be revised.

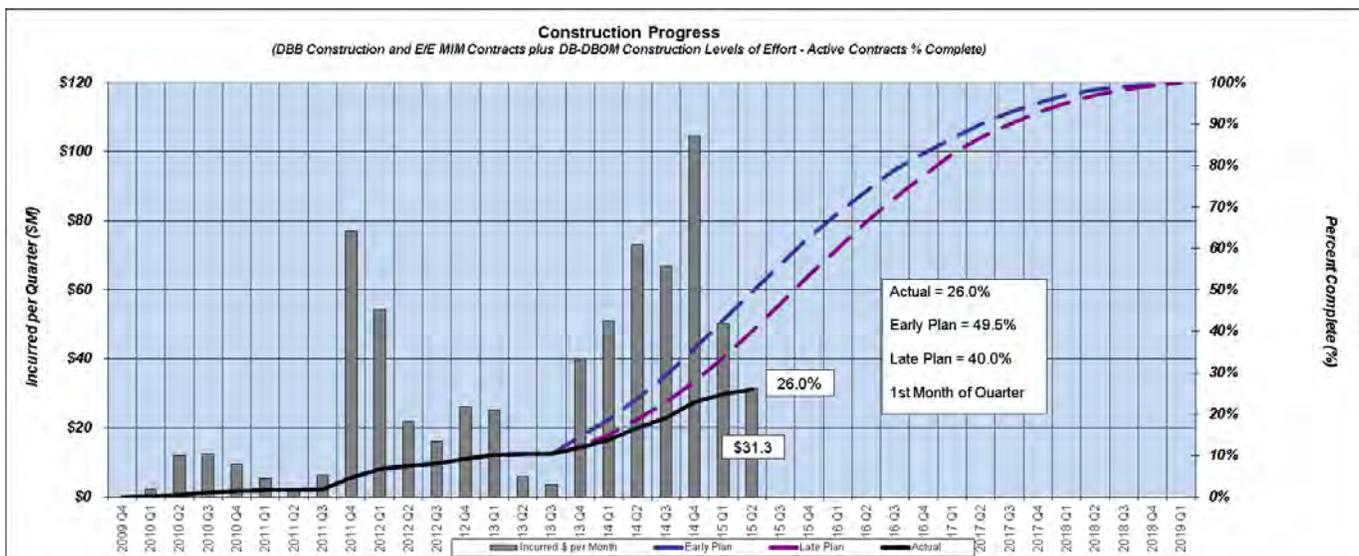
- Note:
- Actual = Actual cost of work performed, based on invoiced-to-date amount.
  - Early Plan = Earliest dates activities can begin and finish, based on logic and durations used in the schedule.
  - Late Plan = Latest dates activities can begin and finish and not have an impact on completion date, based on logic and durations used in the schedule.

Figure 1. Overall Project Progress (% Complete)



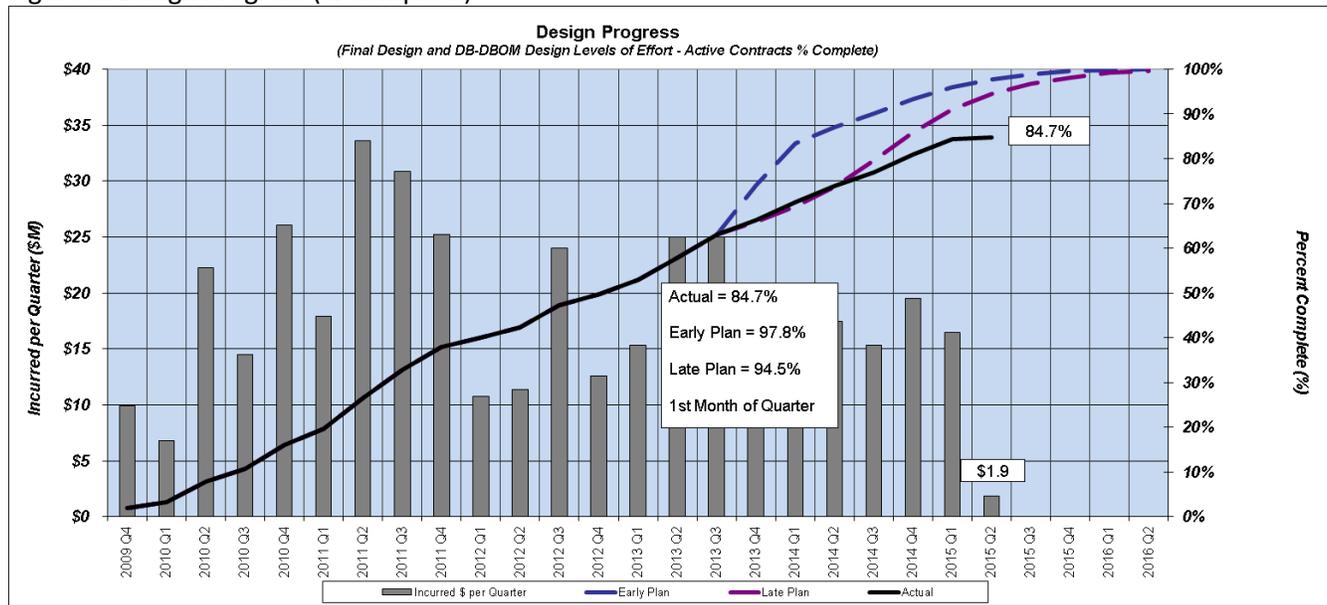
At present “overall” project progress is based on the weighted value progress of the individual construction and design contracts (Design-Build [DB], Design-Bid-Build [DBB], Design-Build-Operate-Maintain [DBOM], Elevator/Escalator Manufacture-Install-Test-Maintain [MIM], Final Design [FD] and DB-DBOM design levels of effort), not including City or non-design consultant labor. Overall Project Progress reflects all project elements as budgeted.

Figure 2. Construction Progress (% Complete)



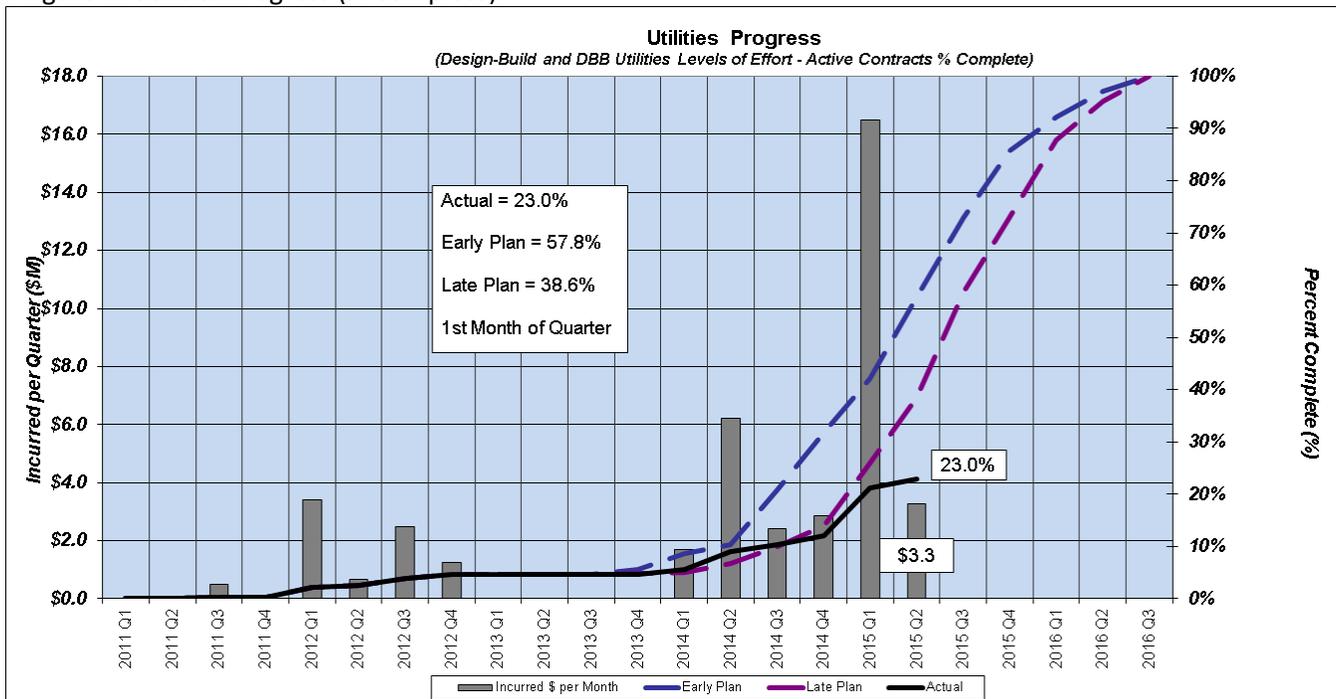
Overall construction progress is based on the weighted average progress of the individual DBB and E/E MIM construction contracts and the DB-DBOM construction levels of effort, not including consultant construction engineering and inspection (CE&I) services.

Figure 3. Design Progress (% Complete)



Overall design progress is based on the weighted average progress of the individual FD contracts and the design levels of effort of the DB and DBOM construction contracts, not including City or non-design consultant labor.

Figure 4. Utilities Progress (% Complete)



Overall utilities progress is based on the weighted average progress of the DB and DBB utilities levels of effort.

**2.2 Project Budget (data as of April 24, 2015)**

- FFGA Project Budget = **\$5,121.7M**
  - Current Project Budget - \$4,438.2M
  - Current Project Contingency - \$510.4M
  - Project Finance Charges - \$173.1M
  
- Total Incurred Cost = **\$1,490.4M** (33.6% of current project budget)
  - April 2015 Incurred Cost = \$45.2M

*Total Incurred Cost = \$1,490.4M  
(previous report = \$1,445.2M)*

**2.3 Project Contingency (data as of April 24, 2015)**

*Note: Contingency management and cost contingency details, including a breakdown of Project contingency drawdowns, are discussed in further detail in Appendix B.*

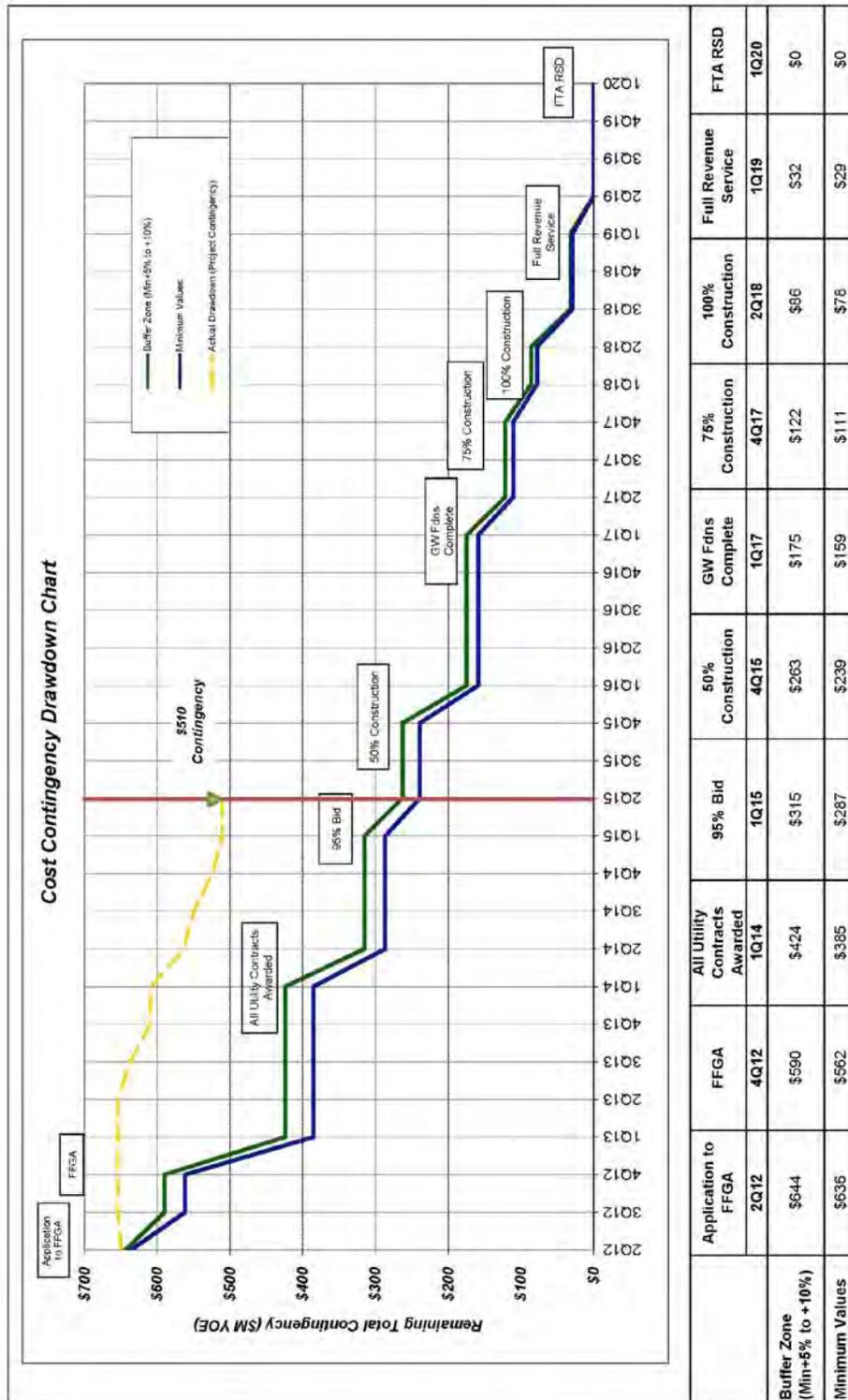
- Current Project Contingency Balance = **\$510.4M**
  - Contingency drawdown to date - \$133.2M (20.7% of baseline project contingency budget)
  - \$0.2M contingency drawdown during April 2015. Please see Appendix B for more details.

*Current Contingency Balance = \$510.4M  
(previous report = \$510.6M)*

Figure 5. Project Contingency Budget

Project Contingency Budget		
Contingency	SCC Code	Budget (\$M)
Unallocated Contingency	90.01	\$101.9
Allocated Contingency	90.02	\$540.1
Allowances	90.03	\$1.6
<b>Baseline FFGA Project Contingency Budget</b>	<b>90.01 - 90.03</b>	<b>\$643.6</b>
Contingency drawdown through February 2015 Report	90.01 - 90.03	(\$123.8)
Contingency drawdown March 2015 Report	90.01 - 90.03	(\$4.2)
Contingency drawdown April 2015 Report	90.01 - 90.03	(\$5)
Contingency drawdown May 2015 Report	90.01 - 90.03	(\$0.2)
Contingency drawdown to date	90.01 - 90.03	(\$133.2)
<b>Current FFGA Project Contingency</b>	<b>90.01 - 90.03</b>	<b>\$510.4</b>

Figure 6. Draft Cost Contingency Drawdown Chart



Data as of 4/24/15 - April '15 Reporting Period

Note: Contingency management and cost contingency details, including a breakdown of Project contingency drawdowns, are discussed in further detail in Appendix B.

2.4 Project Funding (data as of April 24, 2015)

Figure 7. Planned vs. Received Project Funding

Planned vs. Received Project Funding				
Funding Source	Pre-FFGA Project <sup>1</sup>	FFGA Project Period		Total Project
	2007 - 2009 Actuals Received	Planned <sup>2</sup> (\$YOE M)	2009 - Present Actuals Received	2007 - Present Actuals Received
	[A]		[B]	[C] = A + B
Beginning Project Cash Balance <sup>3</sup>	0	298	298	298
Interest Income on Cash Balance	7	3	2	9
FTA Section 5309 New Starts Revenue <sup>4</sup>	0	1,550	376	376
FTA Section 5307 Formula Funds	0	210	0	0
ARRA Funds	0	4	4	4
Net General Excise Tax (GET) Surcharge revenues FY2010-FY2023	378	3,291	1091	1,469
<b>Total</b>	<b>385</b>	<b>5,356</b>	<b>1,771</b>	<b>2,156</b>

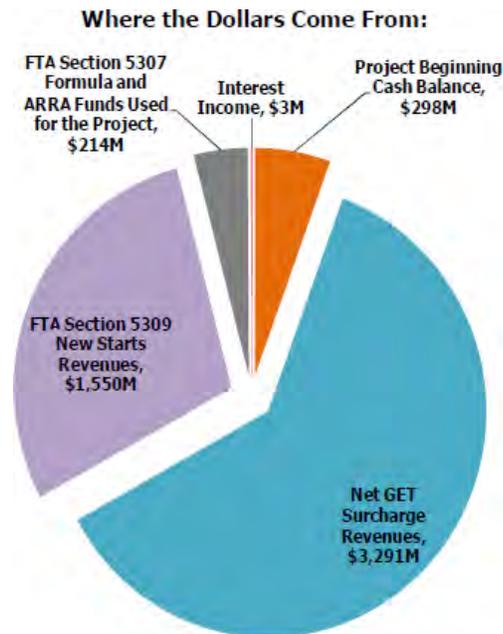
<sup>1</sup> GET and Interest Income received during Pre-Preliminary Engineering (pre-PE) phase prior to entry into PE

<sup>2</sup> FFGA Financial Plan, Table A-1 Capital Plan Cash Flows .

<sup>3</sup> Beginning Project Cash Balance at Entry into Preliminary Engineering (PE) on October 16, 2009 (the FFGA Project start date) = GET, investment and miscellaneous income minus pre-PE expenditures.

<sup>4</sup> New Starts Funds Obligated Through Federal Fiscal Year 2014 Totals \$806.3 Million

Figure 8. Project Funding Sources (YOE \$M)



Source: FFGA Financial Plan, p. 2-1

- General Excise Tax (GET) Surcharge (data as of April 24, 2015)
  - \$1,091M = amount received since the Project’s entry into FTA’s Preliminary Engineering phase of project development.
    - \$1,122M = Projected Net GET Surcharge Revenue for FYs 2010-4Q 2015, as stated in FFGA Financial Plan (Table A-1 *Capital Plan Cash Flows*)
    - GET receipts are currently running 3% short of projections to date, or \$31M behind.
    - \$31M shortfall is approximately 0.9% of the total GET surcharge projections per the FFGA Financial Plan of \$3.291B.
  - \$65M = GET surcharge received in April 2015.
- Full Funding Grant Agreement (FFGA)
  - \$6.8M = New Starts drawdown processed in April 2015.
- The §5307 funds for the Project, per the Financial Plan, are \$210M.

*Total Cash Received Since PE = \$1,771M*  
 (previous report = \$1,692M)

*GET Received Since PE = \$1,091M*  
 (previous report = \$1,026M)

*GET Received Since 2007 = \$1,469M*  
 (previous report = \$1,404M)

Figure 9. New Starts Drawdown by Federal Fiscal Year (data date as of April 24, 2015, per the FTA TEAM website)

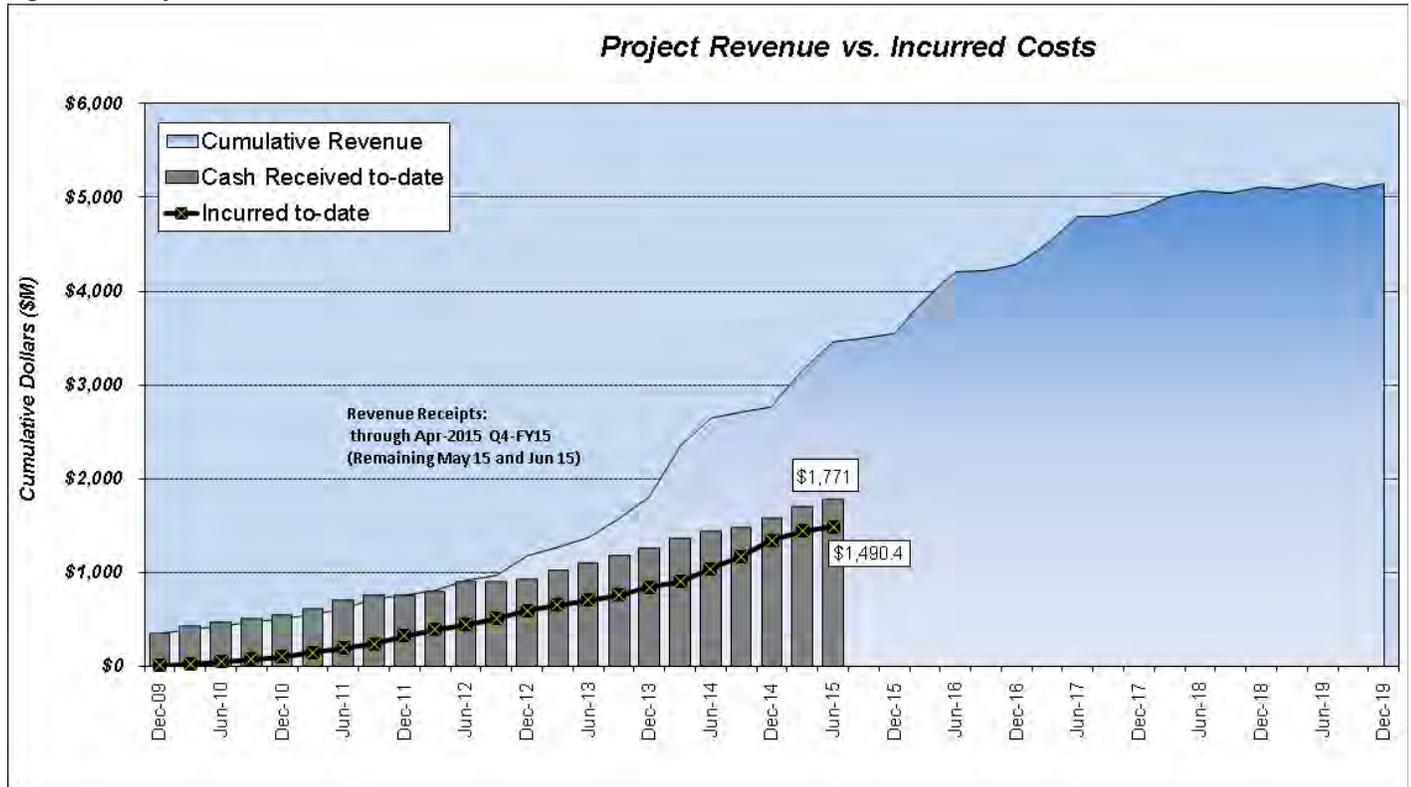
New Starts Grant Information by Federal Fiscal Year				
Federal Fiscal Year Allocation	Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance	FFGA Base Case Cash flow
2008	\$15,190,000	\$15,190,000	\$0	
2009	\$19,800,000	\$19,800,000	\$0	
2010	\$30,000,000	\$30,000,000	\$0	
2011	\$55,000,000	\$55,000,000	\$0	\$20,607,242
2012	\$200,000,000	\$200,000,000	\$0	\$99,382,758
2013	\$236,277,358	\$55,936,510	\$180,340,848	\$258,280,277
2014	\$250,000,000	\$0	\$250,000,000	\$441,719,724
2015 (pending)	\$250,000,000	\$0	\$250,000,000	\$250,000,000
2016 (pending)	\$250,000,000	\$0	\$250,000,000	\$250,000,000
2017 (pending)	\$243,732,642	\$0	\$243,732,642	\$230,010,000
<b>Total</b>	<b>\$1,550,000,000</b>	<b>\$375,926,510</b>	<b>\$1,174,073,490</b>	<b>\$1,550,000,000</b>

2.5 Project Revenue and Costs

(data as of April 24, 2015)

*Ending Cash Balance 4/30/15 = \$337.6M*  
*(previous report = \$345.8M)*

Figure 10. Project Revenue versus Incurred Costs



Planned Funding levels as per the June 2012 FFGA Finance Plan  
Data date for Revenue & Incurred Cost = April 24, 2015

Figure 11. Cash Balance Summary

APRIL 30, 2015 CASH BALANCE SUMMARY		
	APRIL	YTD Cumulative
<b>Beginning Cash Balance</b>	345,832,228	441,011,319
Expenditures:		
Operating Expenditures	(1,749,968)	(13,030,681)
Capital Expenditures	(85,818,349)	(431,608,162)
<b>Expenditures Total:</b>	<b>(87,568,317)</b>	<b>(444,638,843)</b>
Receipts:		
GET Surcharge	65,019,431	220,793,293
FTA Drawdown*	14,300,660	119,966,484
Interest	19,127	199,104
Other (rental, refunds, copy fees, etc.)	23,587	295,359
<b>Receipts Total:</b>	<b>79,362,805</b>	<b>341,254,240</b>
<b>Ending Cash Balance 04/30/15</b>	<b>337,626,716</b>	<b>337,626,716</b>

\*March FTA Drawdown of \$7.5M was recorded in April 2015.

Note: Project Cost Reports can be found in Appendix C.

### 3 SCHEDULE

(data as of April 24, 2015)

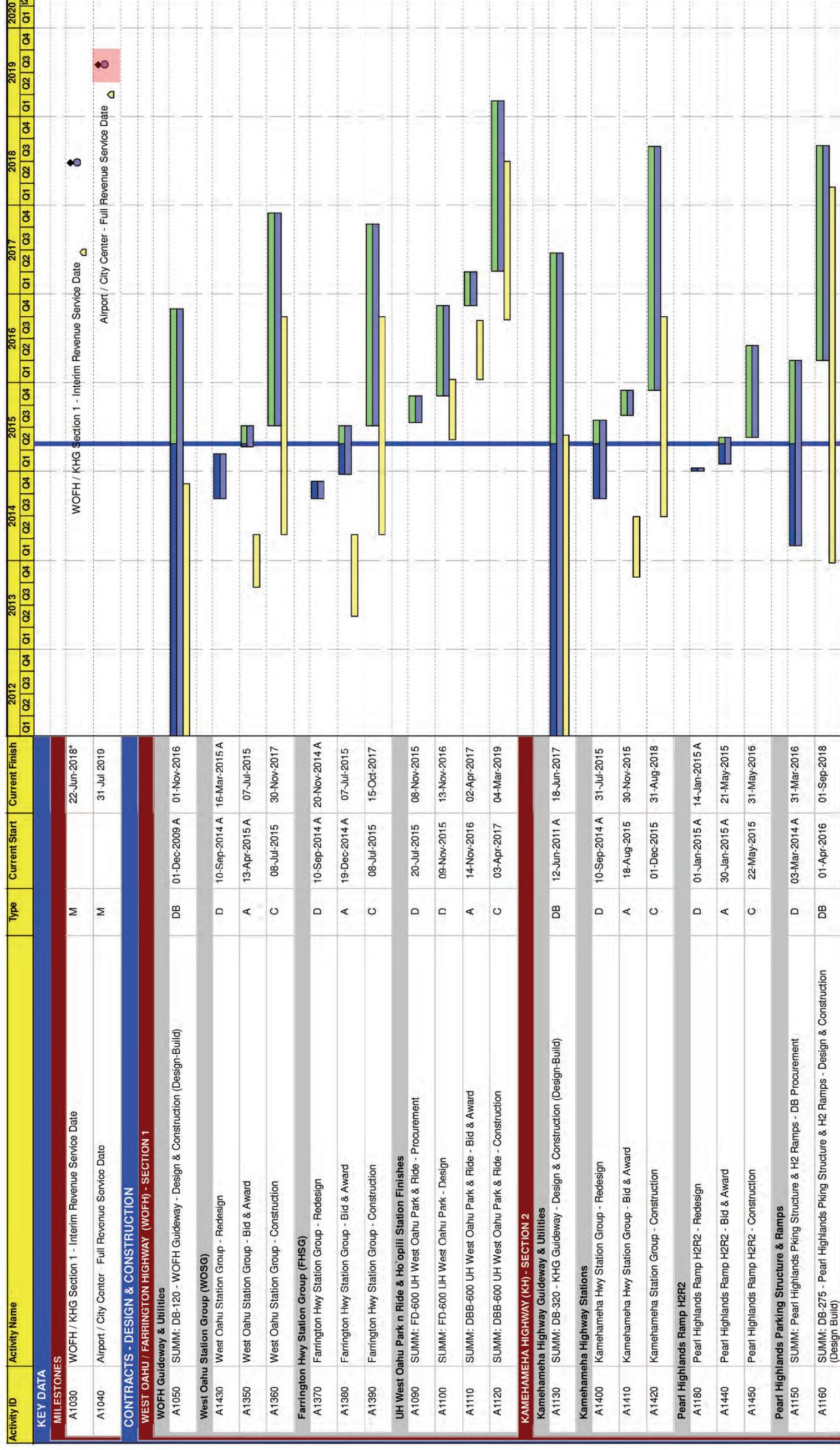
#### OVERVIEW

- The FHSG DBB construction package was issued for bid in December 2014. Bids were opened on March 3, 2015, and the solicitation was protested by Nan, Inc. (Nan) against the apparent low bidder, Hawaiian Dredging Construction Company, Inc. (HDCC). HART denied the appeal, and Nan appealed HART's denial of protest to the State of Hawai'i Department of Commerce and Consumer Affairs (DCCA), Office of Administrating Hearing. A hearing on the motions was held on May 20, 2015 and HART received a favorable oral ruling dismissing the protest. HART expects the formal DCCA hearings officer decision to be issued by June 4, 2015.
- As a result of the protest period, HART has lost three (3) months in the construction time period of the three stations required for the interim opening. That delay will therefore postpone the Interim Opening Date from the currently contemplated June 2018 date to September 2018. As the Master Project Schedule Summary on page 20 reflects data as of April 2014, this change will not be included until the June 2015 Monthly Report which will be showing the May 2015 data.
- HART is currently revising its procurement strategy for the east guideway, stations and utility relocations. Once completed, HART will update the design, bid/award and construction dates shown in the monthly MPS summary. Until then, the November 2014 MPS forecasts for the Full Revenue Service will be shown for reference.
- H2R2 Ramp (DBB-385) and FHSG (DBB-271) contractor schedules will be added to this report as soon as baseline schedules are accepted by HART.
- HART continues to closely monitor, review and manage all active construction packages. Previously reported delays continue to be addressed by the project teams. See contract pages for further details.

#### KEY ISSUES

- WOFH and KHG guideway construction contractor progress is behind approved planned schedules.
- Right-of-way acquisition, third-party interface and utility relocations continue to be areas of concern for program completion.

Figure 12. H RTP Master Project Schedule Summary (MPSS)  
The MPSS is statused against the FFGA Baseline MPS. The baseline and actual/planned durations of each contract are displayed for comparison.



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**Honolulu Rail Transit Project**

**April 2015 Update**

As of: 24-Apr-2015

- FFGA Baseline
- Mar 2014 Updt
- Remaining Work
- Actual Work
- FFGA Baseline Milestone

- Mar 2014 Updt Milestone
- Milestone

Page 1 of 2

**MPS Summary**

**Design & Construction Contracts**

Activity ID	Activity Name	Type	Current Start	Current Finish	2012		2013		2014		2015		2016		2017		2018		2019		2020	
					Q1	Q2	Q3	Q4	Q1	Q2												
<b>AIRPORT - SECTION 3</b>																						
<b>Airport Utility Relocation</b>																						
A1190	SUMM: FD-430 - Airport Utilities - Design	D	05-Jan-2012 A	16-Dec-2013 A																		
A1200	SUMM: Airport Utilities - Bid & Award	A	17-Dec-2013 A	30-Jun-2014 A																		
A1210	DBB-505 - Airport Utilities - Construction	C	26-Sep-2014 A	24-Jun-2016																		
<b>Airport Guideway 7 Pier Construction</b>																						
A1460	Airport Guideway 7 Pier - Bid & Award	A	09-Jul-2014 A	18-Sep-2014 A																		
A1470	Airport Guideway 7 Pier - Construction	C	26-Jan-2015 A	22-Apr-2015 A																		
<b>Airport Guideway &amp; Stations</b>																						
A1480	Airport Guideway & Stations - Design Build Procurement Part 1	A	07-Apr-2015 A	17-Aug-2015																		
A1490	Airport Guideway & Stations - Design Build Procurement Part 2	A	16-Aug-2015	13-Mar-2016																		
A1500	Airport Guideway & Stations - Design & Construction	DB	14-Mar-2016	19-Jul-2019																		
<b>CITY CENTER (CC) - SECTION 4</b>																						
<b>City Center Utility Relocations</b>																						
A1510	City Center Utilities & Civil Work - Bid & Award	A	08-Sep-2015	09-Dec-2015																		
A1520	City Center Utilities & Civil Work - Construction	C	10-Dec-2015	31-Mar-2017																		
<b>City Center Guideway &amp; Stations</b>																						
A1530	City Center Guideway & Stations - Design Build Procurement Part 1	A	04-Aug-2015	01-Nov-2015																		
A1540	City Center Guideway & Stations - Design Build Procurement Part 2	A	02-Nov-2015	31-May-2016																		
A1550	City Center Guideway & Stations - Construction	DB	01-Jun-2016	30-Jun-2019																		
<b>PROJECT WIDE - ALL SECTIONS</b>																						
<b>Maintenance &amp; Storage Facility (MSF)</b>																						
A1320	SUMM: DB-200 - MSF - Design & Construction (Design-Build)	DB	25-Jul-2011 A	21-Apr-2016																		
<b>Core Systems</b>																						
A1330	SUMM: DBOM-920 - Core Systems - Design & Construction	DB	13-Jan-2012 A	31-Jul-2019																		
<b>Elevators &amp; Escalators</b>																						
A1340	SUMM: MI-930 - Elevators and Escalators - Design, Manufacture, Install, & Test	DB	02-Aug-2013 A	05-Jul-2018																		

Program Critical Path



- FFGA Baseline
- Mar 2014 Updt Milestone
- Remaining Work
- Actual Work
- FFGA Baseline Milestone
- Mar 2014 Updt Milestone
- Milestone

Printed: 28-May-2015 16:17  
**Honolulu Rail Transit Project**  
**April 2015 Update**  
 As of: 24-Apr-2015

**MPS Summary**  
**Design & Construction Contracts**

## 4 CONTRACT STATUS

### Core Systems Contract (Section 4.1.A)

#### OVERVIEW

- Vehicle Aluminum Carshell Manufacturing is moving forward in Reggio Calabria, Italy.
- Progressing with sub-system testing and design verification activities.
- CSC delivered trailers to the MSF site.

#### KEY ISSUES

- The AM radio tower near the Middle Street Station is likely to cause Electromagnetic Interference (EMI) due to the proximity of the radio tower to the guideway and station. HART is evaluating alternatives to mitigate EMI: either by shielding the guideway or relocating the existing AM antenna to a new location. HART has identified a location to relocate the AM antenna that appears to be acceptable to all parties.
- HART has provided two notices of revised access to the stations and guideway; HART and AHJV continue to evaluate the cost and schedule impacts associated with both delays. This issue is being addressed in RFCR # 18.

### Fare Collection System (Section 4.1.C)

#### OVERVIEW

- COR continues to review HART's request to exempt the Fare System Technical Consultant RFQ from the three bid requirement.
- Fare Collection System RFP draft continues to be under review by COR and City procurement.
- A new MOU and cooperative agreement is now required.
- A revised RFP with cooperative procurement terms is being drafted.

#### KEY ISSUES

- Confirming the cooperative procurement terms with COR and City procurement in a manner that still appropriately transfers integration risk to the vendor.
- Releasing the RFP as soon as possible.

### West O'ahu Farrington Highway Guideway (Section 4.2.A)

#### OVERVIEW

- Leeward Community College (LCC) Portables and Parking Lot Change Order – Change Order 063, Procurement of LCC Portables/Parking Lot has been executed to allow KIWC to procure four (4) portable buildings for LCC. The procurement of the buildings are long lead time items which have been on the project's critical path. Once the buildings are installed in their new location, and old trailers are removed, work can begin at the LCC Station area.
- Balanced Cantilever System (BCS) Form Advancement – BCS construction is progressing. Pier tables and segments for Piers 253 through 256 are in various levels of completion and segment casting and stressing is proceeding in both eastward and westward directions from Piers 253 and 254.
- Civil Structure Progress for At-Grade Track Section – The MSE Block Wall by Pier 251 continues to progress, forming the foundation for the beginning of the at-grade section of the project. Cast-in-place Wall F by the base of the H-1 onramp has been casted. Backfilling within the wing walls and casting of approach slabs by the North Access Road Underpass has been completed.

#### KEY ISSUES

- Span 17 and Span 105 Damage and Repair (for additional detail, see 4.2.A Key Quality Issues)
- Drilled Shaft Repairs (for additional detail, see 4.2.A Key Quality Issues)
- Precast Segment Quality (for additional detail, see 4.2.A Key Quality Issues)

### Maintenance and Storage Facility (Section 4.2.D)

#### OVERVIEW

- Stem walls for the Train Wash Facility commenced. Track work is progressing in the rail yard; setting of rail turnouts for the storage tracks is complete. Utilities, subballast, ballast, rail ties, traction power duct banks, substation and train control conduits are proceeding in advance of track work. Installation of mechanical, electrical, and plumbing continues for the OSB, MOW and WTB. Roofing and siding, and interior slab and partitions are underway. Associated utility rough in is progressing, including conduits and raceway for the Core Systems Contractor.

KEY ISSUES

- HECO interface with installation of incoming power will be required to support commissioning of building systems and train maintenance including bridge cranes and the wheel lathe.
- Coordination with the abutting WOFH main line contract for completion of site access in the east and west yards including rail, vehicular access and utility interconnection.
- Mobilization of Core Systems' contractors including establishment of shared access between these prime contracts.

**Kamehameha Highway Guideway (Section 4.3.A)**OVERVIEW

- Construction of the drilled shafts will be moving to the balanced cantilever area in order to maintain progress while HECO clearance issues are resolved. Discussions with HECO are being held at an elevated level to resolve concerns about horizontal/vertical clearances and schedule certainty.
- Elevated discussions are also ongoing to clarify the scope and funding source of the HDOT betterments.
- HART continues to explore mitigation measures that would balance MOT and noise impacts to the community. The HART KHG team continues to respond to complaints and document contractor compliance.

KEY ISSUES

- Utility relocations continue to impact the construction schedule for the project, though the effects have been partially mitigated by resequencing the work.
- HDOT betterments are still pending agreement at an elevated level of what constitutes a betterment, and how funding will be transferred from HDOT to HART.
- Mitigation measures for noise and traffic impacts continue to be explored, but mitigation for one tends to adversely impact the other. HART will continue to work with the community to try to minimize impacts.

**Airport Utilities (Section 4.4.B)**OVERVIEW

- Utility relocations along Kamehameha Highway continue for DBB-505 with the installation of the sewer, water, and telecom lines along Kamehameha Highway. License Plate Reader (LPR) camera installations are nearing completion. Conduit installation for lighting relocation has started at Keehi Lagoon Park.

KEY ISSUES

- Right of entry (ROE) into Navy property and concurrence from Navy to work on existing Navy utilities located in HDOT ROW.
- Noise variance permit for night work is pending DOH approval.

**Airport Section Guideway Seven Pier Construction (Section 4.4.C)**OVERVIEW

- All seven (7) shafts were completed including back fill of CMPs and installation of steel cover plates.
- Concrete curbs and paving was completed at Piers 552R, 551R and 550.
- Asphalt paving at Piers 547 and 546 was installed.
- Project Substantial Completion inspection was performed on April 22.
- Contract Substantial Completion was declared on April 22, 2015.
- Demobilized M-888 Mobile Crane and other equipment from the site prior to April 24, 2015.
- Punch list items were complete by May 2, 2015.
- Contract Closeout is currently in progress.

KEY ISSUES

- HART is processing cost estimates submitted by HDCC/CJA JV for:
  - Change proposal for temporary fill at Piers 551R and 550.
  - Double handling of drilled spoils.
  - Additional concrete core samples at Pier 551R.
- HDCC/CJA JV is to submit the following additional costs RFC:
  - Force Account Sheets for Pier 548 and 550 regarding utility conflicts.

- Cost Proposal for extra surface work (concrete curbs and paving) at Piers 546, 547, 550, 551R and 552R due to lowering of CMP casings as instructed by RFI 016 response.
- HDCC/CJA JV has the following items to submit for Contract Closeout:
  - Red line of As-Built Drawings.
  - Complete Certified Payrolls data to LCP Tracker.
  - Submit HDCC/CJA JV daily reports into CMS.
  - Provide Release of Liens.
  - Submit final DBE forms.
  - Submit document submittals to closeout BMP and Environmental requirements.
  - Submit final invoice.

## **Contracts in Procurement**

### OVERVIEW

- Active Procurements:
  - The West O'ahu Stations Group (WOSG) construction contract was advertised for bids in April 2015. A public bid opening is scheduled for June 16, 2015.
  - Bids for the Farrington Highway Stations Group (FHSG) construction contract were opened in March 2015. The solicitation was protested by Nan, Inc. (Nan) against the apparent low bidder. HART denied the appeal, and Nan appealed HART's denial of protest to the State of Hawai'i Department of Commerce and Consumer Affairs (DCCA), Office of Administrative Hearing. A hearing on the motions was held on May 20, 2015 and HART received a favorable oral ruling dismissing the protest. HART expects the formal DCCA hearing officer decision to be issued by June 4, 2015.
  - The H2R2 Ramp contract was awarded on May 18, 2015 to Royal Contracting.
  - The Airport Guideway and Stations (AGS) Design-Build contract is in active procurement. Qualifications proposals are due on July 21, 2015.
- Upcoming Procurements:
  - The Kamehameha Highway Stations Group (KHSG) package is scheduled for advertisement in August 2015.
  - The City Center Guideway and Stations (CCGS) Design-Build package is scheduled for advertisement in August 2015.
  - The scope for a potential City Center Utilities Design-Bid-Build (DBB) package is being determined.

### KEY ISSUES

- HART is evaluating and implementing cost reduction alternatives throughout the project. For remaining DBB contracts, final designs are being revised to reduce construction costs. For DB contracts, proposed contract requirements are being tailored to promote cost savings where appropriate.

4.1 System-wide

A. Core Systems Contract (CSC)

Contract No.: DBOM-920

DBOM Contractor: Ansaldo Honolulu Joint Venture (AHJV)

Contract Start Date: January 2012

Contract Substantial Completion: March 2019

Projected Substantial Completion: July 2019

**Project Description:** Providing rail passenger vehicles, automated train control system, traction electrification system (TES), communication systems, passenger platform screen gates (PSGs), and operation and maintenance of the Project.



**Project Overview:** The CSC contractor is continuing to progress through Interim Design into Final Design. Qualification and design verification tests are ongoing. Major Pre-Shipping tests are to take place in May and June for Communication Systems and Train Control subsystems (see the Look Ahead section for additional details). Construction interface and mobilization is ongoing in preparation for the initial work schedule to begin at the MSF. CSC continues to coordinate mobilization plans with the MSF team. CSC has mobilized trailers on-site at the MSF and continues preparation to start work on the Yard Control Bungalow in June (pending approval of design documents). Passenger vehicle manufacturing, key system manufacturing, design verification and qualification testing activities are ongoing. Carshell assembly continues to progress at the Reggio Calabria, Italy facility. AnsaldoBreda is ramping up the production facilities in Pittsburg, CA.

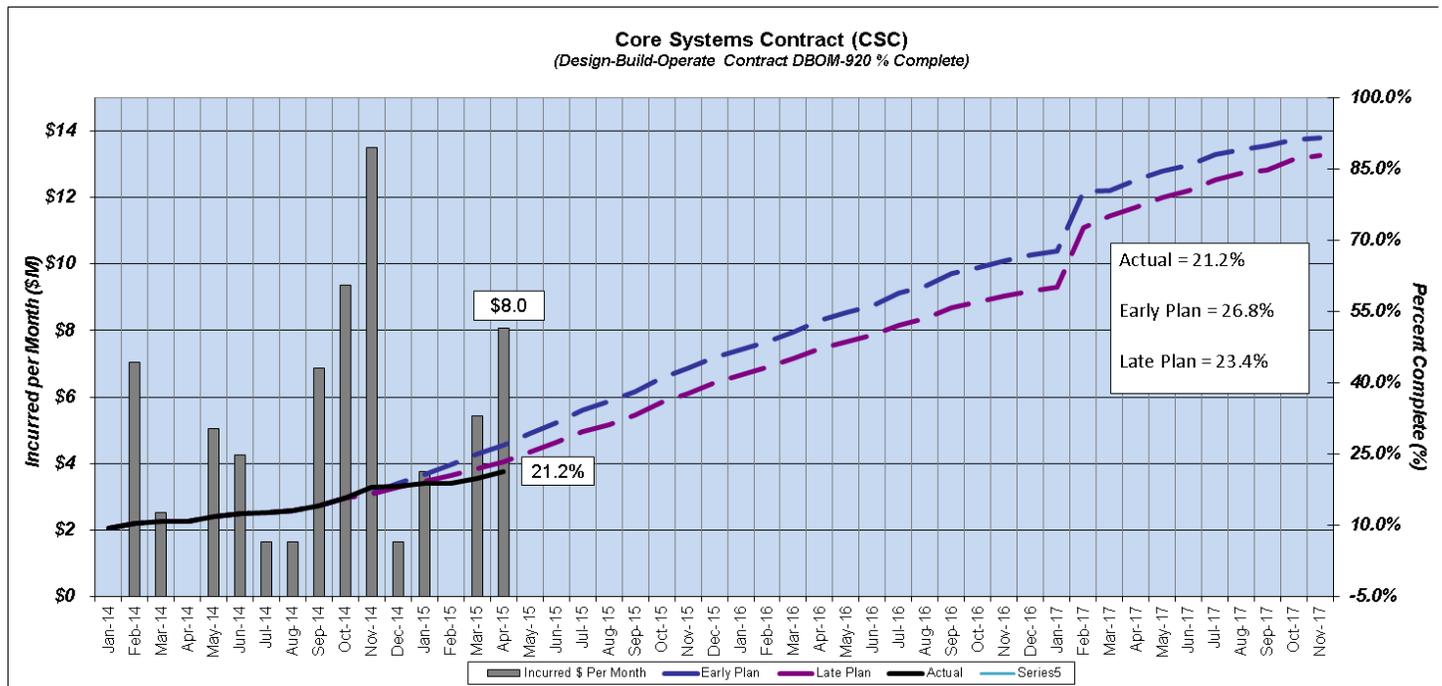
COST INFORMATION:

Original Contract:	\$573,782,793	Incurred-to-Date:	\$126,214,247
Current Contract Value <sup>1</sup> :	\$595,025,837	Incurred in April:	\$8,058,068

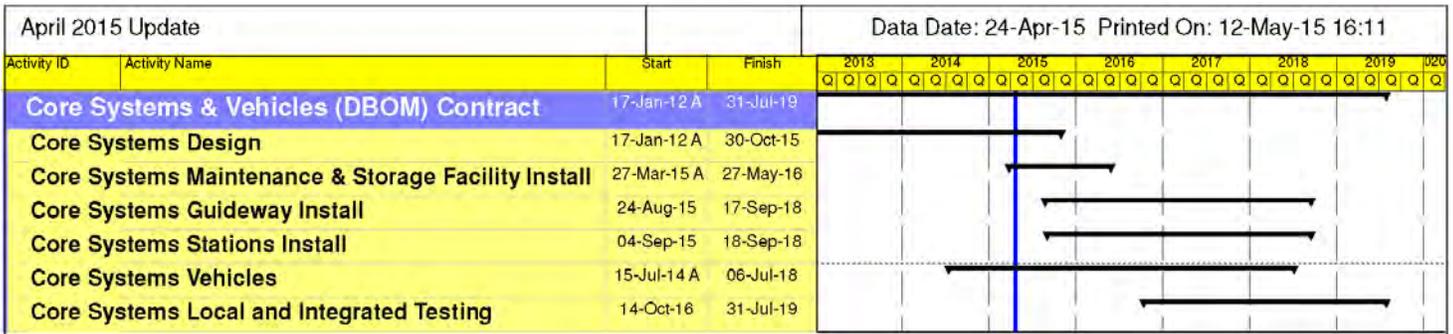
<sup>1</sup>Current Contract Value = Original contract value (excluding contingency and \$823.6M O&M budget) + executed Change Orders

Disadvantaged Business Enterprise (DBE) Participation	
Actual DBE Participation:	\$129,165
DBE % Attained:	0.029%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$21,243,044</b>



**SCHEDULE:**



	Interim Design Submitted Documents	Final Design Submitted Documents	Target Completion Date
Passenger Vehicles	93%	5%	4 <sup>th</sup> Q 2015
Communications	100%	30%	4 <sup>th</sup> Q 2015
ATC/SCADA	88% <sup>1</sup>	82%	4 <sup>th</sup> Q 2015
TES	100%	96%	4 <sup>th</sup> Q 2015
Fire Detection	100%	55%	4 <sup>th</sup> Q 2015
PSG, UPS, MPV	N/A	72%	4 <sup>th</sup> Q 2015

**CRITICAL PATH SUMMARY:**

- Continue to coordinate construction activities with the MSF contractor, CSC installer and On-Call Contractor.
- Work is moving forward on the assembly of the first carshell. Crews continue to complete welding activities. First Article Inspection and Pre-Shipment Inspection of the complete carshell is planned for June 2015. HART is closely monitoring preparations at the final assembly facility and current progress in Italy.
- Due to the modified access dates, the equipment installation at Pearl Highlands and Pearlridge stations is now driving the critical path.

**WORK PROGRESS:**

Activities this Month:

- Project-Wide Percent Complete: 22%
- Passenger Vehicle Percent Complete: 25%

**Design:**

- ATC/SCADA – Documents Received: 10, Documents Reviewed: 9.
- Communications – Documents Received: 13, Documents Reviewed: 13.
- Traction Power – Documents Received: 10, Documents Reviewed: 40.
- Fire Detection – Documents Received: 1, Documents Reviewed: 3.
- Platform Screen Gates – Documents Received: 2, Reviewed: 11.
- Passenger Vehicles – Documents Received: 22, Documents Reviewed: 10.

Look Ahead:

**Design:**

- Acceptance of Passenger Vehicle Carshell final design (June 2015) – Only one document left to accept.
- Completion of ATC/SCADA Final Design for Segment 1 (June/July 2015) - Only seven documents are left to be accepted.
- Completion of TES Final Design for Segment 1 (July 2015).
- Approval of the Yard Control Bungalow design documents (June 2015).

**Manufacturing:**

- Passenger Vehicle Manufacturing – Continue carshell assembly of vehicle #1 and vehicle # 2 in Reggio Calabria, Italy (ongoing). Continuation of work on vehicles 1 and 2. First vehicles expected to move to final cleaning, painting and calibration.

**Testing:**

- Factory Acceptance Tests for MSF TPSS Equipment - Fontana, CA (Tests ongoing, to be completed by June 5, 2015).
- Factory Acceptance Tests for TPSS Temperature Rise - Fontana, CA (June 3, 2015).
- Pre-Shipping Inspection Test for Wireless Communication System – Plano, TX (June 2015). Pre-Shipping Inspection Test Maintenance Management Information System (MMIS) – Plano, TX. (June 2, 2015).

<sup>1</sup> One additional ATC/SCADA Interim Design document is expected, hence the decrease in percent completion.

Activities this Month (continued):

**Manufacturing:**

- Performed manufacturing oversight at the AnsaldoBreda factory in Reggio Calabria, Italy. Work Completed this month: Manufactured center floor machining for vehicle # 2, and finished center floor machining of vehicle # 1, finished roof assembly of vehicle # 1, started center floor assembly of vehicle # 3. (For additional details, please see the Vehicle Carshell Progress Tracker in Appendix E.)
- Vehicle # 1 has moved from the General Assembly fixture to the Final Assembly fixture (next step in production).
- Conducted pre-production inspections of the DRS factory in West Plains, Missouri for the fabrication of steel truck frames.
- Conducted pre-production inspection of the AnsaldoBreda facility in Pittsburg, CA – this facility will be used for the vehicle assembly.

**Testing:**

- Testing resumed for the AFO-IIC components – Issues with testing equipment have hindered progress. Testing is ongoing.
- Continued Factory Acceptance Tests for TES Equipment - Blue Light Stations – testing in progress.

**MSF:**

- Coordinating work in the yard by KKJV, and coordinating follow up work by AHJV and On-Call Contractor.
- Work on installation of yard conduits. Conduits and back boxes for the first floor, mezzanine 1 and mezzanine 2 are almost complete. Installation to be finalized once access is coordinated with KKJV. Installation On-Call Contractor is currently installing conduit at the OSB levels 1, mezzanine levels 1 and 2.
- The CSC mobilized office trailers to the MSF site.
- Conduits at the MOW building started in late May 2015.

Look Ahead (continued):

- Pre-Shipping Inspection Test for Vehicle ATC System Cab racks – Batesburg, SC (TBD).
- Design Verification OSB System - Italy (July 2015).
- Pre-Shipping Inspection Test for On-Board Systems – Plano, TX (July 2015). Pre-Shipping Inspection Test for Fiber Optics – Plano, TX (July 2015).
- Pre-Shipping Inspection Test for Closed Circuit Television (CCTV) – Honolulu, HI (July 2015).
- Pre-Shipping Inspection Test for Intrusion Detection – Honolulu, HI (July 2015).
- Pre-Shipping Inspection Test for Passenger Information System – Plano, TX (August 2015).
- Pre-Shipping Inspection Test for MSF SCADA Hardware – Batesburg, SC (July 15, 2015).
- Pre-Shipping Inspection Test for LCC Station SCADA Hardware – Batesburg, SC (July 27, 2015).
- Pre-Shipping Inspection Test for Waipahu Station SCADA Hardware – Batesburg, SC (July 27, 2015).
- Pre-Shipping Inspection Test for West Loch Station SCADA Hardware – Batesburg, SC (July 27, 2015).
- Pre-Shipping Inspection Test for MSF TCCR Equipment – Batesburg, SC (June 15, 2015).
- Pre-Shipping Inspection Test for LCC Station TCCR Equipment – Batesburg, SC (August 2015).
- Pre-Shipping Inspection Test for ATS/SCADA software – Pittsburg PA (July 2015).
- UPS Prototype tests for Electromagnetic Compatibility (EMC), compliance with Underwriters Laboratories (UL) Standards, and Seismic Tests – China (June 8, 2015).
- UPS Design Verification Tests – China (June 8, 2015).
- Pre-Shipping Inspection Test for Rail Car Mover – Granite Falls, MN (June 2015).
- Pre-Shipping Inspection Test for Rail Grinder – Granite Falls, MN (June 2015).
- Pre-Shipping Inspection Test for High Reach Lift Truck– Granite Falls, MN (June 2015).
- Design Verifications for Platform Screen Gates – Farmington, CT (August 2015).
- Pre-Shipping Inspection Test for Fire Detection Systems – Honolulu, HI (June 2015).

**KEY ISSUES:**

- Finalize options for shielding of communications equipment from Electromagnetic Interference (EMI) due to the proximity of the AM radio tower near the Middle Street Station. HART is evaluating alternatives to mitigate EMI.
- HART is closely monitoring Passenger Vehicle production in Italy and working with AnsaldoBreda (AB) to prepare for final assembly start-up in Pittsburg (CA).
- HART has provided two notices of revised access to the stations and guideway. HART and AHJV continue to evaluate the cost and schedule impacts associated with both delays. This issue is being addressed in RFCR # 18.
- 4-Car Train – Negotiations are still in progress.
- AHJV has asserted that it has had a 9-month delay in starting work due to CSC protest. This issue is in mediation; AHJV submitted additional information, but it has been rejected by HART.

**QUALITY MANAGEMENT:**

- Testing and Oversight Activities:

Design Verifications & System Testing		
Subsystem	Test Completed	Date Completed
ATC/SCADA	Retests of Vehicle Train Control Environmental and EMI Tests	Ongoing
TES	Factory Acceptance Tests for TES Equipment - Blue Light Stations	Ongoing

Passenger Vehicle - Oversight		
Facility	Activity	Date Completed
Reggio Calabria, Italy	On-site inspector in place to oversee and report on AnsaldoBreda PV Carshell manufacturing activities	Ongoing
Pittsburg, CA	Vehicle Final Assembly	Not Started

CSC NCR Log			
	TOTAL	CLOSED	OPEN
AHJV	15	15	0
ASTS	2	2	0
AB	94	73	21
<b>TOTAL</b>	<b>111</b>	<b>90</b>	<b>21</b>

- AnsaldoBreda generated NCRs for each aluminum carshell element with manufacturing issues found during carshell production, primarily at the subassembly supplier (CMC). Corrective actions are being taken for future production, and adjustments are being made to current assembled parts.

**B. Elevators and Escalators Manufacture-Install-Maintain (MIM)**

**Contract No.:** MI-930  
**Contractor:** Schindler Elevator Corporation  
**Contract Start Date:** August 2013  
**Contract Substantial Completion:** May 2018  
**Projected Substantial Completion:** The May 2018 completion date will change to a later date predicated on the award of the DB contracts for the east portion of the guideway. The Airport Section Guideway with stations has been advertised.



**Project Description:** Furnish / install / test / maintain all elevator and escalator equipment located at the elevated stations.

**Project Overview:** Elevator and Escalator equipment design was completed in January 2015. The release to begin manufacturing of the FHSG equipment will be scheduled once a contract award has been made and an approved construction schedule with the successful contractor has been completed. The West O’ahu Station Group contract has been advertised with bids being due June 16, 2015 and Notice to Proceed being issued mid-July. The Kamehameha Station Group will be advertised in August 2015 with an anticipated NTP being issued in December 2015.

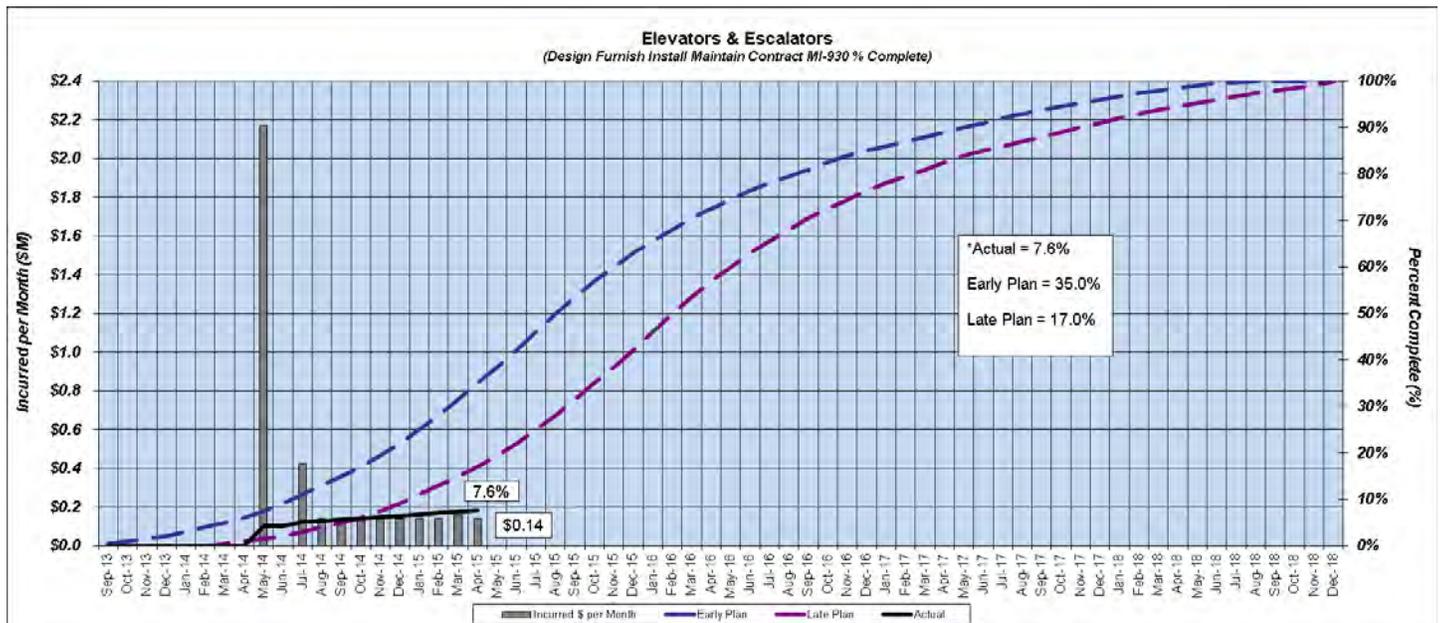
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$50,982,714</u>	<u>Incurred-to-Date:</u>	<u>\$3,879,298</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$50,982,714</u>	<u>Incurred in April:</u>	<u>\$140,825</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$0
DBE % Attained:	0%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$0</b>



\*After a review of the payments, the Actual percentage has been adjusted.

**SCHEDULE:**

April 2015 Update			Data Date: 24-Apr-15, Printed On: 13-May-15																			
Activity Name	Start	Finish	2015				2016				2017				2018				2019			
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	16-Jun-16	18-Apr-17																				
<b>W. Oahu Station Group</b>	16-Jun-16	18-Apr-17																				
Construction - W. Oahu Station Group	16-Jun-16	18-Apr-17																				
East Kapolei Station	04-Jan-17	18-Apr-17																				
UH West Oahu Station	26-Sep-16	10-Jan-17																				
Ho'opili Station	16-Jun-16	04-Oct-16																				
<b>Farrington Highway Station Group</b>	12-Sep-16	27-Dec-16																				
Construction - Farrington Highway Station Group	12-Sep-16	27-Dec-16																				
West Loch Station	12-Sep-16	27-Dec-16																				
Waipahu Transit Station	12-Sep-16	03-Nov-16																				
<b>Kamehameha Highway (KH) - Section 2</b>	14-Dec-16	10-Nov-17																				
<b>Kamehameha Highway Station Group</b>	14-Dec-16	10-Nov-17																				
Construction - Kamehameha Highway Station Group	14-Dec-16	10-Nov-17																				
Pearl Highlands Station	22-Jun-17	10-Nov-17																				
Pearl Ridge Station	14-Jul-17	01-Nov-17																				
Aloha Stadium Station	14-Dec-16	03-Apr-17																				
<b>Airport - Section 3</b>	30-Nov-16	18-Dec-17																				
<b>Airport Station Group</b>	30-Nov-16	18-Dec-17																				
Construction - Airport Station Group	30-Nov-16	18-Dec-17																				
Pearl Harbor Station	30-Nov-16	17-Mar-17																				
HNL Airport Station	19-Jun-17	03-Oct-17																				
Lagoon Drive Station	01-Dec-16	20-Mar-17																				
Middle Street Station	31-Aug-17	18-Dec-17																				
<b>City Center (CC) - Section 4</b>	15-Dec-16	12-Apr-18																				
<b>Dillingham Station Group</b>	15-Dec-16	06-Dec-17																				
Construction - Dillingham Station Group	15-Dec-16	06-Dec-17																				
Kalihi Station	15-Dec-16	04-Apr-17																				
Kapalama Station	18-Apr-17	02-Aug-17																				
Iwilei Station	09-Mar-17	26-Jun-17																				
Chinatown Station	21-Aug-17	06-Dec-17																				
<b>Kaka'ako Station Group</b>	06-Jun-17	12-Apr-18																				
Construction - Kaka'ako Station Group	06-Jun-17	12-Apr-18																				
Downtown Station	06-Jun-17	21-Sep-17																				
Civic Center Station	18-Jul-17	31-Oct-17																				
Kaka'ako Station	15-Aug-17	01-Dec-17																				
Ala Moana Center Station	21-Dec-17	12-Apr-18																				

**CRITICAL PATH ISSUES:**

- Coordination with station contractors on construction interface milestones.
- Re-bidding of the Airport and City Center sections of guideway with stations as Design-Build contracts will impact the completion of the Escalator-Elevator contract.

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 7.6 %; Planned Value: 20%**

- Design is 20% complete.
- All draft equipment drawings for the 21 stations have been submitted for review and acceptance and are in review.
- Design is complete on the three WOSG stations.
- The release to begin manufacturing of the FHSG equipment will be released pending the award of the Farrington Highway Station Group.

**Look Ahead:**

- Design is continuing for the three KHSG stations.
- Elevator & Escalator team will continue meeting with final designers for the Kamehameha Highway Station Group to finalize the respective designs for elevators and escalators
- Release for manufacturing for the Farrington Highway Station group elevators and escalators will be scheduled after contract award and NTP have occurred.

**KEY ISSUES:**

- The release to allow manufacturing for WOSG and KHSG will be dependent on the successful bid and award of these stations later this year (2015).

**C. Fare Collection System**

**Contract No.:** TBD

**Contractor:** TBD

**Contract Start Date:** TBD

**Contract Substantial Completion:** TBD

**Projected Substantial Completion:** TBD

**Project Description:** The fare system is a joint HART and City and County of Honolulu (DTS, DIT, BFS) project that will consist of a multi-model, closed loop, account based smart card system. The Fare System Vendor will be responsible for design, manufacture, testing and installation of the entire system inclusive of hardware and software.

The rail portion of the project will consist of Ticket Vending Machines (TVMs) and fare gates at stations that accept smart cards which can also be used for payment on board TheBus and facilitate a seamless transfer between modes. Equipment and software to be used by both HART and the City and County will include the transaction processing, fare equipment monitoring, customer service systems, as well as a Data Warehouse. TheBus equipment will consist of stand-alone smart card readers on board.

**Project Overview:** The technical specification for the project is complete and the remaining RFP package is 80% complete. Schedule delays continue at this time due to last minute changes by COR and City procurement. A new MOU with DTS, BFS and DIT is being drafted. Anticipated new release date for the RFP is before the end of June 2015. An MOU with DTS and DIT for future operations and maintenance is still required and will be negotiated in fall 2015.

**COST INFORMATION:** TBD

**SCHEDULE:**

- Anticipated RFP release in June 2015 with RFP award anticipated for November 2015. System design anticipated for spring 2016.
- Manufacture in fall 2016.
- System testing for the back office functions and the bus anticipated in spring 2017.
- Anticipated system pilot launch on TheBus in June 2017 with full roll out on TheBus (including all central systems) for fall 2017.
- Interim roll out on rail in late 2018.
- Full roll out on rail in late 2019.

**CRITICAL PATH ISSUES:**

- Confirming cooperative procurement terms with the City.

**WORK PROGRESS:**

Activities this Month:

- Negotiating and drafting new RFP terms to incorporate the City’s requirement for cooperative procurement.
- Work with PIG to set fare policy work plan and support City set up of a fare policy PIG.

Look Ahead:

- Issue Fare System RFP.
- Begin drafting MOU for cost sharing operations with DTS and BFS.
- Support City with establishment of a fare policy PIG.

**KEY ISSUES:**

- Confirming the cooperative procurement terms with COR and City procurement in a manner that still appropriately transfers integration risk to the vendor.
- Releasing the RFP as soon as possible.

4.2 Section I – West O’ahu/Farrington Highway: East Kapolei to Pearl Highlands

A. West O’ahu/Farrington Highway Guideway (WOFH)

Contract No.: DB-120

DB Contractor: Kiewit Infrastructure West Company (KIWC)

Contract Start Date: December 2009

Contract Substantial Completion: July 2016

Projected Substantial Completion: October 2016



**Project Description:** Design and construction of 6.8 miles of rail alignment, starting at the East Kapolei station and ending at the Pearl Highlands station.

**Project Overview:** For the May 2015 Report, progress for utilities, shaft, column, segment casting, and span stressing have been updated. Single Track guideway has begun to be erected in the vicinity of East Kapolei Station. A major column repair at Pier 151 was completed. The 401/404/CZM Permits have been obtained for drill shaft operations to begin in the Pearl Highlands Station area. The Project’s Key Quality Issues continue to focus on drilled shafts and segment repairs, in addition to the repairs of Span 17 and Span 105.

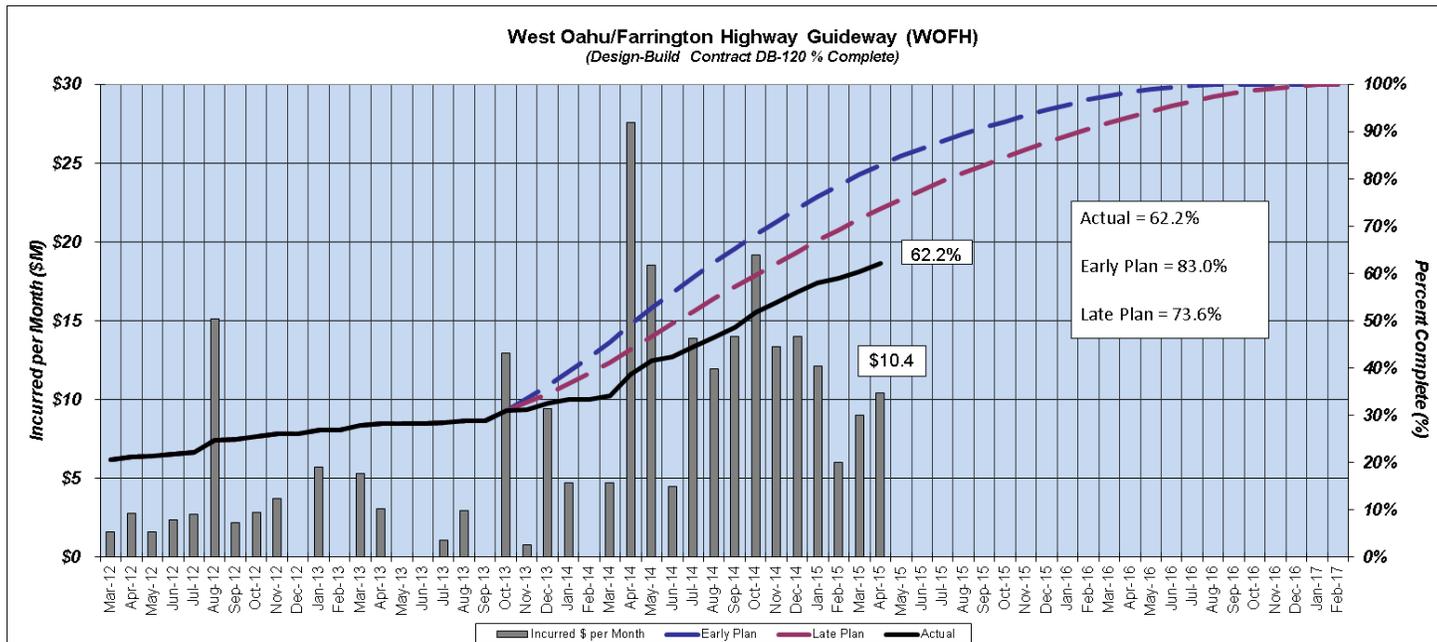
**COST INFORMATION:**

Original Contract:	\$482,924,000	Incurred-to-Date:	\$387,588,591
Current Contract Value <sup>1</sup> :	\$623,606,472	Incurred in April:	\$10,413,382

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$5,339,330
DBE % Attained:	1.11%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$140,682,472</b>



In April, KIWC submitted Pay Application #64 for March 2015, but the Payment was rejected since retention was not applied. KIWC resubmitted Pay Application #64 at the end of April and the payment has been in review by HART during the month of May. In May, KIWC also submitted Pay Application #65 for April 2015, but the payment was rejected since retention was not applied. KIWC resubmitted Pay Application #65 and the payment is in review.

**SCHEDULE:**

- Progress is lagging from the approved planned schedule. HART and KIWC have been working to mitigate impacts to critical path activities. HART reviewed a revised schedule and requested a resubmittal via the Change Order process.
- A second set of travelers has been incorporated at the Balanced Cantilever System area, at no cost to HART, in order to mitigate potential schedule impacts.

April 2015 Update						Data Date: 24-Apr-15, Printed On: 12-May-15 19:42								
Activity Name	Start	Finish	2014			2015			2016					
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>Total</b>	08-Mar-12 A	31-Oct-16												
<b>West Guideways &amp; Structures</b>	08-Mar-12 A	31-Oct-16	Forecast Dates - Dates Not Approved											
W. Oahu/Farrington Highway (WOFH) - Section 1	08-Mar-12 A	31-Oct-16												
W. Oahu/Farrington Highway Guideway	08-Mar-12 A	31-Oct-16												
<b>Kiewit WOFH Summary</b>	08-Mar-12 A	31-Oct-16												
<b>Foundations</b>	08-Mar-12 A	20-Jan-16												
Drilled Shafts	23-Apr-12 A	09-Nov-15												
Columns	21-May-12 A	20-Jan-16												
At Grade	08-Mar-12 A	08-Jul-15												
<b>Guideway</b>	29-Jan-14 A	24-Oct-16												
Precast Segment Erection	29-Jan-14 A	24-Oct-16												
Balanced Cantilever Segments	10-Sep-14 A	30-Dec-15												
<b>Trackwork</b>	09-Jun-15	31-Oct-16												
Direct Fixation Trackwork	09-Jun-15	30-Sep-16												
Third Rail	07-Jan-16	31-Oct-16												

**CRITICAL PATH ISSUES:**

- A change order for the procurement and delivery of portables at LCC was executed. The lead time for these modular buildings will have an impact to the overall schedule. KIWC has notified HART that a 6 month time extension beyond substantial completion is needed to complete work at LCC. HART is currently reviewing this situation and is working with the contractor to mitigate a potential delay.
- Production rates for span erection continue to reside near critical path.
- Work in the Balanced Cantilever System area has slipped from the October 2014 schedule and is nearing critical path with minimal total float days available.

**WORK PROGRESS:**

WOFH Status as of 5/15/15									
Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	Total to Date	Planned to Date*	Total Qty	% Complete	
Water Line	8,528	9,348	91.2%	Shafts	211	201	266	79.3%	
Sewer Line	550	570	96.5%	Columns	164	147	266	61.7%	
Fuel Line	340	340	100%	Segment Casting	2,783	3,163	3,163	88.0%	
Gas line	1,498	1,591	94.2%	Spans Stressed	117	118	266	44.0%	
Drainage Line	3,325	5,166	64.4%	* The planned values are based on KIWC's Pending October Schedule Revision dated Dec. 5, 2014.					
Elec/Telecom	15,379	21,374	72.0%						
Street Lights	5,975	8,357	71.5%						
Traffic Sig/ITS Duct bank	8,009	10,802	74.1%						
System Sites	-	7,046	0%						
ITS Systems Devices	821	4,121	19.9%						

Activities this Month:

**Earned Value: 64.0%** [(Total Achieved to April 2015 (\$387 million) + Projected May 2015 Period (\$12 million))/Total Contract Including Executed Change Orders (\$623 million)]. Planned Value: 75.7%

**Shaft/Column**

- Performed drilled shaft construction, drilling, and placing of concrete for a total of 5 drill shafts. Set rebar and placed concrete for 11 columns.

**Guideway Segment Erection**

- Eastbound heading segments were erected from Span 122 through Span 130. Westbound heading segments were erected from Span 14 through 12R.

**Utility Relocation**

- Addressed utility conflicts along the alignment, relocating traffic signals, streetlights, and existing water/sewer lines. HECO relocating power lines.

Look Ahead:

**Design Progress**

- HART and KIWC are working together to complete final design. Additional submittals are expected to be issued for construction pending coordination with other parties and contracts.

**Shaft/Column**

- Continue with drilled shaft and column concrete placement along Farrington Highway to West Loch Station and further east. Shaft work is proceeding at Waipahu Transit Center Station to West Loch Station. Shaft work is also proceeding at the Pearl Highlands Station area.

**Guideway Segment Erection**

- Segment span erection will continue from Span 11R westbound towards East Kapolei Station and from Span 131 eastbound along Farrington Highway towards West Loch Station.

Activities this Month (continued):

Third-party companies relocating overhead fiber-optic lines. Work is staying ahead of drilled shaft production.

**Balanced Cantilever Structure**

- Casted 5 segments downstream and 4 segments upstream from Pier 253. Casted 2 segments downstream and 3 segments upstream from Pier 254. Pier Table 255 has been completed. Column work is complete at Pier 256 and falsework is being setup for Pier Table construction.

**Track Construction**

- Completed welding operations on the westside of Ho’opili Station. Rail was stockpiled on the guideway after completion. Track setting and concrete placing for plinths continued east of the double crossover by Ho’opili Station.

**Precast Yard**

- Precast Yard performed daily segment and sound wall casting at a reduced pace, averaging 7 segments per day or 35 segments per week. This reduced pace is to accommodate the storage available at the yard.

**KIWC/Third-Party Coordination**

- HECO and KIWC continue to resolve conflicts with utility relocations.
- Horizontal offset requirements with utility companies may become an issue. At current time, design is held-off until resolved.

**Civil Structures**

- The MSE Block Wall by Pier 251 continued to progress where Retaining Wall A remains the main focus for May. Casting and waterproofing of cast-in-place Wall F was completed. Backfilling of wing walls and casting of approach slabs by the North Access Road Underpass has been completed.

Look Ahead (continued):

**Utility Relocation**

- Relocate wet utilities (sewer/water) and dry utilities (traffic signal, street lighting and fiber optics) along Farrington Highway in preparation for eastbound segment erection.

**Balanced Cantilever Structure**

- KIWC will continue to cast upstream and downstream segments for the balanced cantilever at Piers 253 and 254. The traveler at Pier 253 upstream will be transferred for assembly at Pier Table 255. Work will continue on the Pier Table at Pier 256.

**Track Construction**

- Welding operations will return in October 2015 east of West Loch Station. Rail will be stockpiled on the guideway when complete. Plinth work east of Ho’opili Station will continue until June 2015.

**Precast Yard**

- Production of segment casting and sound walls will continue at a rate of 7 segments per day. At this rate, completion of all project segments is expected to be complete by August 2015.

**KIWC/Third-Party Coordination**

- Continue to resolve conflict construction and traffic issues with third-parties.

**Civil Structures**

- Retaining Wall A will continue to progress.

**KEY ISSUES:**

- **Design Completion Schedule** – The Project’s design schedule continues to be tracked closely by HART. Comment Disposition and Over-the-Shoulder Meetings also continue to occur. As of mid-May, 110 of 130 design submittals have been submitted. HART will continue to facilitate the third-party review process and will track against KIWC’s design schedule.
- **Leeward Community College (LCC) Portables and Parking Lot Change Order** – In order for KIWC to begin work at the LCC Station area, four (4) portable buildings need to be relocated to another location within the campus. Change Order 063, Procurement of LCC Portables, was executed. KIWC has a pre-construction Right of Entry (ROE) and borings have begun. A grading permit will be needed prior to the granting of a full construction ROE. KIWC is developing their grading plans which will be submitted to the Honolulu Department of Planning and Permitting (DPP) in June. Full construction ROE will be granted by the University of Hawai’i after the grading plans are approved.
- **Construction Production/Baseline Schedule** – Meeting the project’s schedule will continue to be a challenge for the project. A re-sequenced baseline schedule was submitted to HART in October 2014 showing more realistic construction durations. The schedule is being used to track progress against schedule of milestones. HART and KIWC continue to meet to discuss further refinements to durations and activities within the schedule.
- **HDOT Traffic Signal Betterments** – HDOT has requested various betterments beyond KIWC’s base scope of work. These requests have prevented KIWC from finalizing their design and obtaining approval from HDOT. KIWC has presented a list of contract work versus betterments. HART had reviewed these items and agreed to the final scope of work. In May, both HART and KIWC continued to develop pricing for the agreed upon scope.
- **Hawai’i Department of Health (DOH) Section 401 Permit** – In order for KIWC to begin drilled shaft work at the Pearl Highlands Station, HART will need to obtain a Section 401 Permit, a Section 404 Permit from the U.S. Army Corps of Engineers (Corps), and a Hawaiian Coastal Zone Management (CZM) Permit. These permits will allow KIWC to impact certain Waiawa Stream Tributary and Waiawa Stream areas. The CZM Permit was signed on April 27, 2015, the 401 Permit was signed on April 29, 2015, and the 404 Permit was signed on May 11, 2015, by the respective agencies. Phase 1 (diversion of stormwater pipes into Waiawa Stream) work was completed this month. This is no longer a key issue.
- **Community Noise Variance Permit** – This noise variance had expired on April 12, 2015. Due to the expiration, night work was temporarily suspended affecting progress on the balanced cantilever, utilities, and span by span erection. A revised WOFH Community Noise Variance from HDOH was signed and placed into effect on April 21, 2015. During this period, critical path work was not affected. This is no longer a key issue.

**KEY QUALITY ISSUES:**

- **Span 17 Damage and Repair** - During the erection process of Span 17, segments 17-1, 17-2, 17-11, and 17-12 were damaged due to unbalanced support from the temporary bearings. NCR 00314 was opened to address this issue. KIWC continues to evaluate the extent of the damage. A root cause analysis and repair procedure alternatives will be submitted to HART for review. Repair at Span 17 is not on the critical path and KIWC continues to proceed with Span by Span operations westbound.
- **Span 105 Damage and Repair** – While setting Span 105 into its final horizontal and vertical position, the span shifted while on the jacks. Span 105 made contact with nearby Spans 104 and 106. NCR 00336 was opened while damage to Spans 104, 105, and 106 are being evaluated. KIWC is still in the process of determining how to best set Span 105 onto the bearing pads and into its final alignment. Due to this incident, final span alignment operations were temporarily suspended to re-evaluate the procedures. KIWC has since restarted the rough setting of spans and final alignment operations are expected to begin again.
- **Column 151 Damage and Repair** – In April, Column 151 was poured, but after formwork was removed, the lower concrete surface of the column exhibited large areas of honeycombing and rock pockets with localized areas of exposed vertical and horizontal reinforcing, possibly due to insufficient concrete consolidation. NCR 00331 was opened to address this issue and in May, KIWC completed the appropriate repair work. After this issue, KIWC reevaluated their quality procedures and Quality Assurance was designated a higher degree authority of oversight and control for concrete pours to prevent these issues from occurring in the future. This is no longer a key issue.

- **Drill Shaft Quality** – HART received seven additional drill shaft Crosshole Sonic Logging (CSL) Reports in May 2015. Six of the drilled shafts were found to have velocity reductions outside of the acceptable design criteria limits, potentially because concrete was segregated during concrete placement; one of the shafts had no issues. Of the 242 drilled shafts that have been tested to date, HART has requested that KIWC provide additional testing and/or modifications to 62 shafts to ensure that the shafts meet Project Specifications. KIWC continues to have weekly Drill Shaft Quality Meetings with HART to discuss testing results, quality, the concrete mix, and methods for repair.
- **Drill Shaft Repairs** – Of the 62 drill shafts that are being reviewed in detail, six new NCRs have been opened and submitted to HART this month. HART will not close an NCR until KIWC completes another CSL test and demonstrates soundness of the concrete shaft as well as when all HART comments are responded to. The next major drill shaft repair is expected to be at Pier 235.
- **Pre-Cast Segment Progress/Quality** – The Casting Yard has scaled back in production to allow time for span erection efforts to catch up. Production is now averaging 35 segments per week and is currently more than 85% complete with segment production for the overall project. 2,783 segments have been cast to date. Although 113 of the total 364 NCRs (31.0%) have been related to segmental issues like damaged shear keys, concrete voids, and spalls, proper correction procedures have already been developed and are being implemented.
- **Closing Out NCRs** – NCRs are being promptly corrected, validated, and closed out during this period. Both KIWC and HART have been working together to complete all the needed processes for timely validation. A total of 24 NCRs have been closed since last month. Of the 24, 12 were related to pre-cast segment issues, eight were related to drill shaft issues, one post-tensioning issue, and three out of tolerance rebar issues.
- **Flash Butt Track Welding & Track Construction Operations** – KIWC has moved to the area west of Ho’opili Station where another 476 welds have been completed. These welds cover track between 392+00 to 500+00. KIWC continues to also complete the concrete plinth trackwork heading eastward past the double crossover at Ho’opili Station.
- **Balanced Cantilever System (BCS) Form Advancement** – KIWC has made great strides in the Balanced Cantilever construction. KIWC is already forming, casting, and stressing segments both upstream and downstream segments from Pier 253 and Pier 254. On average, three segments are cast and stressed per week. As of mid-May, 15 of 84 BCS segments have been stressed (17.9%). Third party work is moving away from the vicinity of the BCS construction. Lane closures to redirect traffic on the H-1 should no longer be a major issue moving forward. As an additional safety precaution, nets have been added underneath travelers to catch any excess concrete laitance that may develop as the travelers progress.
- **Base Grouting** – Base grouting work at the base of select drill shafts began. The grout ties the drilled shaft to the rock socket which allows for a more stable structural support system. 20 of 62 shafts (32.3%) have been grouted to date. Base grouting reports continue to be submitted to HART in a timely manner.

WOFH NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
364	277	87

PROJECT PICTURES:



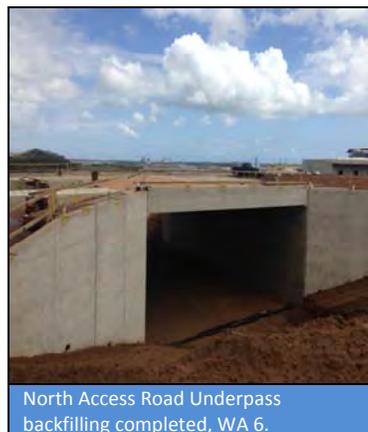
Segment erection at Span 12R Single Track, westbound.



Segment erection at Span 129, eastbound.



BCS segments 253-4U and 254-3D, Work Area 6.



North Access Road Underpass backfilling completed, WA 6.

**B. West O’ahu Station Group (WOSG)**



**Contract No.:** FD-140

**Contractor:** URS Corporation, Final Design Consultant (Engineer of Record)

**Contract Start Date:** June 2012

**Construction Docs Bid-Ready:** April 2015 (in active procurement)

**Project Description:** Architectural and engineering services for the design of three (3) transit stations situated along the WOFH Guideway. The three stations comprising the WOSG contract are the East Kapolei Station, the UH West O’ahu Station and the Ho’opili Station.

**Project Overview:** The WOSG package was issued in a Request for Bids on April 13, 2015. The design consultant is incorporating several items that will be included in an Addendum. These items are discussed below.

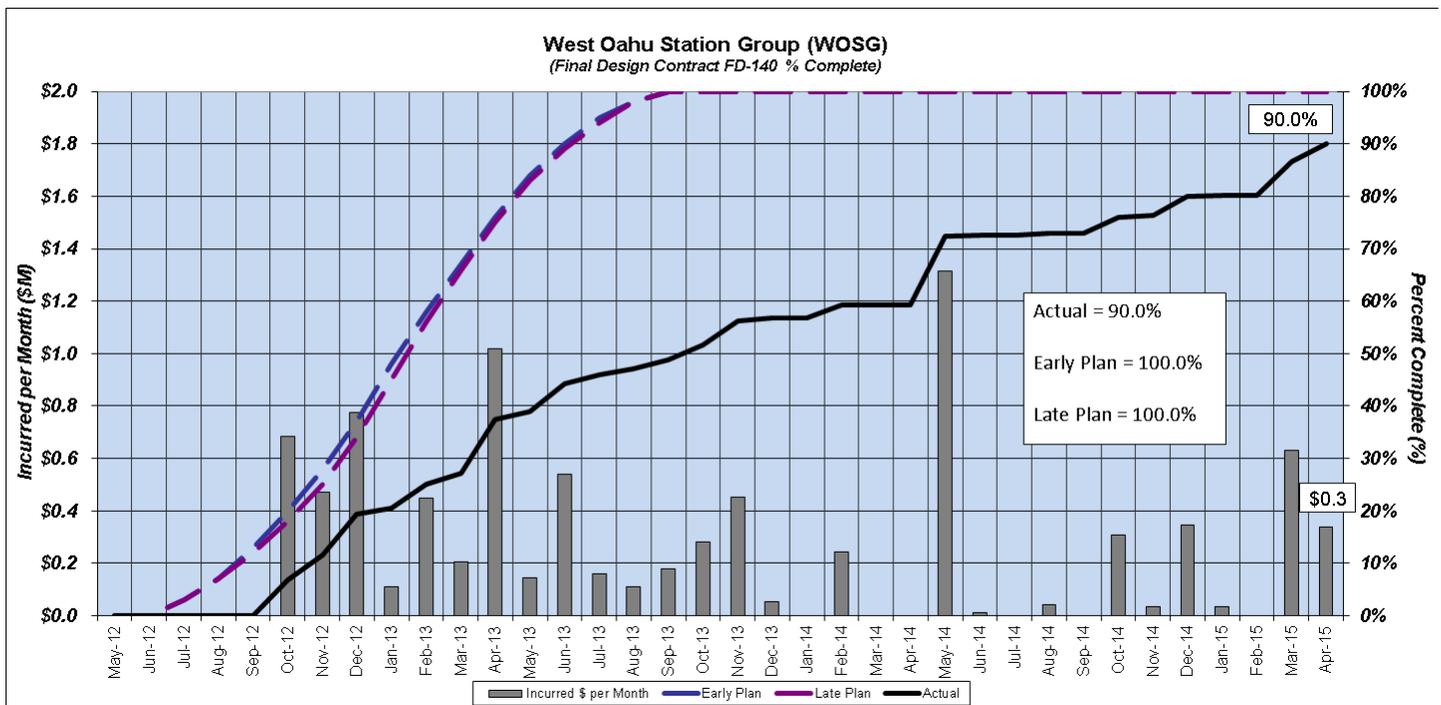
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$7,789,000</u>	<u>Incurred-to-Date:</u>	<u>\$8,923,882</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$10,014,305</u>	<u>Incurred in April:</u>	<u>\$366,555</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$0
DBE % Attained:	0%

April Change Orders/Amendment		
Change No./Amend	Description	Amount (\$)
00014	Ho’opili Grading / Redesign of E. Kapolei Escalators	\$241,000
00015	Redesign of TPSS Trench at SS3 / CSC Cabinets at E. Kapolei	\$28,000
<b>Cumulative to Date</b>		<b>\$2,645,305</b>



The design phase of the WOSG contract is nearly complete. The role of the design consultant is transitioning to engineering support services during bidding and construction.

**SCHEDULE:**

April 2015 Update			Data Date: 24-Apr-15, Printed On: 12-May-15														
Activity Name	Start	Finish	2015				2016				2017						
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	14-Jan-10 A	03-Oct-17															
<b>W. Oahu Station Group</b>	14-Jan-10 A	03-Oct-17															
Design - W. Oahu Station Group	14-Jan-10 A	30-Jun-16															
Construction - W. Oahu Station Group	15-Jul-15	03-Oct-17															
East Kapolei Station	15-Jan-16	03-Oct-17															
UH West Oahu Station	01-Oct-15	31-Jul-17															
Ho'opili Station	15-Jul-15	28-Feb-17															

**CRITICAL PATH ISSUES:**

- HART is overseeing the final resolution of minor interface items outstanding between WOSG and the CSC, WOFH and EE contracts.
- The design consultant is advancing designs of electrical power service connections for UH West O’ahu and Ho’opili Stations. These services will be added to the WOSG package through an Addendum to the bid documents, or will be constructed by others.
- Due to unforeseen complications with a planned water service connection, the design consultant is completing the design of two water storage tanks for fire protection and potable water supply.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 93%.
- Interfacing design with CSC, WOFH and EE contracts.
- Coordinating with private developer, utility companies and third party agencies to establish utility services for UH West O’ahu and Ho’opili Stations.

Look Ahead:

- Document design interface agreements with CSC, WOFH and EE contracts.
- Finalize third-party agreements and approvals.

**KEY ISSUES:**

- Coordinating with HDOT to resolve significant policy level design review comments.

**C. Farrington Highway Station Group (FHSG)**

**Contract No.:** FD-240

**Contractors:**

**URS Corporation**

Start Date: Sept. 27, 2013

End Date: June 2017

**HDR Engineering, Inc.**

Start Date: Jan. 12, 2011

End Date: April 5, 2013

**Construction Docs Bid-Ready:** December 2014 (in active procurement)



**Project Description:** Architectural and engineering services for the design of three (3) transit stations situated along the WOFH Guideway. The three stations comprising the FHSG contract are the West Loch Station, the Waipahu Transit Center Station and the at-grade Leeward Community College Station.

**Project Overview:** The FHSG DBB construction package was issued for bid in December 2014. Bids were opened in March 2015. The solicitation was protested by Nan, Inc. (Nan) against the apparent low bidder. HART denied the appeal, and Nan appealed HART’s denial of protest to the State of Hawai’i Department of Commerce and Consumer Affairs (DCCA), Office of Administrative Hearing. A hearing on the motions was held on May 20, 2015 and HART received a favorable oral ruling dismissing the protest. HART expects the formal DCCA hearing officer decision to be issued by June 4, 2015.

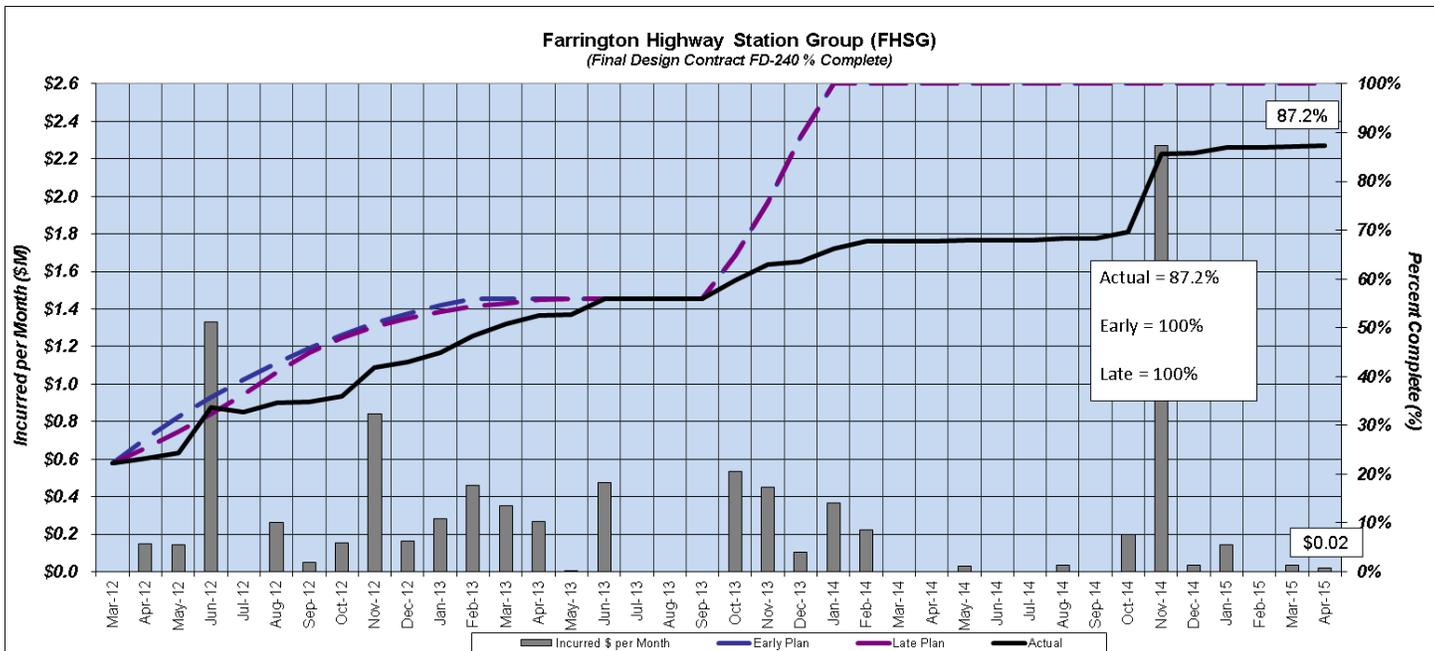
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$9,300,696</u>	<u>Incurred-to-Date:</u>	<u>\$12,387,564</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$14,198,045</u>	<u>Incurred in April:</u>	<u>\$21,160</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$258,611
DBE % Attained:	4.7%

April Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$5,010,093</b>



The design phase of the FHSG contract is substantially complete. The role of the design consultant has transitioned from design to engineering support services during bidding. The role of the design consultant will soon be transitioning to engineering support services during construction.

**SCHEDULE:**

April 2015 Update		Data Date: 24-Apr-15, Printed On: 12-May-15															
Activity Name	Start	Finish	2015				2016				2017						
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>W. Oahu/Farrington Highway (WOFH) - S</b>	02-Oct-09 A	31-Jul-17															
<b>Farrington Highway Station Group</b>	02-Oct-09 A	31-Jul-17															
Design - Farrington Highway Station Group	02-Oct-09 A	14-Nov-16															
Construction - Farrington Highway Station Group	01-Jul-15	31-Jul-17															
West Loch Station	01-Jul-15	31-Mar-17															
Waipahu Transit Station	03-Aug-15	31-Jul-17															
Leeward Community College Station	01-Dec-15	30-Jun-17															

**CRITICAL PATH ISSUES:**

- HART is proactively facilitating the finalization and documentation of interface agreements between the FHSG, CSC, WOFH and EE contracts.
- HART is coordinating and forecasting construction access milestones between interfacing contracts.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 82%. This value appears low relative to other station groups due to the proportionally larger value of its construction services budget. However, the design scope of this contract is substantially complete.
- Finalizing design interface resolutions with all interfacing design consultants.
- Finalizing approvals from third parties.

Look Ahead:

- Obtain remaining HART-provided construction permits and rights of entry.
- Document design agreements with interfacing partners.
- Resolve construction procurement protest.
- Award construction contract.

**KEY ISSUES:**

- Tracking completion of designs that interface with FHSG prior to construction.
- Tracking construction access handoff dates with WOFH contractor.

**D. Maintenance and Storage Facility (MSF)**

**Contract No.:** DB-200

**Contractor:** Kiewit/Kobayashi Joint Venture (KKJV)

**Contract Start Date:** July 2011

**Contract Substantial Completion:** April 2016

**Projected Substantial Completion:** April 2016



**Project Description:** The MSF contract consists of the Operations and Servicing Building, Maintenance of Way, Train Wash Facility and Wheel Truing Building. In addition to the four (4) facility buildings, MSF includes rail procurement, special trackwork, ties, third rail and other track material for the four guideway segments on the project.

**Project Overview:** MSF substantial completion remains 6 calendar days behind schedule due to weather delays that impacted critical construction activities. HART-MSF has negotiated a no cost change order for the six calendar days.

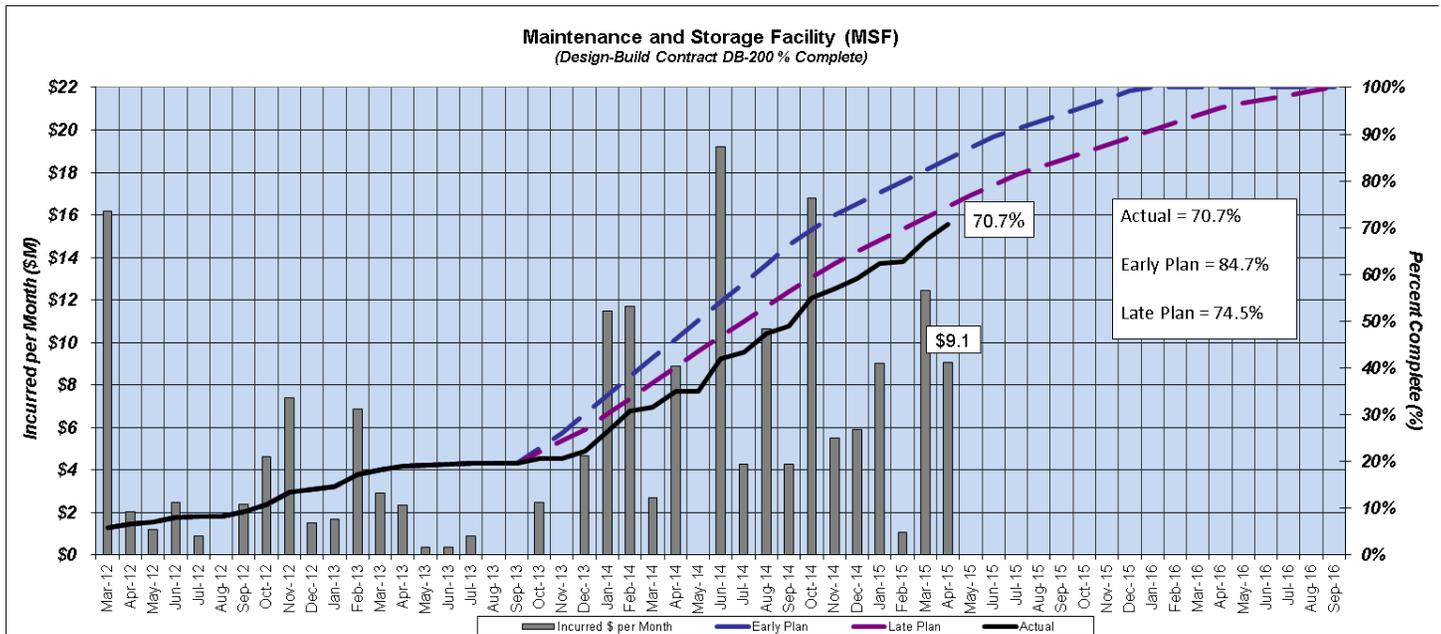
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$195,258,000</u>	<u>Incurred-to-Date:</u>	<u>\$194,183,226</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$274,808,008</u>	<u>Incurred in April:</u>	<u>\$9,059,483</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

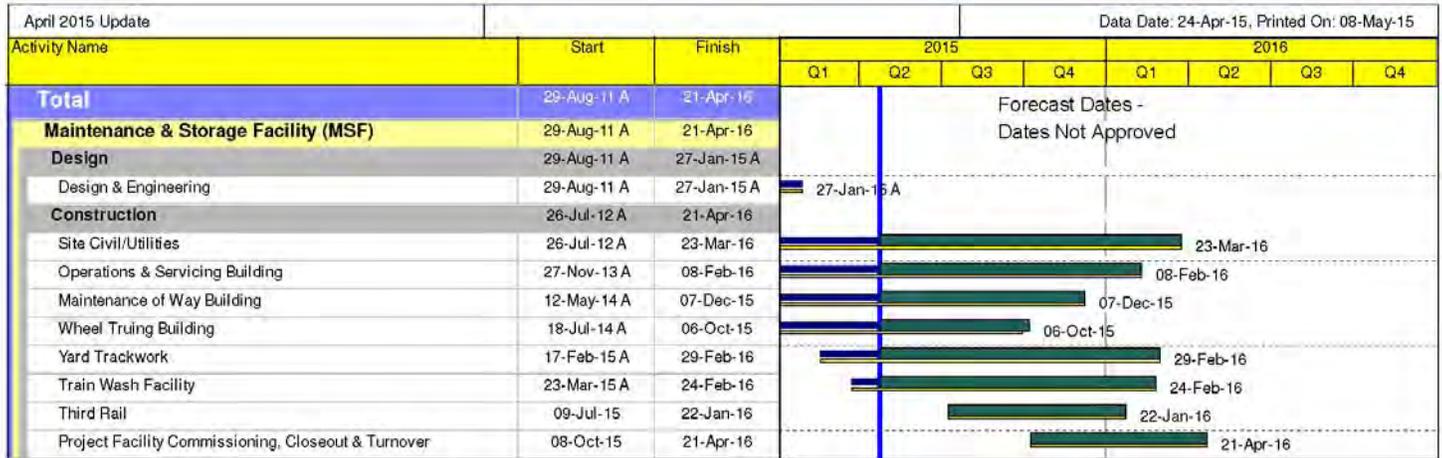
DBE Participation	
Actual DBE Participation:	\$145,819
DBE % Attained:	0.08%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$79,550,008</b>



**SCHEDULE:**

- The MSF substantial completion still reflects the previously reported slippage from April 15, 2016 to April 21, 2016 (based on the March 2015 schedule update).



**CRITICAL PATH ISSUES:**

- MSF contract substantial completion date is indicating 6 calendar days late. This delay is due to inclement weather beyond the norm that impacted construction operations in the fourth quarter of 2014. HART-MSF negotiated a no cost 6 calendar day time extension. A change order is being processed.
- Scheduling work related to test track and functional track to support program opening dates.
- Coordination with abutting WOFH main line contract for completion of track work in west yard, and utilities and site access in the east yard.

MSF Construction Status as of 5/31/15	
Element	% Complete
OSB	62%
MOW Building	57%
WTB	78%
Rail Procurement	96%

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 71%** [(Total Achieved to March 2015 (\$184.8 million) + Projected April 2015 Period (\$9.06 million))/Total Contract Including Executed Change Orders (\$274.3 million)]. Planned Value: 74%

**Yard/Utilities**

- Completed installing/testing site electrical, water, sewer and drainage systems.
- Installing conduit for systems, communications, train control, traction power, site electrical and exterior lighting.
- Completed installation of rail turnouts in the yard for the service and maintenance track.
- Installing track subdrain and subballast, and ballast material at east side of S1-7 track and west side of maintenance track.
- Installation of contact rail at storage tracks commenced.

**Operations and Servicing Building (OSB)**

- Completed installation of metal framing.
- Completed roof installation.
- Completed placing concrete for OSB elevated slabs.
- Installation of rail car lifts caissons and enclosures.
- Installing mechanical/electrical/plumbing.
- Received and installed power distribution switchgear.

Look Ahead:

- MOW Turnout.
- Drop ceiling installation at OSB and MOW.
- Installation of car lifts.
- Interior and exterior doors.
- MOW outdoor switchgear delivery and installation.

Activities this Month (continued):

**Maintenance of Way (MOW)**

- Installing drywall.
- Installing membrane and standing seam metal roofing.
- Installing mechanical/electrical/plumbing.
- Installed permanent access stairs.

**Wheel Truing Building (WTB)**

- Installing mechanical/electrical/plumbing.
- Completed installation of light fixtures, stairs, guardrails and fire protection.

**TPSS**

- Completed TPSS vault concrete. TPSS slab placement is in progress.

**Rail Procurement and Installation**

- Receiving materials and installing turnouts is ongoing.
- Distributing rail materials to WOFH is ongoing.
- Installation of pre-curved rail is ongoing.

**Administration**

- Continued working with the CSC to resolve design interface issues.

**KEY ISSUES:**

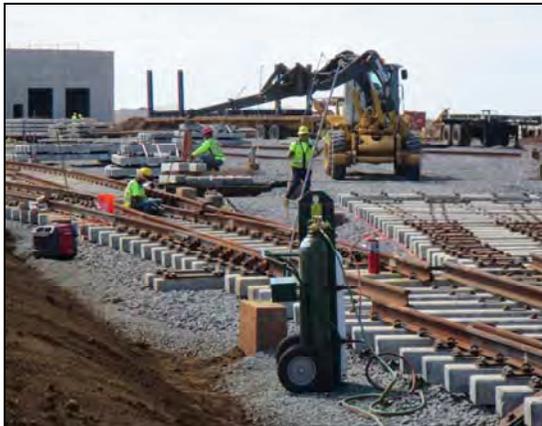
- **Interface Management with Core Systems Contractor** – predominant areas of concern include a general revision to the location of rail control system insulated joints and track devices; building internal requirements for access control, intrusion detection and fire detection and alarm system device locations; and resolution of traction power duct bank terminations at electrically operated traction power switches. Details and resolution are being worked out through the Request for Interface Data process.
- **Joint Occupancy with Core Systems Contractor** – weekly meetings are held and details are being worked out for systematic release of areas and infrastructure whereby the Core Systems Contractor can commence work.
- **HECO Interface** – installation of incoming power will be required to support commissioning of building systems and train maintenance including bridge cranes and the wheel lathe.
- **Coordination with the abutting main line contract** – for completion of site access in the east and west yards including rail, vehicular access and utility interconnection.
- **Train Car Delivery and Assembly** – Rail, access and building completion in support of train car delivery and assembling including site access and internal movement of assembled rail cars.
- **Mobilization of Core Systems contractors** including establishment of shared access between these prime contracts.

**KEY QUALITY ISSUES:**

- NCR 26 was issued to Swanson Steel for wedge anchors not fully embedded for Stairway No. 4.

MSF NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
26	25	1

**PROJECT PICTURES:**



Assembling turnouts.



Pre-curved rail installation.



TWF stem wall.



MOW drywall installation.



OSB stair installation.



Stripping the interior trench TPSS concrete walls.

### 4.3 Section II – Kamehameha Highway: Pearl Highlands to Aloha Stadium

#### A. Kamehameha Highway Guideway (KHG)

**Contract No.:** DB-320

**Contractor:** Kiewit Infrastructure West Company (KIWC)

**Contract Start Date:** June 2011

**Contract Substantial Completion:** September 2016

**Projected Substantial Completion:** May 2017

**Project Description:** Kamehameha Highway Guideway DB Contract (KHG) consists of 3.9 miles and starts 400 feet east of the Pearl Highlands Station and terminates 1,400 feet beyond the Aloha Stadium Station. KHG is made up of utility relocations, highway widening, drilled shaft foundations, columns and aerial structure.



**Project Overview:** Construction of the drilled shafts will be moving to the balanced cantilever area in order to maintain progress while HECO clearance issues are resolved. Discussions with HECO are being held at an elevated level to resolve concerns about horizontal/vertical clearances and schedule certainty. Elevated discussions are also ongoing to clarify the scope and funding source of the HDOT betterments. The KHG team continues to explore mitigation measures that would balance MOT and noise impacts to the community.

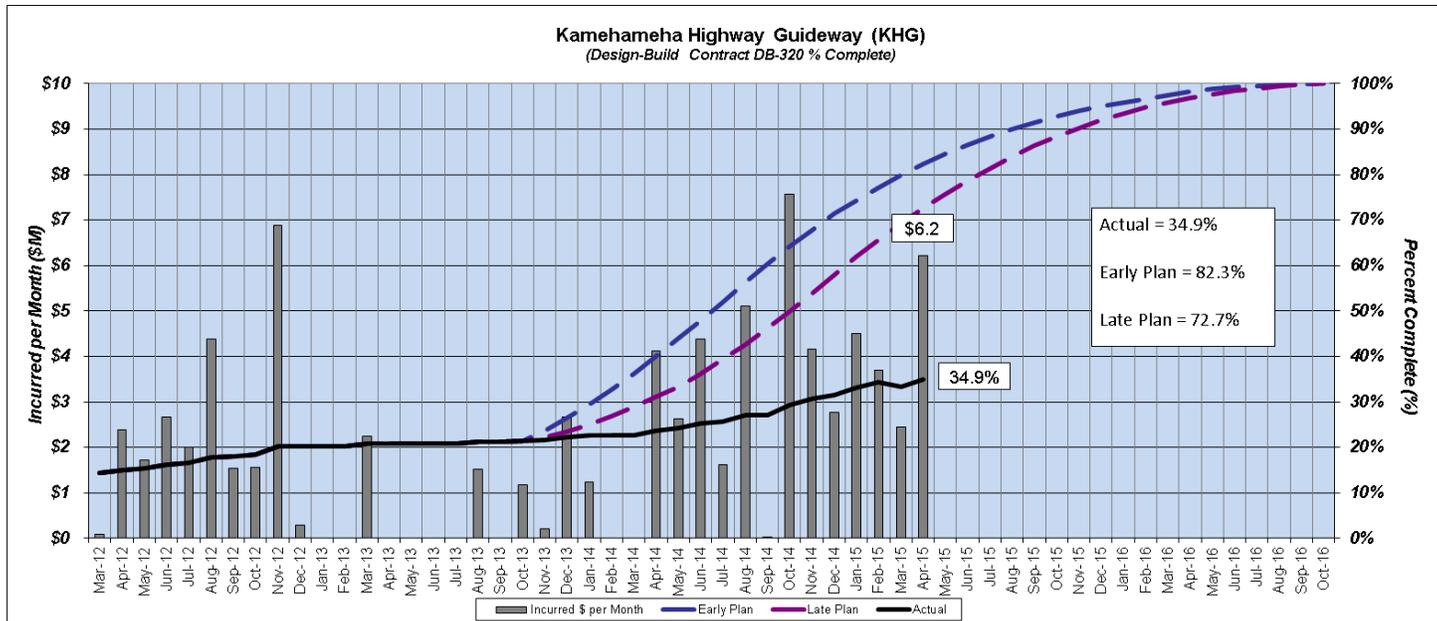
#### COST INFORMATION:

<u>Original Contract:</u>	<u>\$372,150,000</u>	<u>Incurred-to-Date:</u>	<u>\$139,117,289</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$388,515,363</u>	<u>Incurred in April:</u>	<u>\$6,224,999</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$297,631
DBE % Attained:	0.08%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$16,365,363</b>



- Progress payment 44 (March) has been submitted for review.

**SCHEDULE:**

- The accepted re-baselined schedule dated Oct. 28, 2013 is no longer valid, and KIWC submitted a schedule revision on Dec. 5, 2014 with a data date of October 2014. This schedule showed a revised Substantial Completion date of April 4, 2017, and HART has requested re-submittal via the change order process.
- Schedule has continued to slip due to lack of Design-Builder’s coordination and construction of utility relocation work.

April 2015 Update			Data Date: 24-Apr-15, Printed On: 12-May-15 19:43											
Activity Name	Start	Finish	2015				2016				2017			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
<b>Total</b>	26-Dec-14 A	28-Jun-17	Forecast Dates - Dates Not Approved											
<b>West Guideways &amp; Structures</b>	26-Dec-14 A	28-Jun-17												
<b>Kamehameha Highway (KH) - Section 2</b>	26-Dec-14 A	28-Jun-17												
<b>Kamehameha Highway Guideway</b>	26-Dec-14 A	28-Jun-17												
<b>Kiewit KHG Summary</b>	26-Dec-14 A	28-Jun-17												
<b>Foundations</b>	26-Dec-14 A	30-Nov-16												
Drilled Shafts	26-Dec-14 A	29-Sep-16	[Gantt bar: Q1-2015 to Q3-2016]											
Columns	05-Feb-15 A	30-Nov-16	[Gantt bar: Q1-2015 to Q4-2016]											
<b>Guideway</b>	06-Apr-15 A	23-Jan-17												
Precast Segment Erection	06-Apr-15 A	23-Jan-17	[Gantt bar: Q1-2015 to Q4-2016]											
Cast BC Segments	06-Jul-15	23-Aug-16	[Gantt bar: Q3-2015 to Q2-2016]											
<b>Trackwork</b>	30-Sep-15	15-Mar-17												
Direct Fixation Trackwork	30-Sep-15	01-Mar-17	[Gantt bar: Q4-2015 to Q1-2017]											
Third Rail	15-Oct-15	15-Mar-17	[Gantt bar: Q4-2015 to Q1-2017]											
<b>KHG Project Finish Work, Demob, Punchlist</b>	08-Apr-16	28-Jun-17	[Gantt bar: Q2-2016 to Q2-2017]											

**CRITICAL PATH ISSUES:**

- HART and KIWC continue to coordinate on the finalization of easement acquisitions. A MOU allowing HECO to proceed under a right of entry (ROE) while easements are being obtained is still pending.
- Due to delays in the Design-Builder’s design, coordination and construction of utility relocations, drilling of shafts will need to be re-sequenced to mitigate the impact.

**WORK PROGRESS:**

KHG Construction Status as of 5/15/15								
Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	Total to Date	Planned to Date*	Total Qty**	% Complete
Water Line	3,926	4,362	90%	Shafts	40	16	186	22%
Gas Line	10,900	12,641	86%	Columns	0	0	169	0%
Sewer Line	388	492	79%	Segment Casting	0	123	2,075	0%
Drainage	545	2,081	26%	Segment Erection	0	0	2,075	0%
Elec/Telecom	10,423	19,455	54%	Spans Stressed	0	0	156	0%
Signals/ITS/Lights	10,310	18,486	56%	* The planned values are based on KHG’s pending October schedule revision dated Dec. 5, 2014. **Total Quantity based on KIWC interim plans. Final design has not been completed.				

Activities this Month:

**Earned Value: 37.0%** [(Total achieved to February 2015 (\$129.6 million) + March 2015 (submitted), April 2015, and May 2015 projections (\$14.4 million))/Total contract including executed Change Orders (\$389 million)]. Planned Value: 75.8%

**Shaft/Column**

- 40 of 186 shafts have been installed.

**Utility Relocation Progress**

- Water line relocation is ongoing in Phase 6.

Look Ahead:

**Design Progress**

- HART and KIWC are working together to complete final design. To date, 35 of 46 drawing packages have been issued for construction.

**Utility Relocation**

- Acquisition of ROE for utility relocations is being pursued by HART and KIWC jointly, and meetings with property owners will continue.

Activities this Month (continued):

- The relocation of HECO electrical lines and Hawaiian Telcom, Oceanic Time Warner and Intelligent Transportation Systems (ITS) duct banks is occurring in Phases 5, 8, 10 and 12.
- Sewer line relocation is occurring in Phase 11.
- Gas line relocation is occurring in Phase 12.

**Traffic Signals**

- Traffic signal installation is ongoing at the intersections of Acacia, Waimano Home Road, Kaonohi and Honomanu.
- Installation of license plate readers continues.

**Roadway Widening**

- Roadway widening activities are ongoing in Phases 6 and 10.

Look Ahead (continued):

**Guideway Structure**

- Construction of shafts will begin for the balanced cantilever, starting on the west side of H-1 moving eastward.
- Column construction is expected to start in June from the west end proceeding eastward.

**Roadway Widening**

- Roadway widening will continue throughout the alignment.
- There has been no update to the status of HDOT funding acquisition for betterment work.

**KEY ISSUES:**

- Utility relocations continue to impact the construction schedule for the project, though the effects have been partially mitigated by resequencing the work.
- HDOT betterments are still pending agreement at an elevated level of what constitutes a betterment, and how funding will be transferred from HDOT to HART.
- Mitigation measures for noise and traffic impacts continue to be explored, but mitigation for one tends to adversely impact the other. HART will continue to work with the community to try to minimize impacts.

**KEY QUALITY ISSUES:**

- **Project specifications** – Current shaft construction is proceeding with only minor quality issues. Methodology for the process of implementing design changes after plans have been issued for construction is being discussed at a programmatic level.

KHG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
65	40	25

PROJECT PICTURES:



Standing shaft reinforcing cage, Phase 1.



Placing concrete in Shaft 280, Phase 1.



Gas line I tie in, Phase 5.



Widening demo, Phase 10.



Installation of noise barriers, Phase 11.



Kohomua Yard, Phase 13.

**B. Kamehameha Highway Station Group (KHSG)**

**Contract No.:** FD-340

**Contractor:** Anil Verma Associates, Inc. (AVA), Final Design Consultant (Engineer of Record)

**Contract Start Date:** November 2012

**Construction Docs Bid-Ready:**

H2R2 Highway Ramp: January 2015 (in construction)

Kamehameha Highway Stations: August 2015

**Project Description:** The Kamehameha Highway Stations Group FD Contract (KHSG) consists of architectural and engineering services for the design of three (3) transit stations situated along the Kamehameha Highway Guideway. The three (3) stations comprising the KHSG contract are the Pearl Highlands Station, the Pearlridge Station, and the Aloha Stadium Station. The Pearl Highlands Station also includes two highway ramps.

**Project Overview:** The KHSG design is being revised to incorporate value engineering changes in preparation for a construction solicitation in August 2015. In addition, the H2R2 Ramp was broken out and expedited under a separate Design-Bid-Build contract.

**COST INFORMATION:**

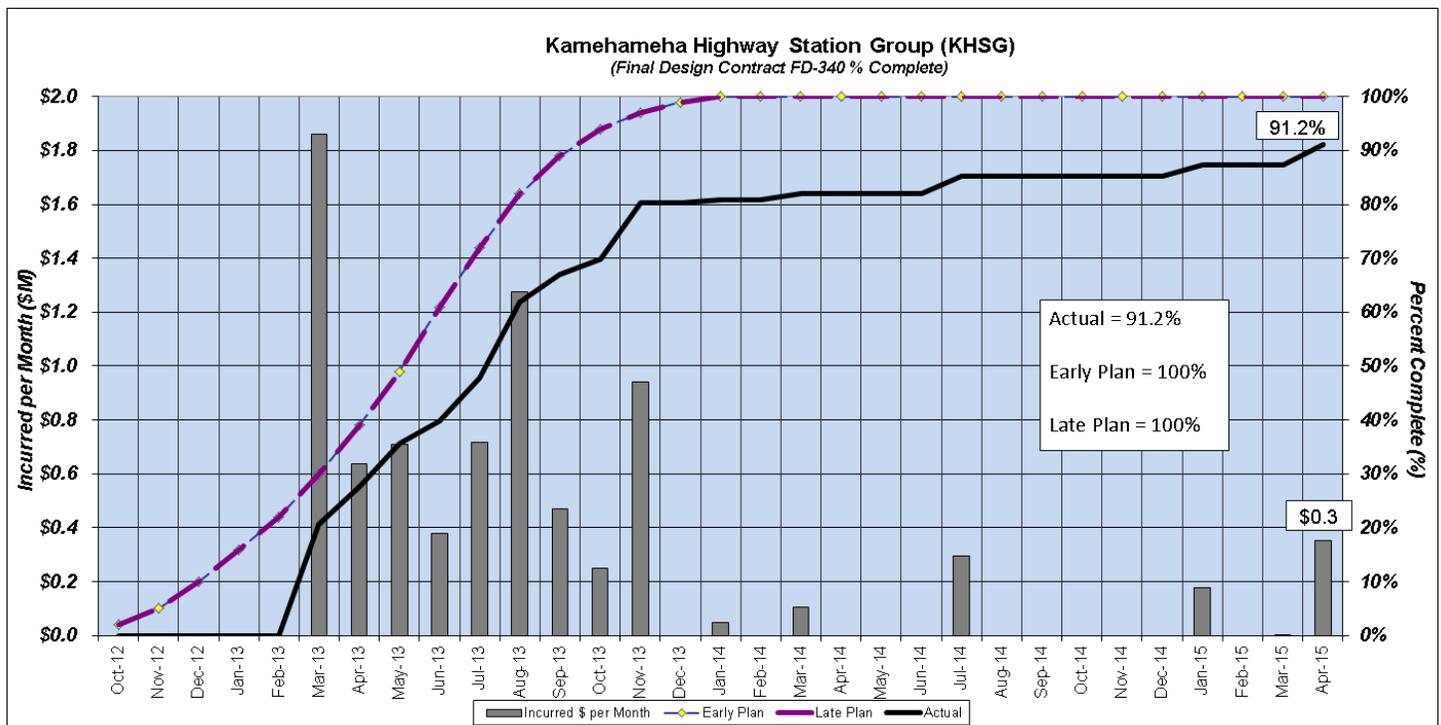
Original Contract: \$8,702,592	Incurred-to-Date: \$8,219,319
Current Contract Value <sup>1</sup> : \$9,011,768	Incurred in April: \$352,176

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed



DBE Participation	
Actual DBE Participation:	\$3,303,778
DBE % Attained:	37.96%

April Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$352,176</b>



The closeout of the KHSG contract is currently 12 months behind its original schedule due to design interfaces with other HART contracts, ongoing value engineering efforts, and a reorganization of the KHSG package from its previous inclusion in the canceled West Side Stations Group solicitation. The schedule for the KHSG design has been extended to accommodate these additional efforts, which are now nearly complete.

**SCHEDULE:**



**CRITICAL PATH ISSUES:**

- HART is proactively facilitating the documentation of design interface agreements between the KHSG and CSC, WOFH, KHG and EE contracts to ensure consistency and integration of these designs.
- HART is overseeing the KHSG final design consultant’s resolution of comments received from third parties.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 95%.
- Interfaced design with the CSC, WOFH, KHG and EE contracts.
- Concluded pre-final review of draft station construction documents.
- Resolved third-party comments.
- Awarded H2R2 construction contract to Royal Contracting.
- Received 401/404 permit from Hawai’i Department of Health Clean Water Branch.

Look Ahead:

- Document remaining design interface agreements.
- Obtain third-party approvals on remaining construction documents.
- Prepare construction bid package for August 2015 advertisement.

**KEY ISSUES:**

- Finalizing design prior to construction advertisement.

### 4.4 Section III – Airport: Aloha Stadium to Middle Street Transit Center Station

#### A. Airport Section Guideway and Utilities

**Contract No.:** FD-430

**Contractor:** AECOM Technical Services, Inc., Final Design Consultant (Engineer of Record)

**Contract Start Date:** January 2012

**Construction Docs Bid-Ready:**

- Guideway, Stations and Utilities (DB)
  - RFP Part 1 for DB (Qualifications): Issued April 2015
  - RFP Part 2 for DB (Proposals): To be issued August 2015

**Currently in Construction:**

- Airport Section Utilities (DBB-505 - Nan Inc.):
  - Construction NTP issued July 2014

**Construction Completed:**

- Airport 7-Piers (DBB-525 – Hawaiian Dredging):
  - Project Completion date May 2015



**Project Description:** The Airport Segment Guideway and Utilities contract consists of 5.2 miles of elevated transit guideway serving four (4) passenger stations, in addition to roadway widening, utility relocation, and other improvements to create space for these transit facilities. Two construction contracts have been split out and expedited from the larger Airport Section package. These two contracts are the expedited Airport Section Utilities and expedited Airport 7-Piers. For both of these expedited contracts, the design has been completed and construction is in progress. Therefore, the remainder of this section focuses solely on the portion of design yet to be completed and advertised for construction.

**Project Overview:** This section of the guideway has been combined into a single Airport Guideway and Stations Design-Build package. This package is in active procurement.

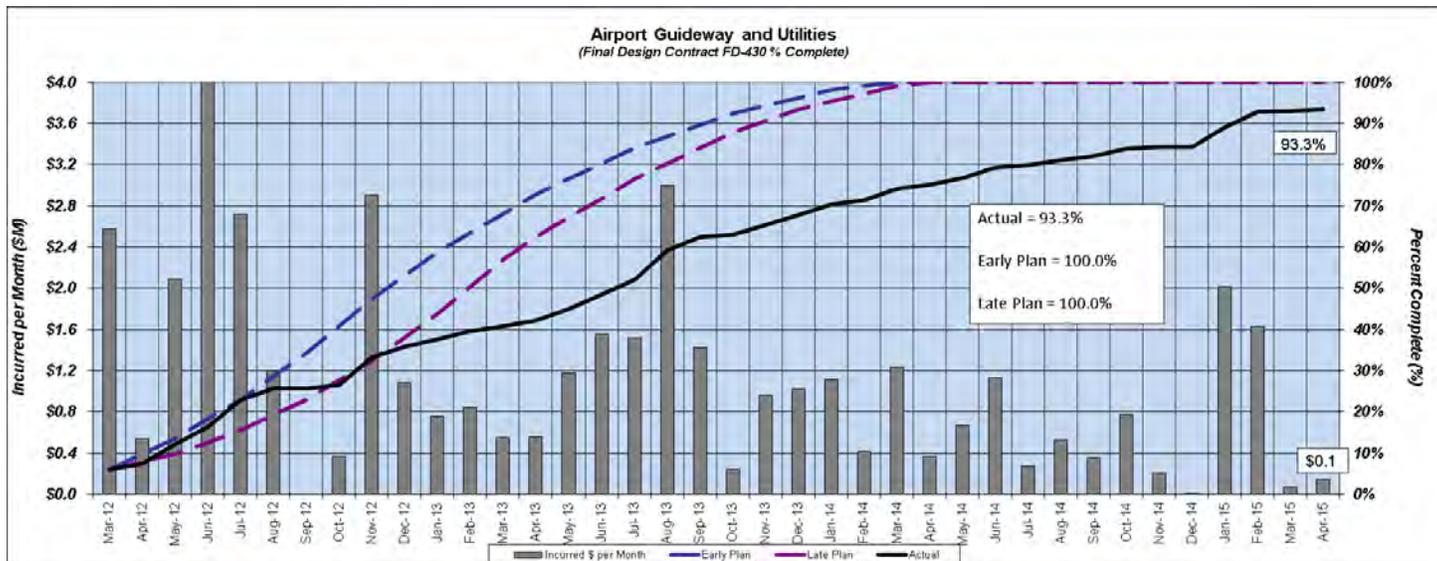
**COST INFORMATION:**

Original Contract:	\$38,840,960	Incurred-to-Date:	\$39,771,629
Current Contract Value <sup>1</sup> :	\$42,610,832	Incurred in April:	\$145,184

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$162,813
DBE % Attained:	0.42%

April Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$3,769,872</b>



Due to the change in procurement strategy from DBB to DB, the design of the Airport Section guideway will not be advanced to completion by AECOM. Preparation of the DB solicitation documents is proceeding per schedule.

**SCHEDULE:**

April 2015 Update			Data Date: 24-Apr-15, Printed On: 13-May-15 16:46																				
Activity Name	Start	Finish	2014			2015			2016			2017			2018			2019					
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>Total</b>	09-Nov-11 A	31-May-19																					
<b>Airport Programmatic</b>	01-May-12 A	04-Feb-14 A																					
<b>Airport Permits</b>	09-Nov-11 A	09-May-16																					
<b>Design - Airport Guideway &amp; Utilities</b>	05-Jan-12 A	27-Mar-15																					
<b>Construction - Airport Guideway</b>	01-Feb-16	31-May-19																					

**CRITICAL PATH ISSUES:**

- HART is preparing RFP Part 2 documents to solicit technical and price proposals.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 97%.
- Coordinating general design with HDOT (Highway and Airport Divisions), utility companies, U.S. Navy, HECO and other stakeholders.
- Coordinating guideway and station design with right-of-way acquisitions.
- Preparing technical DB requirements for pre-advertisement review.
- Issued addendum to allow more time for offerors to prepare qualifications proposals.

Look Ahead:

- Coordinate utility relocations in advance of DB package.
- Obtain third-party approvals.
- HART quality review of draft bid documents.
- Preparing exhibits for the Navy for approval of construction agreement.

**KEY ISSUES:**

- Assessing potential right-of-way impacts due to HECO requirement for additional transformers.
- Acquiring rights-of-way and critical temporary construction easements.
- Coordinating with the U.S. Navy for right of entry and construction agreements.

**B. Airport Section Utilities Construction**

**Contract No.:** DBB-505

**Contractor:** Nan, Inc.

**Contract Start Date:** July 2014

**Contract Substantial Completion:** February 2016

**Projected Substantial Completion:** April 2016

**Project Description:** The Airport Utilities contract consists of relocation of a portion of utilities and some utility facilities that will be impacted by the construction of the HART aerial guideway and associated facilities between Aloha Stadium and Middle Street Transit Center. Specifically, the work involves construction of utility relocations affecting underground and overhead communications lines, Navy-owned electrical lines, fuel lines, gas lines, water lines, storm sewer lines, sanitary sewer lines and street light lines and poles/fixtures; HECO work is excluded from this contract. The work also includes installation of ITS (Intelligent Transportation Systems) facilities, to maintain traffic during construction, and other site improvements. Erosion control measures, temporary planting, permanent irrigation facilities and restoration of existing facilities are also incorporated into the contractor’s scope of work.



**Project Overview:** Nan, Inc. continues with utility relocation work along Kamehameha Highway. ITS installation work along Kamehameha and Nimitz Highways is ongoing and nearing completion. Utility work is being impacted due to lack of Navy ROE. Meanwhile, Nan, Inc. continues to develop and submit outstanding submittals, and work in other areas until Navy access is granted.

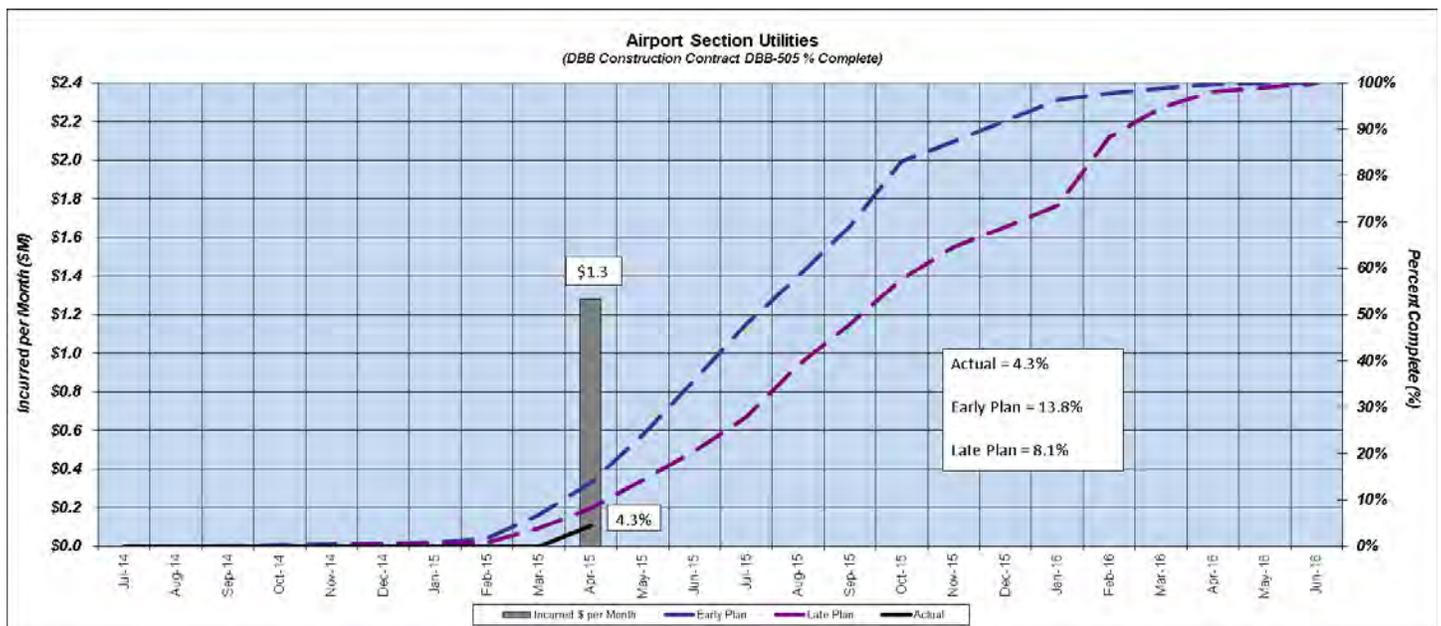
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$28,413,974</u>	<u>Incurred-to-Date:</u>	<u>\$1,279,386</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$28,413,974</u>	<u>Incurred in April:</u>	<u>\$1,279,386</u>

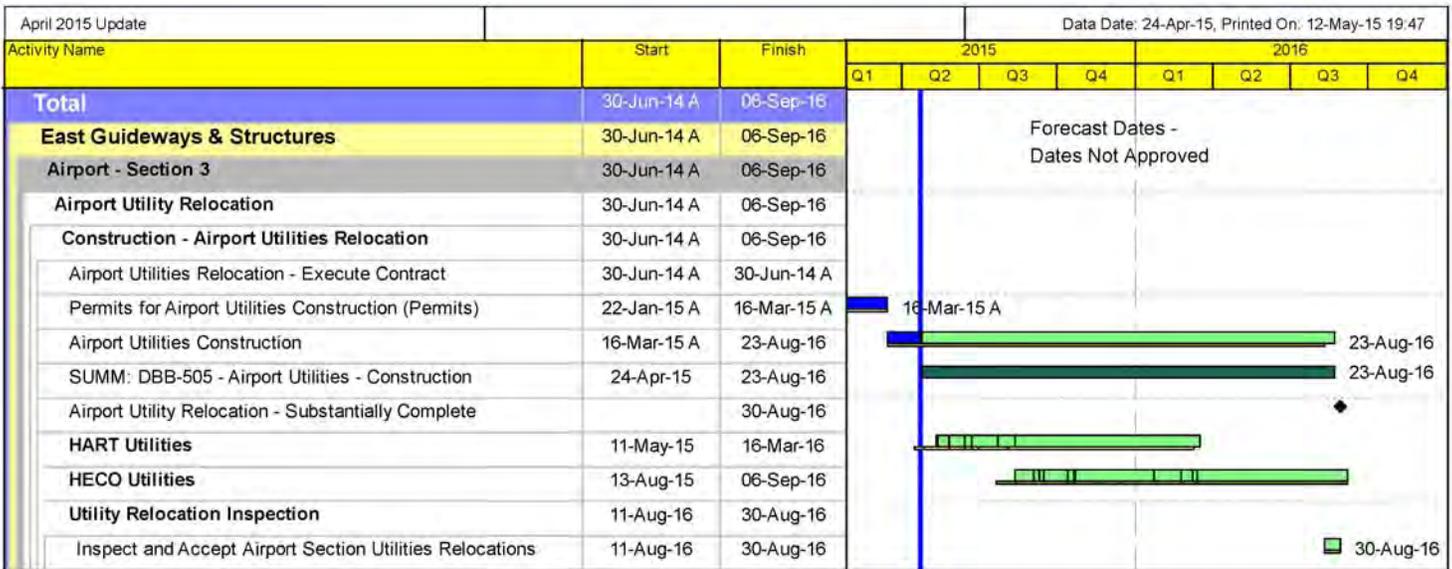
<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$0
DBE % Attained:	0%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$0</b>



**SCHEDULE:**



**CRITICAL PATH ISSUES:**

- Navy right of entry (see Key Issues for additional details).

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 8.82%**; Planned Value: 16.78%

- Nan, Inc. has submitted a baseline construction schedule, which has been approved. They are working on a revised baseline schedule based on deductive RFCRs that have been issued.
- Inspection and Testing Plan (ITP) has been submitted by Nan and returned by HART with comments.
- Nan, Inc. continues to submit RFI and shop drawings for approvals.
- Nan, Inc. continues installation of license plate reader (LPR) cameras.
- Nan, Inc. has commenced installation of an 18-inch sewer line, 24-inch water line, and a telecom line along Kamehameha Highway.
- Nan, Inc. has commenced lighting relocation conduit work at Keehi Lagoon Park.

Look Ahead:

- Continue working on Kamehameha Highway utility work that is not impacted by Navy ROE.
- Nan has applied for permission to do utility relocation work along Aolele Street within the HDOT-Airport’s jurisdiction.
- Evaluate other areas that Nan’s work can be redirected if Navy access is not provided.

**KEY ISSUES:**

- Access to Navy right of entry to perform work could result in potential construction delay claims.
  - Ongoing coordination with HART ROW regarding obtaining access to Navy property for construction related work.
- Nan, Inc. is presently behind schedule; lack of access to Navy facilities could further impact the schedule.
- Noise variance to perform night work is pending DOH approval.

**KEY QUALITY ISSUES:**

- **Sewer Manhole (NCR #2)** – pre-cast risers for sewer sustained damages during handling and will be repaired.

Airport Utilities NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
5	1	4

**C. Airport Section Guideway Seven Pier Construction**

**Contract No.:** DBB-525

**Contractor:** HDCC/CJA JV

**Contract Start Date:** September 2014

**Contract Substantial Completion:** April 24, 2015

**Declared Substantial Completion:** April 22, 2015

**Project Description:** The Airport 7-piers contract consists of seven drilled shaft foundations installed within the Honolulu International Airport Parking lot "J", where the new Interim Car Rental Facility (CONRAC) is also being constructed. The contractor has installed seven foundations for piers 546, 547, 548, 549, 550, 551R and 552R. This work involved close coordination with the HDOT Airport and Kiewit, who is the contractor for CONRAC. In addition to the pier work, existing utility relocations have been included at Piers 546, 548, 549 and 550, under Change Amendment 1.



**Project Overview:** HDCC/CJA JV substantially completed the project on April 22, 2015. The site, along with maintenance of existing BMPs and traffic control measures were turned over to the HDOT-A. Generated punch list items were completed and accepted as of May 2, 2015, by HDOT-A.

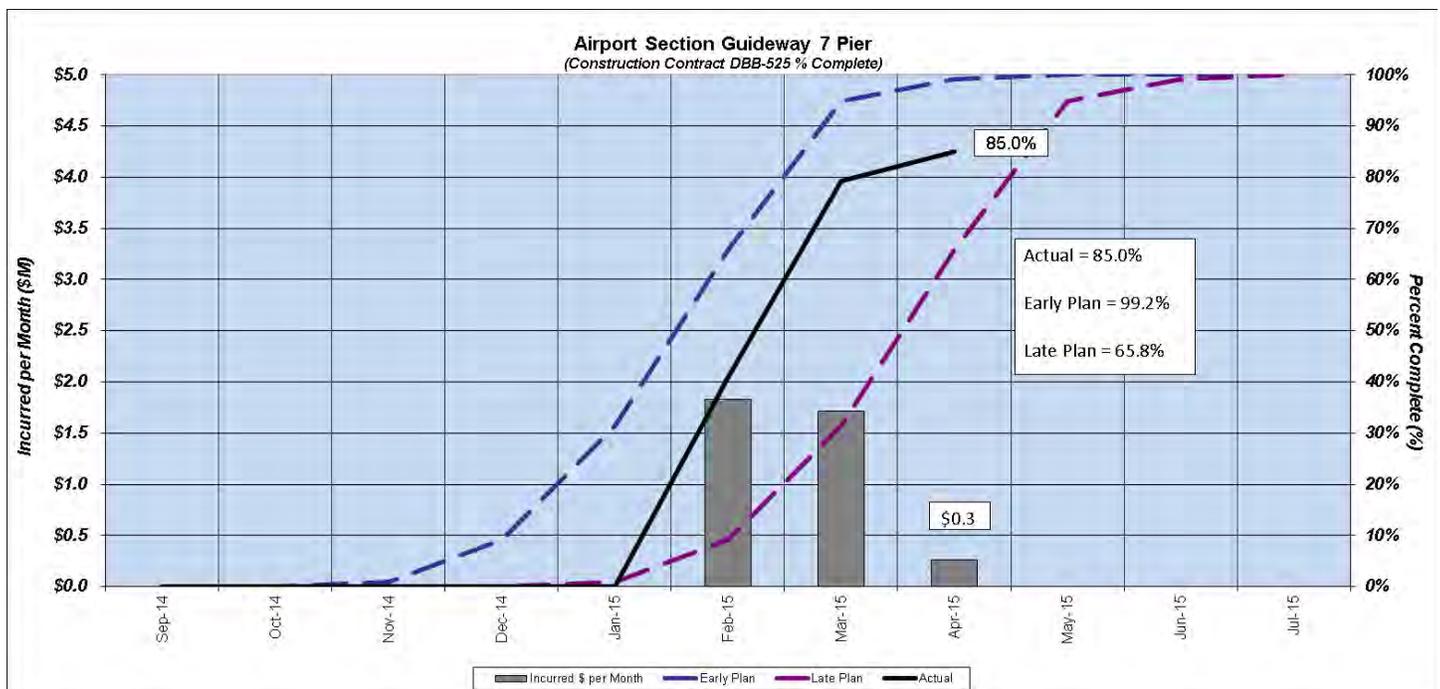
**COST INFORMATION:**

Original Contract:	\$3,973,000	Incurred-to-Date:	\$3,796,241
Current Contract Value <sup>1</sup> :	\$4,481,241	Incurred in April:	\$260,089

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$0
DBE % Attained:	0%

April Change Orders		
Change No.	Description	Amount (\$)
00002	Contractor to Perform CSL Testing	\$17,378
<b>Cumulative to Date</b>		<b>\$17,378</b>



**SCHEDULE:**

April 2015 Update			Data Date: 24-Apr-2015, Printed On: 13-May-2015 15:34									
Activity Name	Start	Finish	2015				2016					
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>Total</b>	18-Sep-2014 A	30-Apr-2015										
NTP	18-Sep-2014 A											
Mobilization	19-Sep-2014 A	28-Jan-2015 A										
Drilled Shafts	26-Jan-2015 A	20-Apr-2015 A										
Transition Zone Rebar Cages	09-Feb-2015 A	30-Apr-2015										
Pour Foundation Piers	11-Feb-2015 A	24-Apr-2015										

**CRITICAL PATH ISSUES:**

- None - All work has been completed.

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 100%**; Planned Value: 84%

- Completed CMP casing work at all seven (7) piers.
- Concrete curbs and paving completed at Piers 550, 551R and 552R.
- Completed asphalt paving at Piers 546 and 548.
- Inspection for Substantial Completion was performed on April 22, 2015.
- Demobilization of M999 Crane and other equipment from the site, followed by Final Site Cleaning.
- Submitted Substantial Completion Inspection Report.

Look Ahead:

- Final CMS processing of open RFI's.
- HART is processing HDCC/CJA JV submitted cost estimates for:
  - Change proposal for Temporary Fill at Piers 551R and 550.
  - Double Handling of Drilling Spoils.
  - Additional core sample test to confirm Pier 551R concrete.
- HDCC/CJA JV is to submit the following additional costs RFCCs:
  - Force Account Sheets for Pier 550 Utility conflicts.
  - Force Account Sheets for Pier 548 Utility conflicts.
  - Cost Proposal for extra surface work (concrete curbs and paving) at Piers 552R, 551R, 550, 547 and 546 due to lowering of CMP casings as required by response to RFI 016.
- HDCC/CJA JV has the following items to submit for Contract Closeout:
  - Red line As-Built Drawings.
  - Complete entering Certified Payrolls to LCP Tracker.
  - Complete entry of HDCC/CJA JV daily report into CMS.
  - Provide Release of Liens.
  - Submit final DBE forms.
  - Submit a number of documents to closeout BMP and Environmental issues.
  - Submit final invoice.

**KEY ISSUES:**

- HDCC/CJA JV to submit Red Line As-Built Drawings; to be included in the Airport Guideway and Stations DB contract.

**D. Airport Station Group (ASG)**

**Contract No.:** FD-440

**Contractor:** AECOM Technical Services, Inc., Final Design Consultant (Engineer of Record)

**Contract Start Date:** November 2012

**Construction Docs Bid-Ready:**

- Airport Guideway and Stations DB
  - RFP Part 1 for DB (Qualifications): Issued April 2015
  - RFP Part 2 for DB (Proposals): August 2015



**Project Description:** Architectural and engineering services for the design of four (4) transit stations serving the Airport Guideway. The four (4) stations comprising the ASG contract are the Pearl Harbor Naval Base Station, the Honolulu International Airport Station, the Lagoon Drive Station, and the Middle Street Station.

**Project Overview:** These four stations have been combined with the guideway into a single Airport Guideway and Stations Design-Build (DB) package. This package is in active procurement.

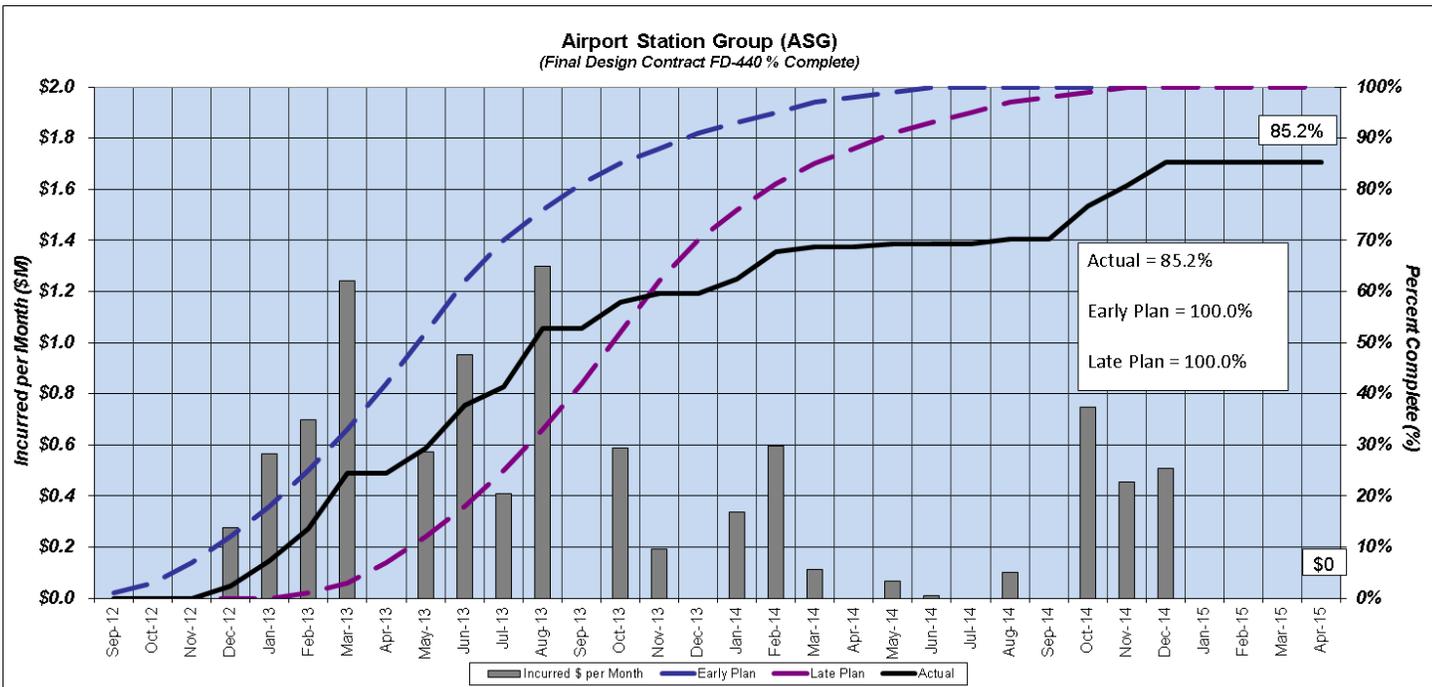
**COST INFORMATION:**

Original Contract:	\$10,177,365	Incurred-to-Date:	\$9,718,742
Current Contract Value <sup>1</sup> :	\$11,402,205	Incurred in April:	\$0

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$234,761
DBE % Attained:	2.31%

April Change Orders		
Change No.	Description	Amount (\$)
00004	HIA Obstruction Investigation	\$20,000
<b>Cumulative to Date</b>		<b>\$1,244,840</b>



Due to the change in procurement strategy from DBB to DB, the design of the Airport Stations Group will not be advanced to completion by AECOM. Preparation of the DB solicitation documents is proceeding per schedule.

**SCHEDULE:**

April 2015 Update			Data Date: 24-Apr-15, Printed On: 13-May-15																		
Activity Name	Start	Finish	2015				2016				2017				2018				2019		
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
<b>Airport - Section 3</b>	02-May-11 A	05-Nov-18																			
<b>Airport Station Group</b>	02-May-11 A	05-Nov-18																			
Design - Airport Station Group	02-May-11 A	01-Feb-16	█	█	█	█	█	█	█												
Construction - Airport Station Group	02-Mar-16	05-Nov-18																			
Pearl Harbor Station	02-Mar-16	22-Sep-17																			
HNL Airport Station	31-May-16	09-Jan-18																			
Lagoon Drive Station	18-Apr-16	06-Nov-17																			
Middle Street Station	15-Jul-16	05-Nov-18																			

**CRITICAL PATH ISSUES:**

- HART is aggressively pursuing access to remaining properties, including the U.S. Navy.
- HART is working with AECOM to prepare the DB bid package.
- HART is coordinating with project stakeholders to identify a potential new location of the AM radio tower currently located near Middle Street Station.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 88%.
- Combined stations and guideway documents into a single bid package.
- Prepared draft RFP Part 2 documents for DB package.
- Issued addendum to allow more time for offerors to prepare qualifications proposals.

Look Ahead:

- Finalize and issue RFP Part 2 package for technical and price proposals.

**KEY ISSUES:**

- Coordinating with the Core Systems team to determine requirements for Faraday shield for mitigating Electromagnetic Interference (EMI) due to the proximity of the AM radio tower near the Middle Street Station. Concurrently, other mitigation options are being explored, such as alternative locations for the antenna.
- Acquiring parcel for the Pearl Harbor Station site through close coordination with the U.S. Navy.
- Preparing RFP Part 2 documents to capture functional and quality requirements while allowing for innovation and savings.

### 4.5 Section IV – City Center: Middle Street Transit Center Station to Ala Moana Center

#### A. City Center Section Guideway and Utilities

Contract No.: FD-530

Contractor: AECOM Technical Services, Inc., Final Design Consultant (Engineer of Record)

Contract Start Date: July 2012

Construction Docs Bid-Ready:

- Guideway, Stations and Utilities (DB)
  - RFP Part 1 for DB (Qualifications): August 2015
  - RFP Part 2 for DB (Proposals): November 2015
- Potential Expedited Utilities Package (DBB):
  - TBD



**Project Description:** The City Center Guideway and Utilities final design contract consists of 4.2 miles of elevated transit guideway serving eight (8) passenger stations, in addition to roadway widening, utility relocation and other improvements to facilitate construction of the guideway.

**Project Overview:** This section of the guideway will be combined with eight (8) stations into a single City Center Guideway and Stations Design-Build package scheduled to be advertised in late 2015.

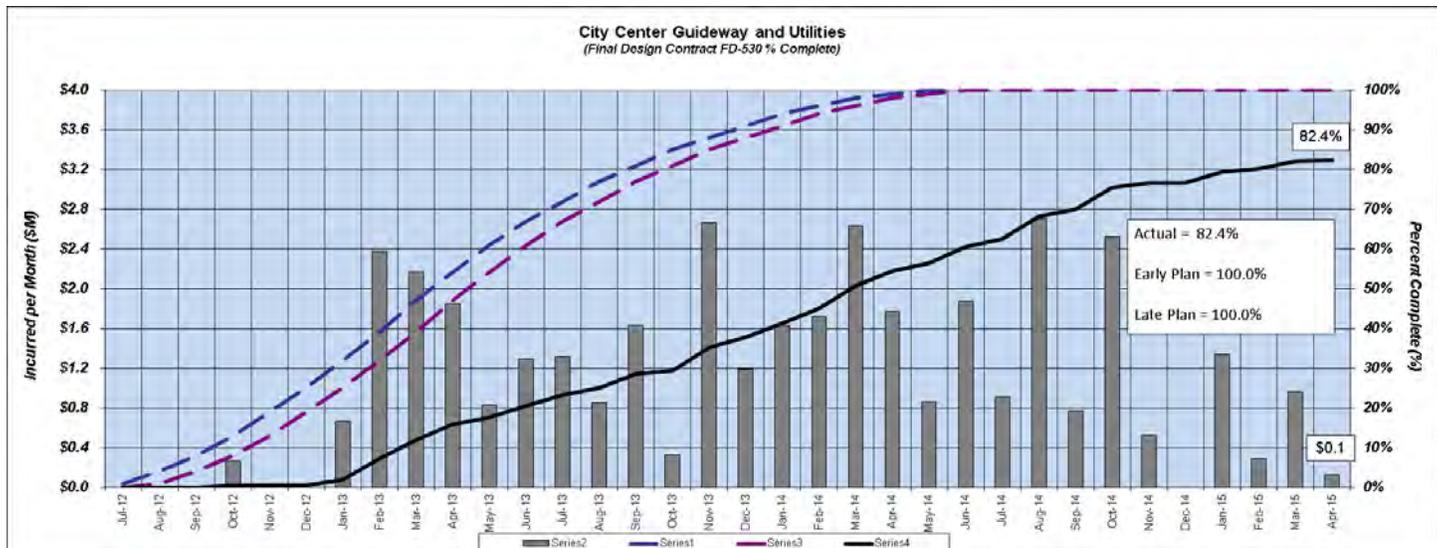
#### COST INFORMATION:

<u>Original Contract:</u> \$43,948,220	<u>Incurred-to-Date:</u> \$38,057,052
<u>Current Contract Value<sup>1</sup>:</u> \$46,183,523	<u>Incurred in April:</u> \$122,843

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$191,227
DBE % Attained:	0.44%

April Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$1,282,803</b>



Due to the change in procurement strategy from DBB to DB, the design of the City Center Section guideway will not be advanced to completion by AECOM. However, utility designs in the City Center Section are being advanced and considered for a potential expedited DBB package. These utility designs are six (6) months behind schedule due primarily to changes in HECO design requirements. HART is actively working with HECO to minimize the impacts of these changes.

**SCHEDULE:**

April 2015 Update		Data Date: 24-Apr-2015, Printed On: 13-May-15 16:37																		
Activity Name	Start	Finish	2014			2015			2016			2017			2018			2019		
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>Total</b>	19-Aug-11 A	30-Jun-19																		
City Center Programmatic	01-Nov-11 A	05-Oct-15																		
City Center Permits	19-Aug-11 A	08-Dec-15																		
Design - City Center Guideway & Utilities	01-Jul-12 A	03-May-15																		
Construction - City Center Guideway & Utilities	01-Jun-16	30-Jun-19																		

**CRITICAL PATH ISSUES:**

- HART is evaluating the scope of civil and utility work that can be expedited in a separate DBB package.
- HART is overseeing coordination between final design consultant AECOM and critical third parties.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 89%.
- Coordinating with HDOT, HECO and other stakeholders.
- Pursuing rights-of-way and rights of entry.

Look Ahead:

- Obtain third-party approvals of design concepts.
- Determine appropriate scope to include in expedited utilities package.
- Finalize requirements for DB bid package.

**KEY ISSUES:**

- Assessing cost and schedule impacts associated with HECO’s potential requirement to reconstruct existing building electrical service connections, and coordinating with HECO to obtain case-by-case exceptions.
- Coordinating with HECO to establish appropriate clearance requirements for electrical lines.
- Assessing potential right-of-way impacts due to HECO requests for additional transformers.

**B. Dillingham and Kaka’ako Station Group (DKSG)**



**Contract No.:** FD-550

**Contractor:** Perkins+Will (P+W), Final Design Consultant (Engineer of Record)

**Contract Start Date:** August 2013

**Construction Docs Bid-Ready:**

- Guideway, Stations and Utilities
  - RFP Part 1 for DB (Qualifications): August 2015
  - RFP Part 2 for DB (Proposals): November 2015

**Project Description:** Design of eight (8) stations for the fourth and final phase of the current project that will connect Dillingham Boulevard to Ala Moana Center.

**Project Overview:** The DKSG stations are being combined with the City Center Guideway into a single City Center Guideway and Stations Design-Build package.

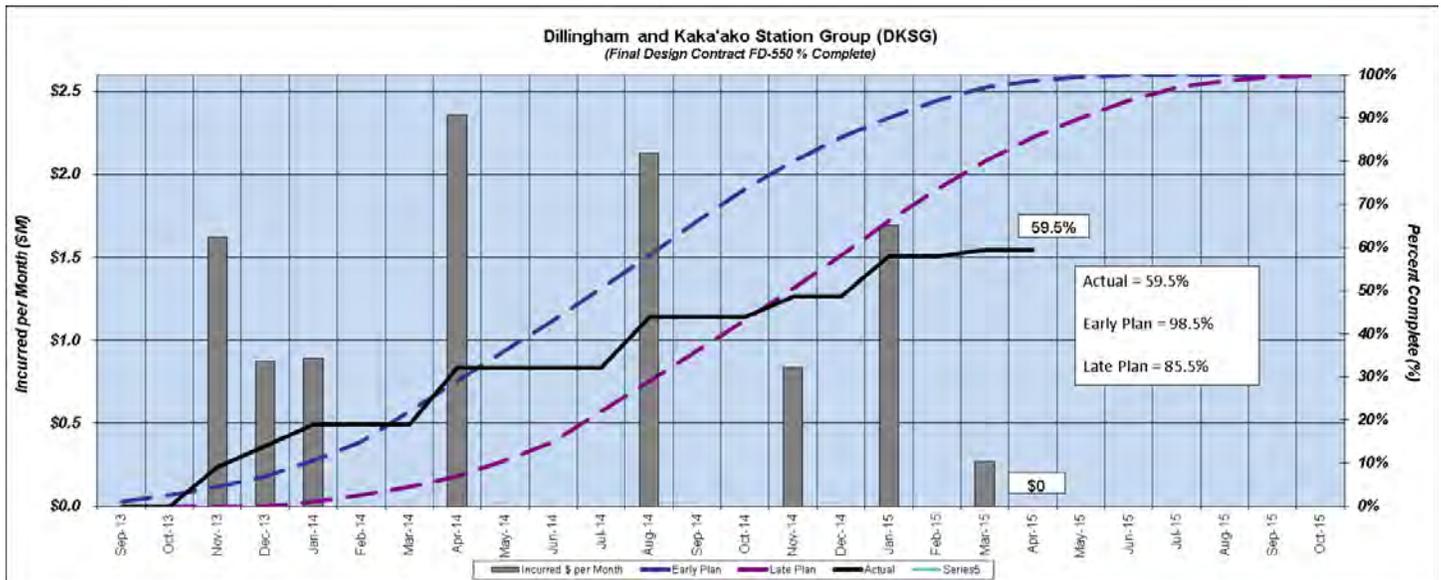
**COST INFORMATION:**

<u>Original Contract:</u> \$18,321,918	<u>Incurred-to-Date:</u> \$10,667,500
<u>Current Contract Value<sup>1</sup>:</u> \$18,974,447	<u>Incurred in April:</u> \$0

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$0
DBE % Attained:	0%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$713,148</b>



HART is working closely with the final design consultant to identify and prioritize activities that will support the selected DB delivery method. Ongoing and forecasted efforts are itemized below.



### 4.6 Project-Wide

#### A. Program Management Support Consultant-2 (PMSC-2)

Contract No.: MM-901

Contractor: InfraConsult LLC

Contract Start Date: March 8, 2012

Contract Completion: March 7, 2016, with option to renew contract one additional year

**Project Description:** Provide program management support services in the areas of elevated guideway engineering, rail station design, construction management, project management, environmental planning, federal programmatic requirements, and other services for the Honolulu Rail Transit Project.

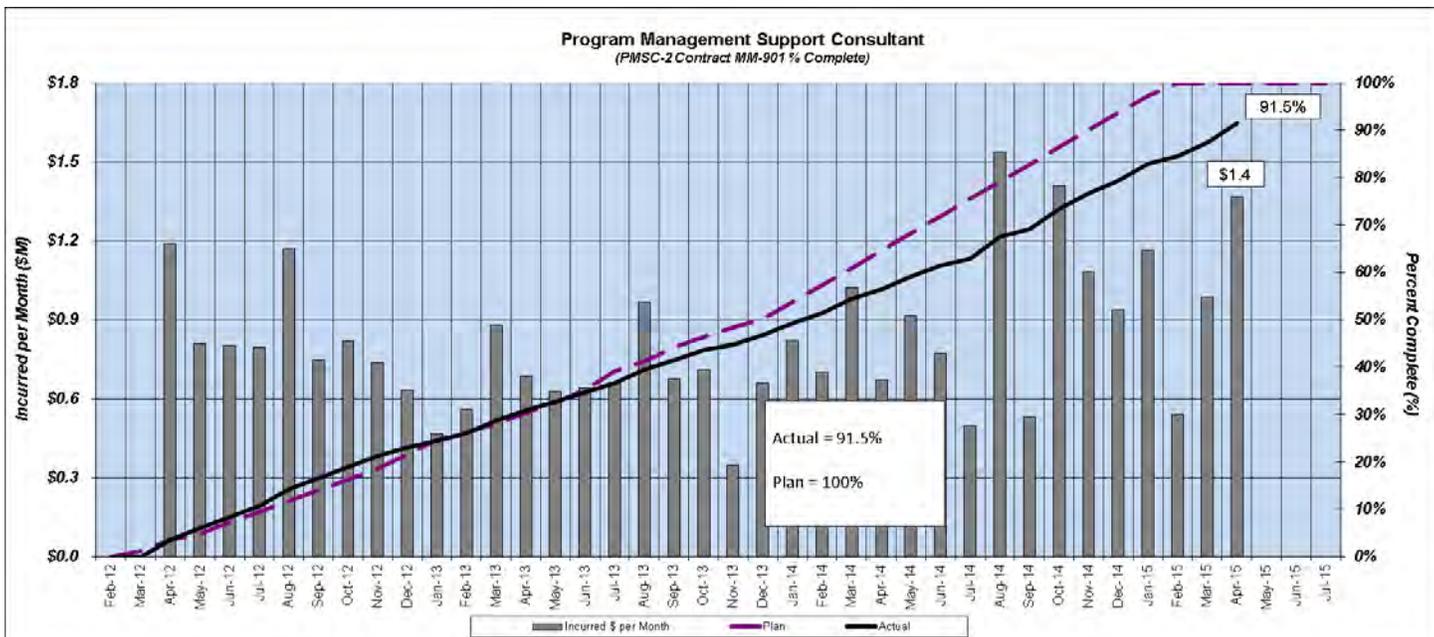
#### COST INFORMATION:

Original Contract:	\$33,376,897	Incurred-to-Date:	\$30,548,966
Current Contract Value <sup>1</sup> :	\$33,376,897	Incurred in April:	\$1,366,785

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$0
DBE % Attained:	0%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	\$0
<b>Cumulative to Date</b>		<b>\$0</b>



#### KEY ISSUES:

- No Issues.

**B. General Engineering Consultant III (GEC-3)**

**Contract No.:** MM-913

**Contractor:** CH2M HILL

**Contract Start Date:** December 2013

**Contract Completion:** April 5, 2019, with option to extend for up to three (3) additional years

**Project Description:** HART GEC III support services include: schedule and estimating, interface coordination and management, environmental and planning, design management services, and program management (aka GEC III contract management).

**Project Overview:** The GEC III is supporting HART with procurement packages with design review, review of independent cost estimates, evaluation of east segment schedules, and preparation of stream crossing permits, tree relocations, and fulfillment of cultural and historic commitments from the environmental process.

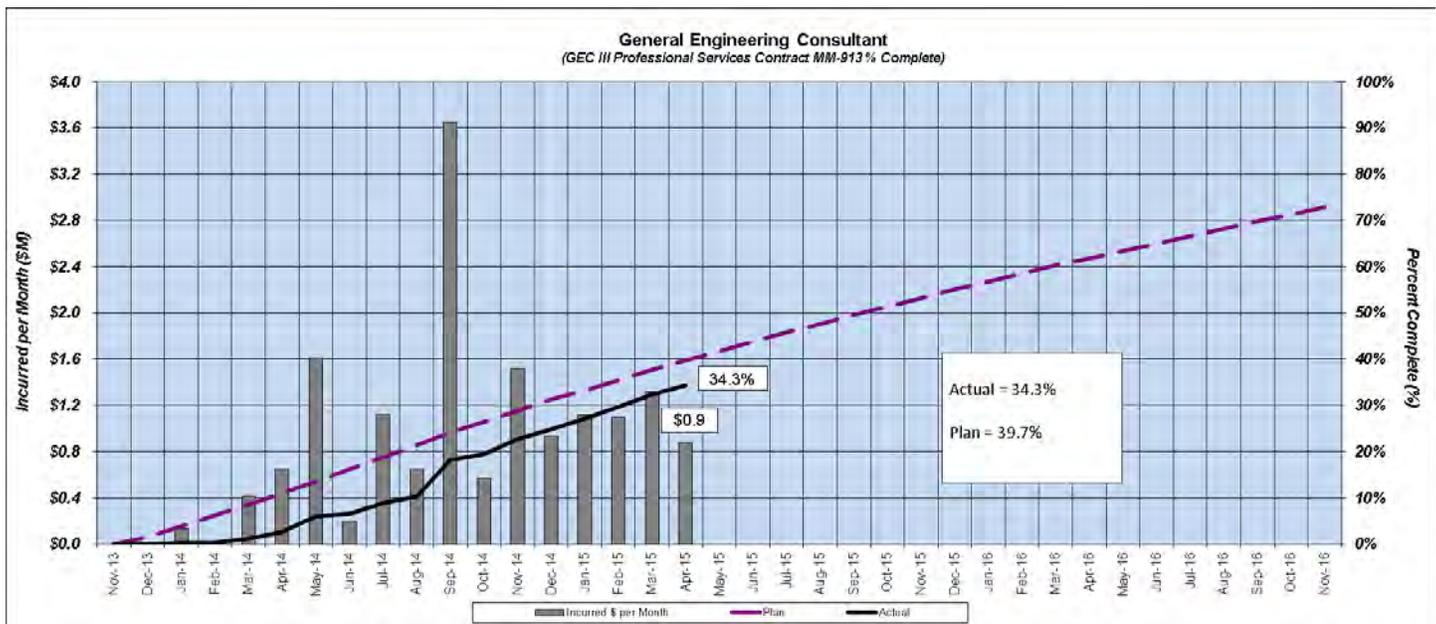
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$46,143,277</u>	<u>Incurred-to-Date:</u>	<u>\$15,848,848</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$46,143,277</u>	<u>Incurred in April:</u>	<u>\$876,621</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$1,098,766
DBE % Attained:	2.38%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$0</b>



**KEY ISSUES:**

- Continue to evaluate results of the schedule analysis of the draft schedule for FFGA schedule and “Optimal” schedule for east sections by estimating work sequencing, crew sizing and productivity rates.
- Continue to seek close out of Interface Coordination agreements between contractors.
- Preparing support documentation for stream crossing permits to HART and provide ongoing documentation for cultural and historic properties.
- Provide support to WOSG and Airport Guideway and Stations (AGS) procurements. Replan level of service and support for DB delivery of east section.

**C. Construction Engineering & Inspection West Side Sections**

**Contract No.:** MM-290

**Contractor:** PGH Wong Engineering, Inc.

**Contract Start Date:** January 2014

**Contract Completion:** January 2020

**Projected Substantial Completion:** December 2018

**Project Description:** The West Side Section CE&I (West CE&I) team is providing Construction Engineering and Inspection Services (CE&I) for the West Section, which includes aerial guideway, stations, maintenance & storage facility, and garage & transit center from East Kapolei in West O’ahu to Aloha Stadium, of the 20-mile Honolulu Rail Transit Project (H RTP) for the Honolulu Authority for Rapid Transportation (HART).

The West CE&I team provides HART staff augmentation for construction management and administration services to monitor and observe the design-build and design-bid-build construction work such that the projects are constructed in general conformity with the plans, specifications, and special provisions for the WOFH, KHG, MSF, WSSG, and PHGT contracts. These CE&I services also include: constructability review, resident engineering, on-site field oversight, project controls, scheduling review, change management, cost control, document controls, contract administration, construction cost estimating, environmental monitoring, surveying, material testing, interface coordination and claims analysis.

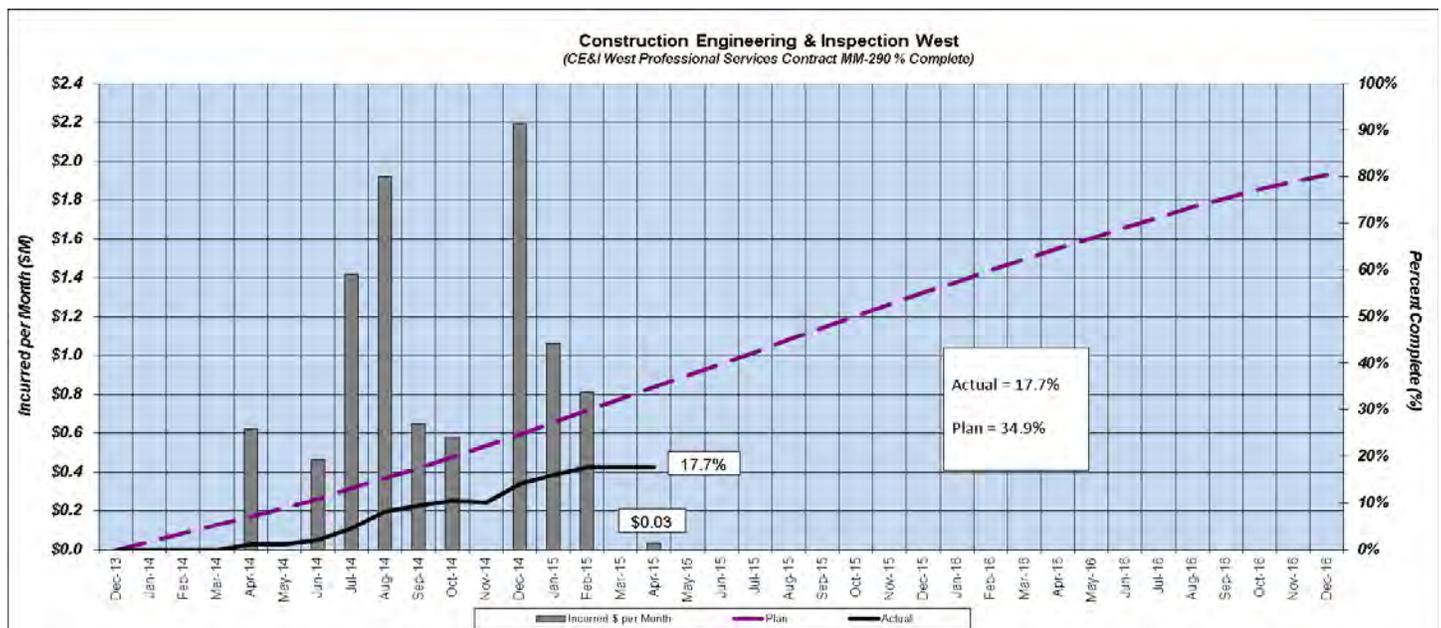
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$54,232,480</u>	<u>Incurred-to-Date:</u>	<u>\$9,577,079</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$54,232,480</u>	<u>Incurred in April:</u>	<u>\$32,741</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$578,733
DBE % Attained:	1.07%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$0</b>



**KEY ISSUES:**

- Evaluating staffing and field office requirements as a result of West Side Station Group procurement packaging into multiple, smaller contracts.
- Recent schedule discussions on guideway contracts need to also be aligned with anticipated West CE&I staffing durations.

**D. Construction Engineering & Inspection East Side Sections**

**Contract No.:** MM-595

**Contractor:** URS Corporation

**Contract Start Date:** January 2014

**Contract Completion:** December 2018 (anticipated August 2015, due to conflict of interest)

**Projected Substantial Completion:** August 2018

**Project Description:** The URS team is providing Construction Engineering and Inspection Services (CE&I) for the east section of the Honolulu Rail Transit Project (H RTP) for the Honolulu Authority for Rapid Transportation (HART). The H RTP will construct a 20-mile passenger rail system connecting East Kapolei in west O’ahu to Ala Moana Center in Honolulu’s dense urban core.

The URS team is providing services from the preconstruction phase through construction closeout. CE&I services include: constructability review, resident engineering, construction observation, project controls, scheduling, change management, cost control, document controls, contract administration, estimating, environmental monitoring, surveying, material testing, interface coordination, geographic information system (GIS) support and claims analysis. The primary role of the URS team is to inform the HART project manager of any significant omissions, substitutions, defects, and deficiencies noted in the work of the contractor and the corrective action that has been directed by HART to be performed by the contractor.

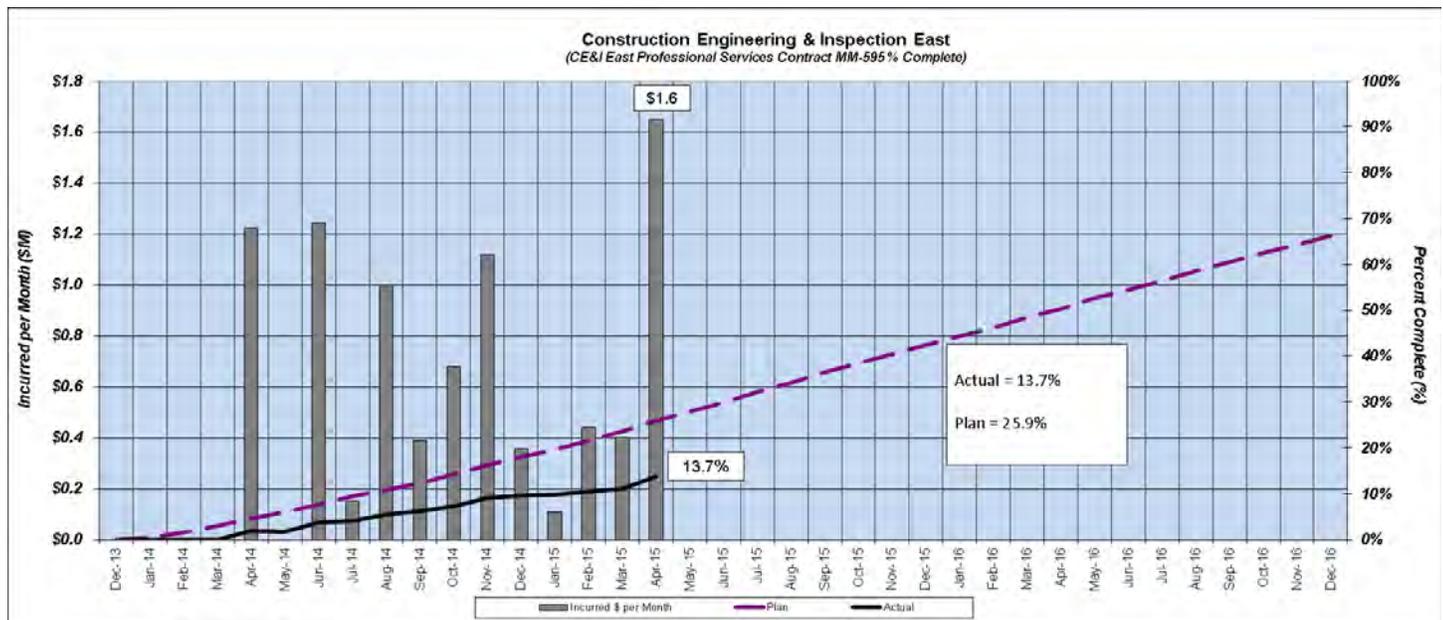
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$63,083,417</u>	<u>Incurred-to-Date:</u>	<u>\$8,658,069</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$63,083,417</u>	<u>Incurred in April:</u>	<u>\$1,647,963</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$949,724
DBE % Attained:	1.51%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$0</b>



**KEY ISSUES:**

- The CONRAC A7 shafts project closeout will continue into June 2015 while the final costs and change orders are finalized and processed through CMS. The project was a success both with HDOT and HART, and was completed on schedule/budget.
- The unresolved ROE and ROW on the Navy property within the east section corridor may cause a delay for the Airport Section Utilities project, however, a potential resolution with the Navy has been initially agreed upon that would allow for resolution by August 2015.
- The Independent Cost Estimate (ICE) has been completed for the Airport and City Center DB packages along with the potential ATC’s. HART has evaluated the documents, and is completing an internal review/processing of the information.

**E. Core Systems Contract Oversight Consultant**

**Contract No.:** MM-962

**Contractor:** Lea+Elliott, Inc.

**Contract Start Date:** February 2014

**Contract Completion:** August 2019

**Projected Substantial Completion:** N/A

**Project Description:** Provide professional services for design and construction management and testing/commissioning of the Core Systems Design-Build-Operate-Maintain (DBOM) contract. The major systems of the Core Systems DBOM contract are the vehicles, the automated train control (ATC) system, the traction electrification system, the communications system, and the platform screen gates (PSGs). Services include review and approval of design submittals, manufacturing oversight, installation oversight, operation/maintenance design oversight and support, system testing/acceptance, and contract close-out.

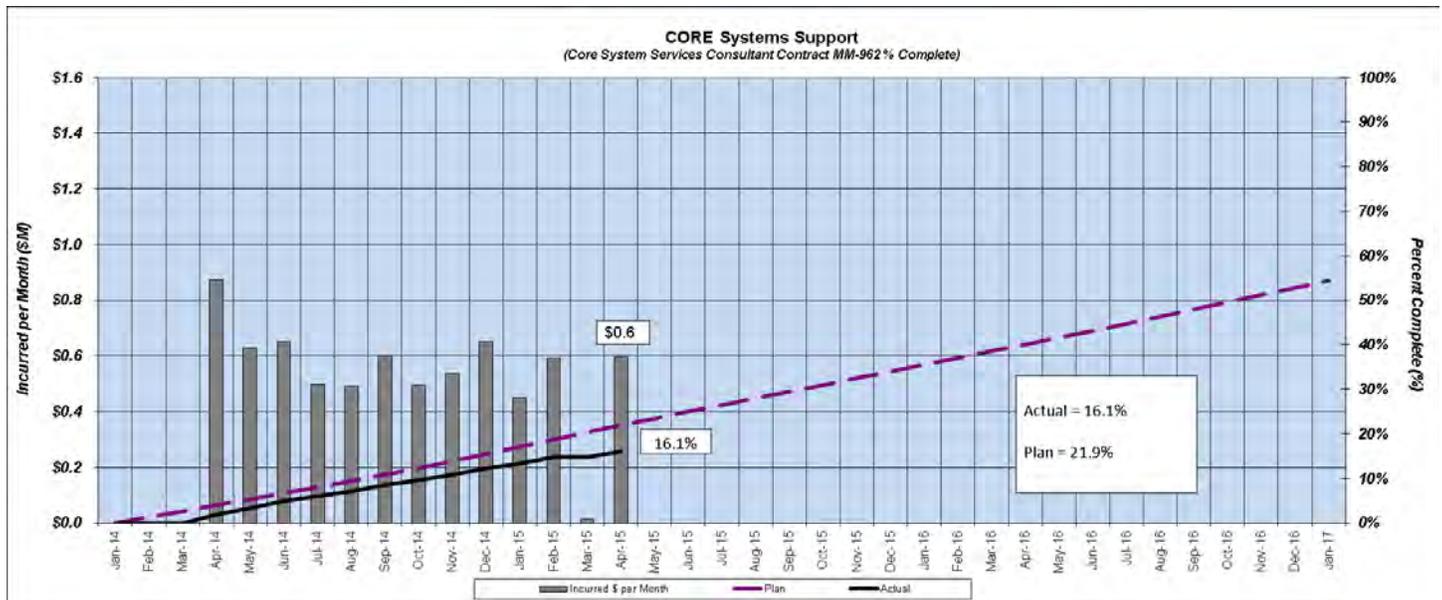
**COST INFORMATION:**

Original Contract:	\$43,988,989	Incurred-to-Date:	\$7,081,934
Current Contract Value <sup>1</sup> :	\$43,988,989	Incurred in April:	\$594,718

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$190,609
DBE % Attained:	0.43%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$0</b>



**KEY ISSUES:**

- Coordination with other contractors on construction interface milestones.
- Review and acceptance of procedures for factory acceptance tests.
- Design review completion with respect to manufacturing fabrication and test schedule.

**F. On-Call Construction Contractor**

**Contract No.:** MM-945

**Contractor:** Royal Contracting Co. Ltd.

**Contract Start Date:** August 2014

**Contract Completion:** July 2019

**Projected Substantial Completion:** The On-Call Contract is Task Order based with each Task Order having a specific Substantial Completion date.

**Project Description:** The On-Call Contract performs tasks not generally covered in the general construction contracts. These activities include demolition of structures; repairs to existing HART facilities; relocation of trees and other minor facilities such as bus stops, street lighting, etc.; minor civil/utility work, and repair of third-party facilities such as road repair/patching as requested by HDOT in the HART right-of-way and as allowed by third-party agreements. The intent of the On-Call Contract is to provide HART a contractual tool to address those required work items not easily addressed by the general contractors working to specific scopes.

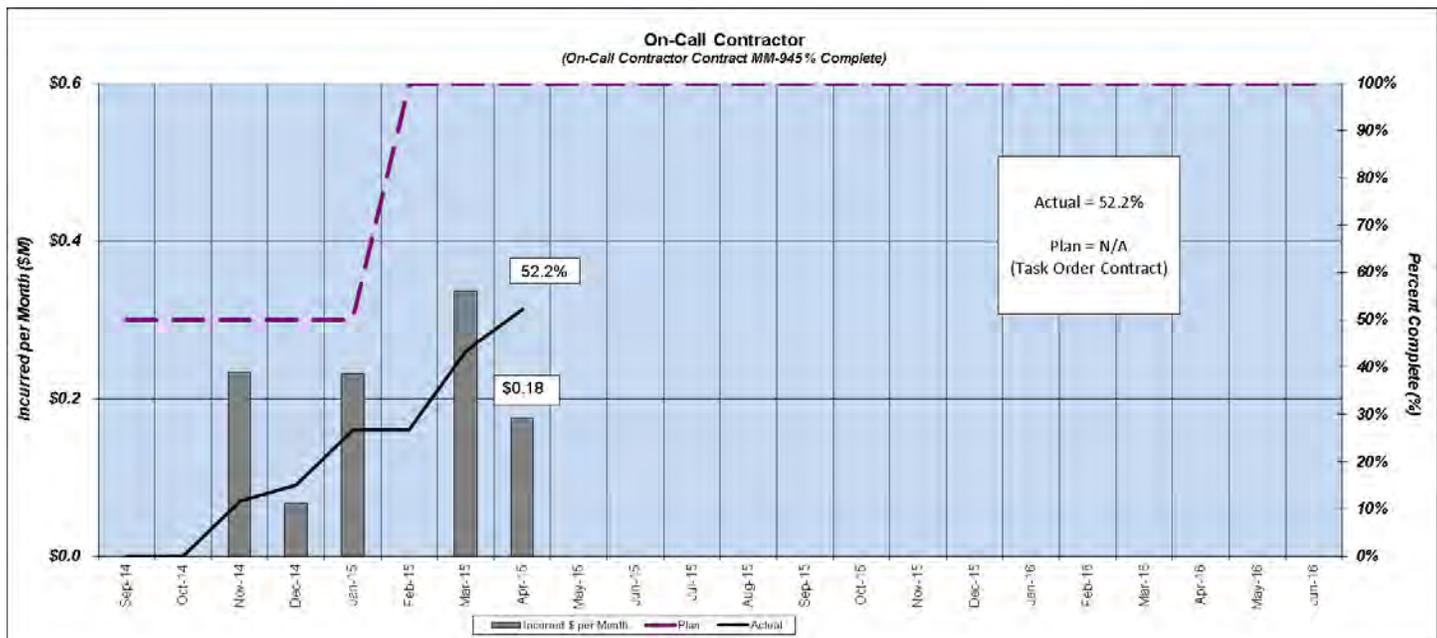
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$1,000,000</u>	<u>Incurred-to-Date:</u>	<u>\$1,044,886</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$1,999,951</u>	<u>Incurred in April:</u>	<u>\$175,455</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$0
DBE % Attained:	0%

April Change Orders		
Change No.	Description	Amount (\$)
Amendment	Task Order 7	(\$49)
<b>Cumulative to Date</b>		<b>(\$49)</b>



**KEY ISSUES:**

- The On-Call Contractor has successfully:
  - demolished fourteen buildings located in the WOFH, KHG and City Center right-of-way
  - relocated/removed more than 40 trees in the Airport right-of-way
  - repaired/protected multiple facilities owned by HART
- The On-Call Contractor is in the process of working with HART’s right-of-way group and owners in providing cost to cure solutions to properties which will need modification in achieving cleared right-of-way in the Airport and City Center sections of the guideway.
- Demolition of HART owned facilities in the Airport and City Center sections of the right-of-way is on hold pending resolution with the State Historic Preservation Division (SHPD) in meeting their requirements. The On-Call has demolished seven structures during this period due to health and safety reasons.

## 5 OVERALL PROJECT-WIDE ACTIVITIES

### Permits (Section 5.1)

#### OVERVIEW

- HART has increased noise monitoring efforts with Kiewit under collaboration with the Hawai'i Department of Health (HDOH) regarding noise levels along the Kamehameha Highway Guideway (KHG) section currently under construction.

#### KEY ISSUES

- HART is incorporating additional noise monitoring and mitigation into the Airport Community Noise Variance application and is working with the Hawai'i Department of Health (HDOH) to address ongoing construction noise issues.
- HART is working with the Navy and HDOH on monitoring and mitigation of known contaminated sites along project construction areas.

### Utility Agreements (Section 5.3)

#### OVERVIEW

- HTI Airport UCA was executed on May 28, 2015.
- Execution of an amendment to HIE KHG UCA.
- Hawai'iGAS City Center UCA has been executed.

#### KEY ISSUES

- HART continues to address multiple issues with HECO that may affect the design and construction of planned work. HART is continuing to meet with HECO on a weekly basis to resolve the issues. Executive meetings are now being conducted to include HART's Executive Director and CEO, and HECO's President.

### Right-of-Way (Section 5.4)

#### OVERVIEW

- Right-of-Way acquisitions are under budget by \$10.4M, as of May 14, 2015.
- The WOFH section acquisitions are nearing completion.
- Nearly all private property site access for guideway is complete for KHG. ROW is continuing to work with KIWC to obtain remaining easements for utility relocation.
- ROW is working with the Design department regarding right-of-way requirements for the City Center construction work.

#### KEY ISSUES

- HART is continuing to work closely with the U.S. Navy to secure easements, licenses and fee acquisitions needed for construction in the Airport Section.
- Working to resolve third-party agreements with UH, the Navy and Post Office in order to allow construction to proceed without delay.

## 5.1 Permits

- **Permits Submitted and In-Progress**

- HART submitted a revised Airport Community Noise Variance to HDOH.
- The Commission on Water Resource Management is reviewing Stream Channel Alteration Permits at Halawa, Moanalua and Kalihi Streams.
- HART submitted Aloha Stadium Waiver to DPP.
- HART submitted follow-up response to HCDA regarding station consultation presentation.

- **Permits and Approvals Granted**

- HART received an Individual Section 404 permit from the U.S. Army Corps of Engineers (USACE) for construction at the Waiawa Stream, as well as the corresponding Section 401 Water Quality Certification and the Coastal Zone Management Consistency Determination from HDOH.

- **Look Ahead**

- Upcoming significant permit activity:
  - HART will submit the Clean Water Act Section 404 permit application for Kapalama and Kalihi Streams to the USACE.
  - HART will submit the Clean Water Act Section 401 permit application for Kapalama and Kalihi Streams to HDOH.
  - HART will submit a request for Jurisdictional Determination to the USACE for Aolele Ditch.
  - HART will submit a letter requesting determination of permit required to the USACE for Nuuanu stream.
  - HART will resubmit applications for Airport and City Center Noise Variances to HDOH, incorporating language and format from the recently-approved WOFH Community Noise Variance.

## 5.2 Hawai'i Department of Transportation (HDOT) Agreements

- **Activities this month**

- Alignment-wide, the HDOT Traffic Management Consultant (contract MM-915) continues to review traffic signals, ITS and construction Maintenance of Traffic (MOT) for HDOT.
- Kiewit is responsible for maintenance of Farrington Highway and Kamehameha Highway as part of the Master Agreement.
- The HDOT Design Coordination Consultant for the WOFH section (contract MM-920), AECOM Technical Services, Inc. (AECOM), continues to review design submittals for HDOT.
- AECOM, the HDOT Design Consultant for the KHG section (contract MM-921), continues to review design submittals for HDOT.
- SSFM, the HDOT Design Coordination Consultant for the Airport and City Center Guideway sections (contract MM-922), is reviewing guideway design submittals for HDOT.

- **Look Ahead**

- City Center Joint Use and Occupancy expected to be executed late-2015.

**5.3 Utility Agreements**

Figure 13. Utility Agreements Status

Utility Agreements Status Matrix									
Utility Owner	Status	WOFH		KHG		Airport		City Center	
		ESA	UCA	ESA	UCA	UCA	COMBINED ESA	UCA	
AT&T	Executed	5/11/11	12/20/11	5/18/12		Draft sent back to AT&T for review (will include KHG & City Center)	Agreement Executed		
	NTP	5/12/11	12/21/11						
Chevron	Executed	12/4/09		11/4/11					
	NTP	12/22/09		11/15/11					
Hawaiian Telcom	Executed	5/20/10	11/17/14	5/10/12	Executed 12/31/14	5/28/15	HTI agreement executed 9/27/13		
	NTP	6/14/10							
HECO	Executed	By Agreement with PB	4/20/12 (to be vacated once Design and Construction Services Agreements Executed)	7/12/12 (Agreement to be vacated once Design and Construction Services Agreements are Executed)			Airport Bridging Agreement (superseded by Design Services Agreement) City Center Bridging Agreement (superseded by Design Services Agreement)		
	NTP								
		Pre-Construction		Pre-Construction		Pre-Construction			
	Executed	10/30/13		10/4/13		n/a			
	Expired	11/29/13		11/29/13		n/a			
		Design Services	Construction Services	Design Services	Construction Services	Design Services	Construction Services	Design Services	Construction Services
	Executed	11/20/13	11/29/13	11/20/13	11/29/13	11/20/13		11/25/13	
	NTP	11/20/13	11/29/13	11/20/13	11/29/13	11/20/13		11/25/13	
Oceanic Time Warner Cable	Executed	12/8/09	12/21/11	1/9/12	6/2/14	Executed 12/19/14	4/4/2013		Draft sent to Oceanic
	NTP	12/22/09							
Pacific Lightnet/Wavecom	Executed	4/28/10	3/12/12	2/15/12					
	NTP	4/29/10	3/13/12	2/16/12					
Sandwich Isle Communications	Executed	5/20/10		4/20/12			Submitted draft to SIC		
	NTP	6/8/10							
Hawai'iGAS	Executed	12/18/09	6/30/11	6/1/12	4/14/14	8/20/14	9/27/13		5/8/15
	NTP	12/22/09	7/12/11						
tw telecom	Executed	12/2/09		2/14/12	No Scope – Oceanic to relocate for tw telecom for KHG		10/11/12		Draft is routing internally for review.
	NTP	12/22/09		2/16/12					
Tesoro	Executed			2/15/12	Agreement executed 9/12/13		Agreement executed 9/3/13		
	NTP			2/16/12					

Legend:  = Action this month  
 = Not applicable

COR = Corporation Counsel  
 ESA = Engineering Services Agreement

UCA = Utility Construction Agreement  
 UFCRA = Combined Engineering and Construction Utility Agreement

WOFH

- All WOFH agreements have been executed.

KHG

- All KHG agreements have been executed.

AIRPORT

- All engineering utility agreements for the Airport section have been executed.
- HART is reviewing AT&T comments to the draft Construction Agreement. It is not necessary for this agreement to be in place for the Airport Segment utility construction.

CITY CENTER

- All engineering utility agreements for the City Center section have been executed.
- HART reviewed AT&T comments and the revised draft Construction Agreement was sent back to AT&T for review.
- HART has submitted the Utility Construction Agreement for City Center to OTWC for review/comments.
- HART has prepared a draft of the Utility Construction Agreement for tw telecom and is routing internally for review/comments.
- Looking Ahead:
  - Execute Oceanic City Center UCA.
  - Execute Hawaiian Telcom City Center UCA.

HECO

- **Davis-Bacon requirements** – HECO has established a collective bargaining agreement – which does not align with Davis-Bacon requirements – for which HECO is requesting a waiver. HART is coordinating to resolve this with HECO.
- **HECO 46kV Substation near Rail Operations Center (ROC) area** – HECO indicates a need in the 2018-2019 timeframe for a new 46kV substation to feed the ROC area due to requirements in HECO Rule 13. Initial planning indicates that a currently un-used location on the ROC property may be suitable for this facility. HECO is investigating a ‘system’ substation, which would also feed the area surrounding the ROC.
- **Additional Clearances** – HECO indicates the need for additional horizontal working clearances from overhead pole alignments and additional buffer radial clearances from the actual overhead high-voltage lines.
  - **Horizontal Working Clearances Analysis** – HECO is reviewing the current overhead pole and line locations to identify areas where accessibility for HECO maintenance is a concern. HART is currently reviewing the results of HECO’s analysis. Additional HECO re-evaluation is ongoing for pole locations with sub-optimal clearance. HART will also be setting up meetings to further discuss and resolve this with HECO.
  - **Bronto Bucket Truck Rental/Testing** – To allow for increased accessibility for HECO maintenance personnel when considering horizontal working clearances, HECO identified a bucket truck with a telescoping boom (versus a knuckle) and with extendable outrigger supports (versus swinging outrigger supports). The truck allows for greater accessibility and less required setup space than the current larger HECO bucket trucks. HART has agreed to reimburse HECO for 3 months of rental for an un-insulated model of the proposed Bronto Bucket Truck. HART is currently reviewing the HECO Horizontal Working Clearance study. HART will also be setting up meetings to further discuss and resolve this with HECO.
- **New Service Connections** – HECO service requests are required for new electrical services for the MSF, Passenger Stations and Systems Sites (traction power facilities). The Passenger Station designers are providing the service request for the stations and the Core Systems Contractor is providing the service request for the systems sites.
  - **MSF** – Service request approved via receipt of HECO Final Cost Letter and HECO design drawings. Coordination with HECO for installation is progressing.
  - **Passenger Stations and Systems Sites** – HECO service request reviews are in progress and approvals are anticipated in Q2 2015 for the west side stations. HECO is working to finalize its designs and cost estimates.

**5.4 Right-of-Way (data as of May 14, 2015)**

**BUDGET**

- The ROW budget continues to show a favorable trend. \$71.2M was spent to acquire 36 properties. The budgeted amount for the 36 parcels was \$81.6M, resulting in a budget underrun of \$10.4M for acquisitions.
- \$5.4M has been expended to date for relocations.

**ACQUISITIONS**

Figure 14. Right-of-Way Status for the Parcels [data provided by Real Estate Acquisition database (READ)]

	No. of Parcels Impacted	Current No. of Parcels Needed	Appraisals In Process	Appraisals Completed	Letters of Offer Sent	Offers Accepted	Possession Granted For Condemnation	Agreements Executed	Acquisitions Completed	Relocations Completed	Properties Available for Contractor
<b>Full Acquisition</b>											
W.Oahu\Farrington	16	16		14	14	13	1	4	16	10	16
Kamehameha	3	3		3	3	3			3	1	3
Airport	5	5	1	4	5	5			4	3	4
City Center	23	22		20	20	17			15	14	10
<b>TOTAL</b>	<b>47</b>	<b>46</b>	<b>1</b>	<b>41</b>	<b>42</b>	<b>38</b>	<b>1</b>	<b>4</b>	<b>38</b>	<b>28</b>	<b>33</b>
<b>Partial Acquisition</b>											
W.Oahu\Farrington	11	3		2	2	2		2	2		2
Kamehameha	19	4		3	3	1	1	1	1		3
Airport	9	9		3	3			1	1		1
City Center	88	77	12	47	39	6			1		2
<b>TOTAL</b>	<b>127</b>	<b>93</b>	<b>12</b>	<b>55</b>	<b>47</b>	<b>9</b>	<b>1</b>	<b>4</b>	<b>5</b>		<b>8</b>
<b>Easement</b>											
W.Oahu\Farrington	18	16	5	1	1			10	8		8
Kamehameha	6	6	1					9	5		5
Airport	44	28		7	5			16	16		16
City Center	45	35	15	8	2			1	1		1
<b>TOTAL</b>	<b>113</b>	<b>85</b>	<b>21</b>	<b>16</b>	<b>8</b>			<b>36</b>	<b>30</b>		<b>30</b>
<b>GRAND TOTAL</b>	<b>287</b>	<b>224</b>	<b>34</b>	<b>112</b>	<b>97</b>	<b>47</b>	<b>2</b>	<b>44</b>	<b>73</b>	<b>28</b>	<b>71</b>

*During design development, the real estate requirements have been adjusted to accommodate the design refinements. Parcel requirements are adjusted as design is finalized.*

**WEST O’AHU/FARRINGTON**

- Issues:
  - HART has acquired site control for nearly all needed property for the WOFH section, for both guideway and the stations.
  - HART is continuing to work with Leeward Community College and the UH West O’ahu campus to secure construction right of entry for the WOFH guideway.

**KAMEHAMEHA**

- Issue:
  - All private property site access for guideway is complete for Kamehameha. ROW is expediting the right-of-entries for the relocated utility easements.

**AIRPORT**

- Issues:
  - HART is working on easements pending from the U.S. Navy needed for the Airport Utility contractor. HART is working closely with the U.S. Navy personnel to complete the documentation as quickly as possible and meeting regularly with the Navy.

- The mapping process for the Airport Station must be finalized.
- HART made an offer to the Post Office which is currently under negotiation.
- Look Ahead:
  - Complete Post Office acquisition, as well as Airport and Navy agreements.
  - HART is expecting more appraisal reports. This will allow offers to move forward on remaining airport parcels in anticipation of construction.
  - A request is being considered by the HART Board for eminent domain for some of the parcels. Other parcels may be presented to the HART Board in July for eminent domain to ensure that the construction schedule is maintained.

**CITY CENTER**

- Issues:
  - HART continues efforts to acquire ROW parcels. Prioritization is being given to the Dillingham section and resolving remaining full acquisitions.
  - As indicated in the table, there are a number of appraisals and offers in progress.
  - HART continues to track parcels for potential eminent domain processing.
- Look Ahead:
  - Continue to track the acquisitions in relation to construction schedules for City Center.

**RELOCATIONS**

Figure 15. Relocation Status for the Occupants (data provided by READ)

Section	Residential Relocations (a)	Business Relocations (b)	Not-For-Profit Relocations (c)	Total Relocations (a+b+c)	Relocation Assessment Completed	90-Day Notice Sent	30-Day Notice Sent	Relocations Completed for Occupants
W.Oahu\Farrington	18	6	1	25	11	12	8	25
Kamehameha		4		4	4	3	3	4
Airport		13		13	5	9		7
City Center	16	67		83	31	45	23	48
<b>Grand Total:</b>	<b>34</b>	<b>90</b>	<b>1</b>	<b>125</b>	<b>51</b>	<b>69</b>	<b>34</b>	<b>84</b>

**WEST O’AHU/FARRINGTON**

- Look Ahead:
  - Oversight of the remediation process for TMK 9-6-004-006 is ongoing.

**AIRPORT**

- Look Ahead:
  - Relocation of several TMKs by August is expected.

**CITY CENTER**

- Look Ahead:
  - Continue to complete relocations for remaining TMKs.

**THIRD-PARTY AGREEMENTS**

Figure 16. Third-Party Agreement Status

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
University of Hawai'i (UH) Master Agreement	Pending	July 2015	WOFH, KHG, City Center	Final negotiations are ongoing. Will secure Right of Construction as not to delay the project.
UH -West O'ahu (UHWO) Pre-Construction Right of Entry	Executed		WOFH	
UH - West O'ahu (UHWO) Construction Right of Entry	Pending	June 2015	WOFH	In negotiations. Concerted effort is being made to finalize.
Leeward Community College (LCC) Pre-Construction Right of Entry	Executed		WOFH	
Leeward Community College (LCC) Construction Right of Entry	Pending	June 2015	WOFH	In negotiations. Concerted effort is being made to finalize.
UH Urban Garden Pre-Construction Right of Entry	Executed		KHG	
UH Urban Garden Construction Right of Entry	Executed		KHG	Consent to construct in place.
UH Urban Garden Kiewit Construction Right of Entry	Executed		KHG	
D.R. Horton Agreement for Construction	Executed		WOFH	Allows for construction to proceed.
D.R. Horton Final Easement Agreement	Pending	December 2015	WOFH	Document in process with D.R. Horton.
Honolulu Community College (HCC) Pre-Construction Right of Entry	Executed		City Center	
Honolulu Community College (HCC) Construction Right of Entry	Pending	July 2015	City Center	In negotiations. Concerted effort is being made to finalize.
Department of Land and Natural Resources (DLNR) Right of Entry (Kapolei)	Executed		WOFH	Consent to construct in place.
Department of Land and Natural Resources (DLNR) Easement (Kapolei)	Pending	August 2015	WOFH	Easement documents in process.
City Dept. of Parks & Recreation (DPP) (MSF drainage)	Executed		WOFH	Consent to construct in place.
Department of Land and Natural Resources (DLNR) Keehi Lagoon Right of Entry	Executed		Airport	Consent to construct in place.
Department of Land and Natural Resources (DLNR) Keehi Lagoon Easement	Pending	August 2015	Airport	Process Easement Agreement.
Department of Education Master Agreement and Consent to Construct (Waipahu H.S.)	Executed		WOFH	Consent to construct in place. Jurisdictional Transfer in process.
Aloha Stadium / Department of Accounting & General Services (DAGS) MOU	Executed		KHG	
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry	Executed		KHG	Limited ROE granted for staging for Kiewit for KHG Contract.
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry	Executed		KHG	Construction ROE in place.
Aloha Stadium / Department of Accounting & General Services (DAGS) Easement	Pending	July 2015	KHG	Easement in process.
DHHL Master Agreement	Executed		WOFH, MSF	

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
DHHL License	Executed		WOFH, MSF	Consent to construct in place.
HDOT Master Agreement	Executed		WOFH	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Executed		WOFH	Consent to construct in place.
HDOT Master Agreement for KHG, Airport and City Center	Executed		KHG, Airport, City Center	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Executed		KHG	Consent to construct in place.
HDOT Joint Use & Occupancy (JU&O) Sub-agreement for Airport Division parcels	Executed		Airport	Consent to construct in place.
HDOT Easement Agreement for Airport Division parcels	Pending	August 2015	Airport	Process Easement Agreement.
HDOT Joint Use & Occupancy (JU&O) Sub-agreement for Airport leased/revenue parcels	Pending	October 2015	Airport	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Pending	October 2015	City Center	
HDOT SOA MOU	Executed		Program	
OCCC/Hawai'i Department of Public Safety Agreement Dillingham Blvd	Pending	July 2015	City Center	Finalizing requirements.
HI Community Development Agreement (HCDA)	Pending	July 2015	City Center	Coordination is on-going.
Department of Accounting & General Services (DAGS)/HHFDC Right of Entry	Pending	July 2015	City Center	Processing.
Department of Accounting & General Services (DAGS)/HHFDC Easement	Pending	July 2015	City Center	Process Easement Agreement.
City Dept. of Transportation Services (DTS) (Middle St.)	Pending	July 2015	Airport	Joint Use MOU in process. Pending design.
U.S. Navy (17 Easements)	Pending	July 2015	WOFH, KHG, Airport	Easements are being processed by the Navy. Navy will not charge for all licenses and easements. Exemption granted.
U.S. Navy Pearl Harbor Station	Adopted		Airport	Congress passed bill to transfer property to City.
U.S. Post Office Honolulu Processing Center	Pending	July 2015	Airport	Offer tendered to the Post Master General. HART is reviewing appraisal from the Post Office.
City Dept. of Transportation Services (DTS) (Middle St.)	Pending	July 2015	Airport	Joint Use MOU in process.
City Dept. of Facility Maintenance (DFM) (Kamehameha Hwy/Makalapa Manor)	Executed		Airport	
City Dept. of Facility Maintenance (DFM) (N. Nimitz & Awa St.)	Pending	July 2015	City Center	Joint Use MOU in process.
City Dept. of Facility Maintenance (DFM) (Kohou St.)	Pending	July 2015	City Center	Joint Use MOU in process.
Federal Court House/GSA	Pending	August 2015	City Center	Draft agreement is under review and discussions on-going.

## 6 MANAGEMENT AND ADMINISTRATIVE UPDATES

### Safety and Security (Section 6.1)

#### OVERVIEW

- S&S Certification Program
  - The S&S Design Criteria (DC) Conformance Checklists design verification percentages for all contracts under construction are in the upper 90% level. Efforts are underway with the designers to resolve all open items to reach the 100% design verification level as soon as possible.
  - The S&S civil construction specification conformance verification percentages continue to increase for the KHG, WOFH, MSF and Airport 7 piers contracts. HART SSRC is scheduled to review for approval WOSG, KHSG, FHSG and Airport Utilities Relocation base Specification Conformance Checklists in June 2015.
  - The systems specification/testing conformance checklists development is in the preliminary planning stages to capture all general and specific testing requirements for Integration Testing, ATC, TES, Communications, FDAS, SCADA, PSGS, MOW Vehicles, and YCB.
  - Vehicle certification is in the preliminary planning stages utilizing FTA guidelines, where three (3) specification/testing conformance checklists are under development for:
    - 1) General requirements that applies to all vehicles
    - 2) Interim Certification for Dynamic Testing and
    - 3) Certification for Pre-Revenue Service
  - The PHAs that cover the MSF, Alignment, and Track are in Final DRAFT form to reflect actual mitigations designed into the project with final hazard ratings and undergoing internal reviews.
  - DRAFT Procedures are in place to address and close the S&S Certification Open Items and to define the review process thru the FLSWG, SSCWG, and SSRC meetings for final resolution.
  - The Hazard Tracking Log (HTL) is being incorporated into a database and has been revised to be able to review by contract to track all potential hazards identified by design changes and/or construction change orders. DRAFT Procedures are under development to address and close identified hazards with Project Managers, to define the committee review process, and how these hazards are integrated into the overall Project PHAs.
  - The Interim Certification Sub-Committee has outlined Interim Certification requirements to support the first vehicle delivery date. This includes an Interim Certification Schedule, an Action Item Log, and a HART Safety and Security Interim Certification Guidance Document that outlines all the preliminary certification requirements for the civil, systems, vehicle, and support vehicles contracts.
  - Key S&S Certification related meetings held in May 2015:
    - Safety and Security Certification Working Group (SSCWG) Meeting, May 5, 2015
    - PMOC monthly review meeting, May 12-13, 2015
    - Interim Certification Sub-Committee meeting, May 19, 2015
    - Fire Life Safety Working Group (FLSWG) meeting, May 17, 2015
    - Safety and Security Review Committee (SSRC) meeting, May 27, 2015
    - Bi-weekly and/or monthly project coordination meetings with Core Systems, MSF, WOFH, and KHG
    - HART Safety and Security weekly meeting with HDOT
- Site access control at MSF has been developed to assure contractors are aware of work schedule and work areas for contractors.

#### KEY ISSUES

- Continued Engineering Leadership support is essential to fully implement the S&S CSCC verification process, the construction and equipment procurement submittal review/approval process for verification efforts, and the resolution process for closing items on the certification OIL and HTL.
- The vehicle SSHA and O&SHA are critical safety analyses that need to be completed as soon as possible as the first vehicle is currently in production.
- HECO-Power for testing and verification needs to be complete prior to AHJV vehicle arrival in early 2016.

## Quality Management (Section 6.2)

### OVERVIEW

- The HART QMP and HART-approved QAPs of contractors, consultants and suppliers have been assimilated by their respective employees and are being implemented as standard operating procedures. Therefore, less Nonconformance Reports (NCR) are reported or encountered.
- There are four (4) major NCRs on the DB Guideway Contracts (WOFH and KHG) that need to be addressed and corrected to prevent recurrence and mitigate impact on the overall progress of the project. These NCRs are discussed in more detail on the Key Issues of Section 6.2.
- Performed QA surveillance of the pre-pour and concrete pouring of Balanced Cantilever Segment S254-3U (Mauka of H-1), during the night of May 13, 2015.
- Performed QA audit of CH2M HILL (GEC-3) on May 20-21, 2015.

### KEY ISSUES

- QA audit of KHSG Final Design on June 3-4, 2015, prior to issuance for bid solicitation.
- Closeout of Buy America Audit of MSF.
- QA review of procurement document package for the Airport Guideway and Stations DB RFP.
- Resolution of four (4) major NCRs (cracked segments 1, 2, 11 and 12 of Span 17 remediation; realignment of Spans 104, 105 and 106; Drilled Shafts [Crosshole Sonic Logging Reports] quality and repairs; and Pre-Cast Segments quality and repair).
- Construction of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, etc.
- Installation and welding of rails and turnouts on top of the WOFH Guideway.
- Construction of WOFH Balanced Cantilever Segmental Span across H-1.
- Manufacturing of Carbody(s) at Ansaldo Breda and its subcontractor manufacturing facilities in Italy. First Article Inspection (FAI) of the Carbody #1 at Reggio Calabria.
- Close-out Audit of A-7 contract to include review of "Lifetime" Quality Records including NCRs, if any, and As-built Drawings.

## Buy America Compliance (Section 6.3)

### OVERVIEW and KEY ISSUES

- An interim Buy America audit was conducted on March 23-25, 2015.

## Disadvantaged Business Enterprise (Section 6.4)

### OVERVIEW

- \$24,626,953 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 5/31/15.

## Planning and Environment (Section 6.5)

### OVERVIEW

- HART's Planning and Environmental team has coordinated extensively in May with the FTA and Programmatic Agreement (PA) Signatory and Consulting Parties to anticipate and resolve issues with the near-term and future implementation of PA stipulations.

### KEY ISSUES

- HART is coordinating closely with the Navy to support the right-of-way efforts.

**Risk Management (Section 6.6)**OVERVIEW

- There are a total of 160 risks in the May 2015 risk register. There were 14 risks deleted and 1 new risk added for the month of May. Reviews were conducted for City Center Guideway, Environment and Permits, Utilities, Elevator/Escalator, Procurement/Contract Administration, and Safety & Security. Core Systems will be added to the June Report.
  - Risk deletions were a combination of risk acceptance and risk transfer through mitigation as HART plans packaging for the City Center Guideway and Stations Group Design Build.
  - Risk addition was limited to the possible escalation cost impact to the Elevator/Escalator contract due to the repackaging of the West Side Station Group into three separate packages.

KEY ISSUES

- Risks associated with the market, right-of-way, utilities and third parties remain at the top of the list of concerns.
- The construction market represents a particularly challenging situation for HART. On behalf of HART, the Mayor has been seeking additional GET funding at the legislature through an extension to cover potential capital cost overruns.
  - Construction escalation is expected to continue to be high for 2015 and 2016, as growth in island permitted work continues at a faster rate than completion of construction work.
  - HART construction contracts are a major contributor of the construction market and may contribute as much as 25% of the total construction volume (private and public) in 2015 and 2016.
- Third party actions are taking longer than expected to resolve, exposing HART's contractors to potential delay in the performance of their work unless there are work around alternatives available to minimize risk impacts to cost or schedule.
  - Navy, HECO and University of Hawai'i issues remain critical.

**Community Outreach (Section 6.7)**OVERVIEW

- HART's construction outreach focuses on communities in the heaviest work zones, including Waipahu, Pearl City and Aiea areas.

KEY ISSUES

- HART's public outreach team connects with businesses along the Kamehameha Highway corridor as part of HART's business outreach program, which is designed to provide information, workshops and resources for businesses impacted by construction.
- HART's public information team responded to more than 120 inquiries and requests in May that came in via the agency's website, email and 24-hour hotline. Inquiries this month primarily focused on construction activities, particularly traffic impacts.

**Staffing (Section 6.8)**OVERVIEW

- The Director of Design and Construction left the program in May. HART has advertised the position as a city position and is conducting interviews. Otherwise, all key positions are filled.
- A Budget Analyst has been selected and the confirmed start date is June 8, 2015.
- The Secretary position in Planning was filled on May 1, 2015.
- The Planner V position in the Planning division has been filled with a City Civil Service employee.
- HART prioritizes filling all vacancies with city employees and supplements the city staff with consultants when required and appropriate.

KEY ISSUES

- The latest organization chart is dated Jan. 14, 2015. An updated version is being developed that will reflect minor revisions and personnel changes.

6.1 Safety and Security

Key HART S&S Certification Documents Status			
Documents	Revision #	Date Approved	Comments
Safety and Security Management Plan (SSMP)	Rev 5	02/25/2015	Pending signatures and PMP update/approval
Safety and Security Certification Plan (SSCP)	Rev 4	02/25/2015	Pending signatures and PMP update/approval
WOFH SSCP	Rev 0	10/22/2014	No future updates: HART SSCP in affect
Construction Safety & Security Plan (CSSP)	Rev 2	10/22/2014	Pending signatures
Project Preliminary Hazard Analysis (PHAs)	Rev 1	6/6/2014	Rev 2 - Finalizing PHAs is on-going
Core Systems Contract (CSC) PHAs (DBOM)	Rev C	-	Received 12/15/14 – CSC updating
- Central ATC O&SHA	Rev A	-	Under Development
- Wayside ATC SSHA	Rev B	-	Received 11/14/2014 – CSC updating
- Wayside ATC O&SHA	Rev C	-	Received 4/1/2015 – CSC updating
- Wayside/ATC SHA	Rev C	-	Received 1/6/2015 – CSC updating
- SCADA O&SHA	Rev C	-	Received 03/13/2015 – CSC updating
- SCADA SSHA	Rev C	-	Received 3/10/2015 – CSC updating
- Vehicle SSHA	Rev A	-	Under development – high priority
- Vehicle O&SHA	Rev A	-	Under development – high priority
- Vehicle/ATC SSHA	Rev C	-	Received 3/24/2015 – CSC updating
- Vehicle/ATC O&SHA	Rev C	-	Received 4/23/2015 – under review
- TES SSHA	Rev A	-	Received 11/17/2014 – CSC updating
- TES O&SHA	Rev A	-	Received 5/22/2015 – CSC R&R
- PSGS O&SHA	Rev A	-	Received 12/8/2014 – CSC updating
- PSGS SSHA	Rev A	-	Received 02/2/2015 – CSC updating
- UPS O&SHA	Rev A	-	Received 4/24/2015 – under review
- Communications SSHA	Rev A	-	Under development
- Communications O&SHA	Rev A	-	Under development
- FDAS SSHA	Rev A	-	Under development
- FDAS O&SHA	Rev A	-	Under development
- MOW O&SHA	Rev A	-	Under development
Threat and Vulnerability Assessments (TVAs)			
- Project TVA	Rev 1	1/16/2015	Update once all station designs are complete

S & S Design Criteria Conformance Checklist (DCCC)			
Design Verification Status			
Contracts: DC Conformance Checklists (CEL/CILs)	% Verified	+ / - % Change	Comments:
<b>Under Construction</b>			
DB-200, MSF	99%	-	SSRC approved DCCC verification - 1/28/2015
DB-120, WOFH Guideway 38 total – Sub CEL/CIL Packages	99%	+ 1%	31 - Sub CELs/CILs, SSRC approved DCCC verification - 1/28/2015, 02/25/2015, 03/25/2015, 4/29/2015, and 5/27/2015
DB-320, KHG Guideway 39 total – Sub CEL/CIL Packages	96%	-	31 – Sub CELs/CILs, SSRC approved DCCC verification - 1/28/2015, 02/25/2015, 3/25/2015, 4/29/2015, and 5/27/2015
FD-430, Airport Utilities	100%	-	SSRC approved DCCC verification – 6/25/2014
FD-430, 7 – Shafts	90%	+ 2%	Working with designer to close the open items
<b>Under Design or in Pre-bidding Status</b>			
FD-140, West Oahu Station Group	46%	-	Designer DCCC update underway
FD-240, Farrington Hwy Station Group	30%	+ 24%	DCCC verification underway
FD-340, Kamehameha Highway Station Grp	98%	-	3 - station DCCC verification SSRC approved - 4/29/2015, 5/27/2015
DB-275, Pearl Highlands PS/Bus Transit Center	-	-	TBD - base DCCC not yet SSRC approved
FD H2R2 Ramps	96%	-	SSRC approved base DCCC - 5/27/2015
DB-xxx, Airport Guideway & Stations Grp	38%	-	On hold - contract change underway
DB-xxx, City Center Guideway & Stations Grp	-	-	On Hold - contract change underway
FD-530, City Center Utilities	-	-	On Hold - designer input is underway
FD-600, West Oahu Park & Ride	-	-	TBD - base DCCC not yet SSRC approved
DBOM-920, Core Systems			
- Traction Electrification System	-	-	Designer input underway
- Communication System	-	-	Designer input underway
- Fire Detection Alarm System	-	-	Designer input underway
- Passenger vehicle	-	-	Designer input underway – under review –initial submission
- Train Control	-	-	Designer input underway
- SCADA	-	-	Designer input underway
- Platform Screen Gate System	-	-	Designer input underway
- MOW Vehicles	-	-	Base DCCC not yet SSRC approved
- Yard systems Bungalows	64%	-	SSRC approved base DCCC - 5/27/2015
MI-930, Elevators & Escalators	-	-	Draft base DCCC under developed
Transit ART Program	-	-	Draft base DCCC under developed

S & S Construction Specification Conformance Checklists (CSCC) - Civil Contracts Specification/Testing Conformance Checklists (STCC) - Systems Contracts			
Construction - Installation - Testing Verification Status			
Contracts	% Verified	+ / - % Change	Comments
<b>Civil Contracts Under Construction – CSCC</b>			
DB-200, MSF	24%	+ 4%	Verification underway
DB-120, WOFH Guideway	28%	+ 13%	Verification underway
DB-320, KHG Guideway	4%	+ 4%	Verification underway
DBB-505, Airport Utilities	-	-	Ready for June SSRC base CSCC approval
FD-430, Airport Section, 7 - Drilled Shafts	98%	+ 21%	Verification underway
<b>Civil Contracts Still under Design or in Bidding or Pre-bidding Phases</b>			
DBB-171, West Oahu Station Group	-	-	Draft CSCC under PM/CM review
DBB-271, Farrington Hwy Station Group	-	-	Draft CSCC under PM/CM review
DBB-371, Kamehameha Hwy Stations Grp	-	-	Draft CSCC under PM/CM review
DB-275, Pearl Highlands PS/ Bus Transit Center	-	-	TBD
DBB-385, H2R2 Ramps	-	-	SSRC approved base CSCC, 5-27-2015
DB-xxx, Airport Guideway & Stations Grp	-	-	Draft CSCC in hand – on hold pending re-design
DBB-xxx, City Center Utilities	-	-	TBD
DB-xxx, City Center Guideway & D&K Stations Grp	-	-	Draft CSCC in hand – on hold pending re-design
DBB-600, West Oahu Park & Ride	-	-	TBD
MI-930, Elevators & Escalators	-	-	Base CSCC under development
Operational CEL/CILs	-	-	CEL/CILs under development
<b>Systems Contracts - STCC</b>			
DBOM-920, Core Systems			
- System Integration Testing (SIT)			Base STCC under development
- Traction Electrification System CIL	-	-	TBD
- Communication System CIL	-	-	TBD
- Fire Detection Alarm System	-	-	TBD
- Passenger vehicle Spec/testing CIL	-	-	3 - base STCCs under development
- Train Control System (TCS)	-	-	TBD
- Supervisory Control & Data Acquisition (SCADA)	-	-	TBD
- Platform Screen Gate System (PSGS)	-	-	TBD
- MOW Vehicles	-	-	Base CSCC under review
- Yard systems Bungalows	-	-	TBD

Project-Wide Incident Activity					
Event Type	Total Number of Events since 1/1/2007	Total Number of Events for May 2015	Loss Type	Date	Event Description
Environment	12	0			
Loss or Damage	19	0			
*Reportable Occupational Injury/Illness	0	0			
Security	48	5	Theft Theft Theft Theft Theft	a) 5/4/2015 b) 5/11/2015 c) 5/16/2015 d) 5/19/2015 e) 5/25/2015	a) WOFH - Burglary of conex boxes. b) Airport - Equipment container broken into and attempted theft of company truck. c) KHG - Theft at American Electric conex box. d) WOFH - Stolen tools and materials from multiple conex boxes. e) KHG - Two trailers were broken into and power tools were stolen along with a welder.
**Loss Time Occupational Injury/Illness	6	0			
Road/Vehicle - Driving	63	5	Minor Damage Minor Damage Minor Damage Minor Damage Minor Damage	a) 5/1/2015 b) 5/8/2015 c) 5/11/2015 d) 5/24/2015 e) 5/29/2015	a) KHG - Citizen blew out tire while driving over contractor hose. b) MSF - KKJV forklift operator struck subcontractor's water truck tail light. c) WOFH - Crane operator turned crane and struck and scratched a 150W generator. d) KHG - Crane contacted a light bracket on an overhead sign fixture. e) WOFH - Citizen ran into the back of a Kiewit truck stopped at a traffic light.
Service Strike	44	7	Minor Damage Minor Damage Minor Damage Minor Damage Minor Damage Significant Damage	a) 5/7/2015 b) 5/7/2015 c) 5/12/2015 d) 5/14/2015 e) 5/19/2014 f) 5/20/2015 g) 5/27/2015	a) KHG - Excavator struck unknown direct buried interconnection line. b) KHG - Contractor struck a buried gas line. c) Airport - An abandoned concrete pipe was struck. d) Airport - Contractor backed a cone truck into Special Duty Officer's vehicle. e) WOFH - 2-inch unmarked Hawaiian Tel conduit was struck. f) Airport - Contractor struck and broke a concrete jacket around an unknown pipe. g) KHG - Contractor struck Hawaiian Tel phone line causing a service outage.
*Reportable incidents: Requires OSHA to be notified within 8 hours, and includes the death of an employee or hospitalization of three or more employees.					
**Loss Time Injury: Time away from work due to injury.					

	Jan. 2015			Feb. 2015			Mar. 2015			Apr. 2015			May 2015		
	Hours Work	No. of Recordables	No. of Lost Time Cases	Hours Work	No. of Recordables	No. of Lost Time Cases	Hours Work	No. of Recordables	No. of Lost Time Cases	Hours Work	No. of Recordables	No. of Lost Time Cases	Hours Work	No. of Recordables	No. of Lost Time Cases
Totals*	397	0	0	2759.5	0	0	2783	0	0	1174.5	0	0	8	0	0

\*Data for DBB-525 Airport Section Guideway Seven Pier Construction contract

## 6.2 Quality Management

### • Overview

- The HART QMP and HART-approved QAPs of contractors, consultants and suppliers have been assimilated by their respective employees and are being implemented as standard operating procedures. Therefore, less Nonconformance Reports (NCR) are reported or encountered.
- Review and approve contractors, consultants and suppliers new and updated QAPs including Inspection and Test Plans (ITP).
- Conducted biweekly Quality Task Force (QTF) meetings with CE&I, contractors and consultants QA teams to discuss the status of: design and construction activities; procurement activities; inspection and testing; NCRs; Corrective Actions (CARs) and Preventative Actions (PARs); quality compliance; various process improvements; quality economics, and Buy America compliance.
- Participated in Pre-Activity Meeting for scheduled construction activities: MSF (Fire Protection, Contact Rail Installation, and Metal Wall Panels [Source and First Article Inspection]; KHG (Signal Pole Foundation); and CSC (Yard TPSS and Cabricks PSIT).
- Perform Management System Audits (QA, Environmental and Buy America); 2015 Combined Management System Audit Schedule as shown below:



HONOLULU AUTHORITY for RAPID TRANSPORTATION

## COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: 2015 Rev 6

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
CCH-100	Honolulu Authority for Rapid Transportation (HART)	HART	15-009 QA	8/24 - 9/04		
	Honolulu Authority for Rapid Transportation (HART) -Security & Safety Only		15-009 SS	8/24 - 9/04		
CT-HRT-10HO137	West O'ahu/Farrington Highway Guideway Design-Build (WOFH)	KIWC - HI	15-001 QA	2/17 - 2/19	2/17 - 2/18	4/17/15
CT-HRT-11HO195	Kamehameha Highway Guideway Design-Build (KHG)		15-001 BA	2/17 - 2/19	2/17 - 2/18	4/17/15
CH-HRT-10HO449	Maintenance and Storage Facility Design-Build (MSF)	KKJV - HI	15-003 QA	2/25 - 2/26	2/25 - 2/26	4/14/15
			15-003 BA	2/25 - 2/26	2/25 - 2/26	
CT-HRT-11HO195	WOFH-KHG Casting Yard	KIWC - HI	15-011	7/15 - 7/16		
CT-HRT-10HO137	WOFH, KHG, MSF) Audit Surveying and Alignments	KIWC/KKJV - HI	15-013	8/19 - 8/20		
CT-HRT-1200106	Core Systems Contract (CSC) Design-Build-Operate-Maintain	ASTS Italy	TBD	TBD		
		AB Italy	TBD	TBD		
		AB USA	TBD	TBD		
CT-HRT-1200106	Core Systems Contract (CSC)	AHJV - HI	15-010	6/25 - 6/26		
SC-HRT-1200116	West O'ahu Station Group Final Design (WOSG)	AECOM - HI	15-005	3/18 - 3/19	3/18 - 3/19	5/18/15
FD-245	Pearl Highlands Parking Structure/Bus Transit Center Final Design	TBD	TBD	TBD		



HONOLULU AUTHORITY for RAPID TRANSPORTATION

## COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: **2015** Rev 6

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
SC-HRT-1200111	Kamehameha Highway Station Group Final Design (KHSG) PH, PR, AS	AVA - HI	15-002	6/3 - 6/04		
		AVA - CA				
SC-HRT-1200111	H2R2 Final Design	AVA - HI	15-004	1/28	1/28	2/3
		AVA - CA				
SC-HRT- 1200038	Airport Section Utilities and Guideway Final Design (AUG)	AECOM - HI	15-008	TBD		
SC-HRT- 1300022	Airport Station Group Final Design (ASG)	AECOM - HI				
SC-HRT-1200149	City Center Section Utilities and Guideway Final Design (CCUG)	AECOM - HI	TBD	TBD		
SC-HRT-1400003	Dillingham and Kaka'ako Station Groups "East Side Stations" Final Design (DKSG)	PERKINS+WILL - SEA	TBD	TBD		
SC-HRT-1400049	CSC Support Services	L + E	15-016	11/23 - 11/24		
FD-600	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes Final Design	TBD	TBD	TBD		
DBB-275	Pearl Highlands Parking Structure/Bus Transit Center Construction	TBD	TBD	TBD		
DBB-	H2R2 Ramp Construction	TBD	TBD	TBD		
DBB-	West Oahu Station Group Construction	TBD	TBD	TBD		
DBB-	Farrington Hi-way Station Group Construction	TBD	TBD	TBD		



HONOLULU AUTHORITY for RAPID TRANSPORTATION

## COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: **2015** Rev 6

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
DBB-	Kamehameha Hi-way Station Group Construction	TBD	TBD	TBD		
SC-HRT-1200038	Airport Section Utilities Construction	NAN, Inc	15-012	8/05 - 8/06		
CT-HTR-1500080	Airport Section Guideway Seven Pier Construction	HDCC/CJA JV	15-006 QA	3/11	3/11 - 3/24	3/31/15
			15-006 BA	3/11	3/11 - 3/24	3/31/15
DB-	Airport Section Guideway and Stations	TBD	TBD	TBD		
DB-	City Center Section Guideway and Stations	TBD	TBD	TBD		
DBB-600	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes Construction	TBD	TBD	TBD		
CT-HRT-1300318	Elevator and Escalator - Manufacture, Install and Maintain	US Schindler - HI	15-015	9/9 - 9/10		
		US Schindler - NJ				
SC-HRT-1400050	West O'ahu, Farrington Highway, and Kamehameha Highway Station Groups "West Side Stations" CE&I	PGH Wong - HI	15-014	9/16 - 9/17		
	Pearl Highlands Parking Structure/Bus Transit Center CE&I		TBD	TBD		
	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes CE&I		TBD	TBD		
TBD	CE&I East	TBD	TBD	TBD		
SC-HRT-1400027	General Engineering Consultant III for Final Design and Construction (GEC III)	CH2M Hill	15-007	5/20 - 5/21	5/20 - 5/21	

• **Key Issues**

HART NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
<b>32 (Audits)</b>	<b>32</b>	<b>0</b>
<b>1 (Construction)</b>	<b>1</b>	<b>0</b>

- Updating, reviewing and approval of appropriate HART Project Baseline Plans and Procedures due to new policies, re-organization, process improvement and lessons learned from the internal audits. Upon approval of revised plans and procedures, training of HART employees must be performed in order to assure competency and proficiency.
- Closing of QA audits performed, including NCRs and Observations in order to prevent recurrence and occurrence, respectively. See HART NCR Log above.

- Resolution of four (4) major NCRs on the DB Contracts (WOFH and KHG) that need to be addressed and corrected to prevent recurrence and mitigate impact on the overall progress of the project. The following are the major NCRs identified on the DB Contracts:
  - **Drilled Shafts:** To date, there are 29 Open NCRs on WOFH and 15 NCRs on KHG, which are related to CSL Report. The contract requires that deep foundation elements (drilled shafts) integrity must be tested in accordance with ASTM D6760-14 Standard Test Method for Integrity Testing of Deep Foundations by Ultrasonic Crosshole Testing and HART will determine the final acceptance of each shaft based on the crosshole sonic log (CSL) report, which includes: test result, drilled shaft installation information, and analysis for the tested shaft. The evaluation of testing results will be based on the percentage decrease in velocity as correlated to the Concrete Condition Rating Criteria detailed in specification Section 31 63 30 G. If the test results do not meet the allowable requirements, a minimum 2-3-inch diameter cores per shaft will be performed by KIWC to intercept the suspected or defective zones. The disposition and corrective actions will be agreed with KIWC EOR and HART. Closing of NCRs related to the drilled shafts is a prerequisite for the construction of transition zone and the columns. Therefore, it is a QA Hold Point. To date, there are 211 and 26 drilled shafts completed on WOFH and KHG, respectively.
  - **Span 17 – NCR 00314:** The procedure for lowering a heavier and wider span was not followed during the setting of the span to the columns. The result of the error was cracked segments 17-1, 17-2, 17-11 and 17-12. KIWC is currently evaluating the damages, disposition and the proposed corrective actions. HART has requested a Remedial Plan from KIWC.
  - **Span 105 – NCR 00336:** During the setting of Span 105 to its final position, the span shifted out of alignment and made contact with adjacent Spans 104 and 106 on both ends. KIWC is currently evaluating the root cause and corrective actions to prevent recurrence.
  - **Pre-Cast Segments:** To date, there are 22 Open NCRs, out of 2,783 segments that have been cast to date on WOFH. The descriptions of the NCRs are: shear keys broken, concrete voids, concrete spalls, inserts, and drain location. These NCRs may be fixed at the Casting Yard or during the erection process at the construction site.
- QA audit of KHSG Final Design on June 3-4, 2015, and prior to issuance for bid solicitation.
- QA review of Airport Guideway and Station Group procurement documents prior to issuance of DB RFP.
- Construction of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, etc.
- Construction of Balanced Cantilever Segmented Span across H-1.
- Timely closeout of contractors, consultants and suppliers open NCRs.
- Passenger Vehicle: Carbody(s) manufacturing in Ansaldo Breda's and subcontractor facilities in Italy.

### 6.3 Buy America Compliance (49 CFR 661 and 49 CFR 663)

- **Interim Buy America Audit**
  - An Interim Buy America audit was conducted by Raul v. Bravo + Associates, Inc., who has subject matter expertise in Buy America audits, March 23-25, 2015.
- **Utilities**
  - HART has entered into construction agreements with the following utility companies, under which each of the listed utility company has signed the Buy America compliance certification:
    - Hawaiian Electric Company
    - Oceanic
    - Hawaiian Telcom
    - Hawai'iGAS
    - Hawaii Independent Energy (formerly Tesoro)
- **Look Ahead**
  - Will provide updates on any new construction agreements HART enters into with a utility company.

### 6.4 Disadvantaged Business Enterprise (DBE)

- **Activities this month**

- \$24,626,953 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 5/31/15
  - 6.08% = DBE utilization on total disbursed FTA funds received to date (\$24,626,953 divided by \$405,230,515)
  - 1.40% = DBE utilization to date on total Project FTA funds (\$24,626,953 divided by \$1,763,903,901)

*Total DBE Participation = \$24.6M  
(previous report = \$21.9M)*

Figure 17. DBE Participation this Month

DBE Participation in May		
DBE Firm	Contract Number	Participation
Lawson & Associates	SC-HRT-1400061 MM-964	\$51,586
ADS System Safety Consulting	SC-HRT-1400061 MM-964	\$88,599
LKG-CMC	SC-HRT-1400049 MM-962	\$11,354
Anil Verma Associates, Inc.	SC-HRT-1200111 FD-340	\$22,248
Dovetail Consulting	MOU-11-SO-1 MM-930	\$709,497
AMR Estimating Services	SC-HRT-1400027 MM-913	\$46,075
The Solis Group	SC-HRT-1400027 MM-913	\$71,870
PAC Electric Inc.	CT-HRT-10H0137 DB-120	\$1,657,684
PSC Consultants	SC-HRT-1400050 MM-290	\$19,179
Element Environmental	SC-HRT-1400050 MM-290	\$49,770
Bow Construction	SC-HRT-1400050 MM-290	\$421
<b>TOTAL FOR THE MONTH</b>		<b>\$2,728,283</b>

Note: For a full listing of DBE participation to date, please see Appendix F.

### 6.5 Planning and Environment

- **Activities this month**

- Programmatic Agreement Activities:
  - HART participated in the Kāko’o Meeting with Programmatic Agreement Signatory and Consulting Parties on May 21, 2015.
  - HART’s Programmatic Agreement (PA) team met with SHPD on May 5, 2015, as part of ongoing consultation with the division.
- Planning, Environmental, and Cultural Activities:
  - HART hosted a meeting with the Project’s recognized cultural descendants on May 6, 2015.
  - HART provided an update to the O’ahu Island Burial Council (OIBC) on May 13, 2015.
  - HART continues to work with SHPD to seek concurrence on all HRS 6E related issues.
  - HART has submitted Post-ROD documentation for the Middle Street Station and Emergency Backup Generators to the FTA for review and is awaiting comments for finalization.
  - HART continues to coordinate with the City and County of Honolulu, Hawai’i Community Development Authority, and other State agencies and legislators on transit-oriented development.

- HART continues to work with the City Department of Parks and Recreation and community stakeholders to relocate trees which are affected by rail project construction. About 10 trees were relocated into Neal Blaisdell Park, Central Oahu Regional Park, and the Waiau District Park, and other trees were planted at Aloha Stadium as mitigation.
  - HART submitted the Quarterly Mitigation Report for the First Quarter of 2015 to FTA and PMOC.
  - Revision 1 of the Mitigation Monitoring Program (MMP) was completed and is under review. The revised MMP will be distributed to existing contractors and included in upcoming bid documents upon final approval.
- **Looking Ahead**
    - Ongoing coordination with DTS to ensure consistent planning of seamless bus and rail services focusing on rail's interim opening date.
    - Conduct regular monthly HART/SHPD consultation meetings.
    - Attend monthly scheduled Kāko'o Meetings with Programmatic Agreement Signatory and Consulting Parties.
    - Continue resolution of Post-ROD documentation.
    - Continue coordination with DPP and HCDA regarding transit-oriented development.

## 6.6 Risk Management

The primary strategy of risk management is to maintain a reserved contingency balance throughout the life of the Project that is acceptable to HART and the FTA. Effective management of project risks is necessary to significantly increase the likelihood of delivering a successful project. Risk management is the systematic process of identifying, analyzing, and responding to risk in a timely manner. Risk management is integral to all phases leading up to revenue service opening including: planning, design, construction, systems testing, system operation start up, safety and security certification, and ultimately to project construction closeout. Risk assessments are performed to identify, assess, prioritize, manage and mitigate risk exposure, and develop prudent contingency plans. The Project Risk Register (RR) is the depository for all risks identified for the Project. Every month, risks contained in the RR are reviewed to confirm risks are appropriately identified, identify new risks, and close out risks that no longer pose an issue.

Maintaining the RR includes assessing the potential for a risk to happen as well as the cost and schedule impacts should the risk occur in isolation. The cost and time impacts to the Project are assessed based on a "most likely scenario" rather than the maximum or the minimum impact. Not all risks (known and unknown) will occur with the same frequency or probability as estimated in isolation. In addition, risks can be eliminated due to design best practices as well as through the implementation of safe alternative means and methods of construction to avoid the occurrence.

This report includes a listing of the top project wide risks which is an aggregate of the individual contract risks. Key metrics for probability of occurrence and cost and schedule impacts are subject to change as more is learned about the risks. At the same time, HART is implementing mitigation of avoidance, transfer, and acceptance/minimization.

### **NOTES OF SIGNIFICANCE**

- Corrective actions are underway to improve cost estimates and forecasting methods as well as cost containment measures being implemented and evaluated to more accurately reflect budget and market conditions.
- Additional focus is being placed on Hawaiian Electric Co. coordination and issue resolution.
- Airport and City Center Traffic Management Plans are being evaluated to determine additional measures that can be put in place relative to construction sequencing plan scenario developed by HART.

### **ADDITIONAL BACKGROUND** (Dates indicated as shown are target goals)

The narrative below provides additional background on the mitigation actions being taken to control and contain cost and schedule impacts to the Project. Provided below are the risk category, target date, and specific actions being taken. Based on the effectiveness of the mitigation efforts, more actions may be required to further contain cost and schedule impacts in future months. The major risks covered are: A) Market Conditions, B) Utilities, C) Right-of-Way, D) Contractor Production, and E) U.S. Navy Property.

**A) Market Conditions** – The construction market in Hawai'i is similar to the conditions experienced in 2005-07. There is significant investment in private development. The year 2015 is expected to set a new record for construction in the state. Backlog is still growing with permit volumes exceeding construction tax revenues by 20%. This translates to increased escalation of about 1% per month for late 2014 and through 2016, according to the Rider Levett Bucknall, Quarterly Construction Cost Report. The escalation from FFGA budget approval in May 2012 through December 2014 is 18.7%. These are extraordinary conditions and not sustainable long term. It is not known when outside investors will slow their rate of investment into the local economy. These conditions will affect the craft labor experience which will in turn affect contractor productivity rates.

Mitigation Plan:

- Seek Construction Industry feedback regarding market conditions, trends and future outlook to inform Delivery and Procurement Plan. **Action: Ongoing industry forums.**
- Refine list of primary and secondary mitigation measures. **Action:**
  - **Finalize recommendations for primary and secondary mitigation measures and submit to Project Director for Action. – Date: TBD.**
- Identify opportunities within project scope for alternative funding sources. **Actions:**
  - **Reach agreement on possible HDOT betterment projects to funding of utility, widening, ITS and Intersection Improvements. – Date: TBD.**
  - **Research State Law relative to Public Private Partnership funding relative to TOD and parking opportunities. – Date: June 2015.**
- Seek additional GET extension of funding to close the gap for market conditions and delay beyond HART's control. **Actions: Legislature voted to approve GET for five years at 5%. Remaining action is with the Governor and City Council for enactment.**
  - **Work with Board, City/County Honolulu and respond to frequently asked questions as needed. – Ongoing.**

**B) Utilities** – Utilities continue to be an issue for the project. Coordination with HECO indicates that both HART and HECO have significant program demands on their respective organizations.

Mitigation Plan:

- Resources to relocate HECO facilities are not readily available. HART is subject to availability of resources and schedules are frequently set for relocation contractors to be deployed on other islands. This has had an impact on cost and schedule. **Actions:**
  - **Seek commitment from HECO (senior, mid and front line management) to dedicate adequate resources for relocation work, design work to ensure opening. – Date: May 6<sup>th</sup> meeting held. Executives agree to continue to meet weekly until decisions are made.**
  - **Revise Utility Agreements accordingly. – Date: TBD.**
- Site specific solutions with respect to the 138kV, 46kV and 12kV vertical and horizontal clearance need to be agreed upon by Hawaiian Electric and HART. Affected contracts are KHG, Airport Guideway and City Center Guideway. **Action:**
  - **Secure DB Guideway design, define and evaluate relocation options due to horizontal and vertical conflict resolution needs with HECO. – Date: July 2015.**
- Weatherhead to weatherhead service connections are in violation of current code. The corrections required to remedy code violations are much more extensive than estimated at the time of FFGA. The cure is site specific requiring significant data collection and consultation with HECO. Cost impacts to correct the code violation condition could create additional costs (i.e. 100-150 services for \$10-15K per hook up) for HART not included in the FFGA and also require additional construction property easements to access sites. **Action:**
  - **Coordinate design and construction requirements with HECO, HART designer and Right-of-Way to resolve issues for each site. – Airport - Complete, City Center – June 2015.**

**C) Right-of-Way** – There are a few parcels on the east and west segments that are still under active procurement. Lack of access by the contractor has been partially mitigated through re-sequencing the work.

Mitigation Plan:

- West property transactions have been elevated.
- East Side – there are a number of third-party agreements needed on the Airport Section and private parcels on the City Center Section. The revised Delivery and Procurement Plan takes into account the Right-of-Way Acquisition Plan. Cost to Cure property contacts will take time to work through with owners and tenants for the 16-22 parcels. **Action:**
  - **Implement property acquisition plan. Develop risk mitigation plan should there be parcels that are not likely to be secured by August 2015 with information available to other Departments in advance. – Date: June 2015.**

**D) Contractor Production** – Planned production rates are not being met for a variety of reasons. There is risk exposure to HART in the form of delayed access to third-party properties. The contractor has been asked to submit schedules reflective of its current production rates for review.

Mitigation Plan:

- HART and the Contractor are focused on solving the production issues within their respective responsibilities. HART requested the Contractor to provide a recovery schedule in accordance with contractor provisions. HART has evaluated the schedule and requested the contractor resubmit the revised recovery schedule to be used as a revised schedule. HART and the Contractor will use contract provisions to guide the process for resolution of contract delays. **Action:**
  - **Provide Recovery Plan and initiate implementation of the plan upon approval. – Date: TBD.**
    - **Contractor is implementing mitigation measures to avoid additional delay such as adding another traveler and additional equipment for column pours.**

**E) U.S. Navy Property** – There are a number of property easements required for site access. These properties have an impact to construction in the Airport Section. The Pearl Harbor Station is also affected. A certain level of delay was expected due to the extensive coordination required. It is apparent the approvals required are not moving as quickly as HART was anticipating.

Mitigation Plan:

- Efforts to accelerate the process are underway through an increased number of meetings with the Navy at various levels to attempt to educate, learn and communicate at the multiple levels within each Agency. **Actions:**
  - **Elevate coordination with Navy for Pearl Harbor Station for schedule coordination and certainty of clearance by July. – Date: mid-July 2015.**
  - **Meet and resolve technical issues relating to Navy approvals of property access. – Date: Mar. 2015 and ongoing.**

*Note: Risks by Contract Package and a Comparison of Risk Ratings can be found in Appendix G.*

Figure 18. Risk Matrix

Risk Matrix					
Legend	Low (1)	Med (2)	High (3)	Very High (4)	Significant (5)
Probability	< 10%	10><50%	> 50%	75%><90%	>90%
Cost	< \$250K	\$250K><\$1M	\$1M><\$3M	\$3M><\$10M	>\$10M
Schedule	< 1 Mths	1 ><3 Mths	3><6 Mths	6><12 Mths	> 12 Mths
Rating	<=3	3.1-9.49	>=10.5		

The risk matrix is used to score and rank identified risks. The rating is the average cost and schedule impact score multiplied by the probability score.

Figure 19. Top Project Risks

Top Risks May 2015								
Current Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	May '15 Risk Rating	Apr. '15 Risk Rating
111.05	Airport Guideway	Estimates for remaining guideway contracts may be low compared to current market conditions.	90%	5	5	4	22.5	22.5
111.06	City Center Guideway	Estimates for remaining guideway contracts may be low due to adjustments using pricing from WOFH Bid.	90%	5	5	4	22.5	22.5
36.06	City Center Guideway	Cost exposure from unexpected utility replacements and/or relocations.	75%	4	5	4	18	7.0
65.06	City Center Guideway	The relocation of the 138 kv overhead power lines may require new lines erected to provide redundancy during the 'outage.' (Temporary diversion of the 138kv line may be required if grid capacity is insufficient.)	75%	4	5	4	18	18
110.06	City Center Guideway	Real Estate market could rebound before purchase of all needed properties, greatly increasing cost of property and delaying construction if legal actions are pursued.	75%	4	5	4	18	18
6.04	Kamehameha Highway Guideway	Insufficient utility company resources available to meet the design, approvals, and/or construction schedule.	75%	4	5	3	16	16
6.06	City Center Guideway	Insufficient utility company resources available to meet the design, approvals, and/or construction schedule. (Dillingham bottleneck)	75%	4	4	4	16	8
20.03	West Oahu/Farrington Highway Guideway	Late delivery of/or acceptance of civils, stations, or systems interface to guideway results in change orders.	90%	5	3	3	15	15
16.03	West Oahu/Farrington Highway Guideway	Permits and approvals by other agencies may not be provided in a timely manner and delay the project.	75%	4	4	3	14	14
83.06	City Center Guideway	Delay of utility easement identification for City Center Guideway may result in a delay of ROW acquisition and ultimately the start of construction.	75%	4	4	3	14	14
106.13	Airport Station Group	ROW acquisition at Pearl Harbor may take longer due to Navy NEPA/Section 106 process requirements.	75%	4	3	4	14	14
129.13	Airport Station Group	Pearl Harbor Station - Potential delays due to community actions concerning historical Pearl Harbor site.	75%	4	2	5	14	14

Risks are placed in order based on highest risk rating for the month. The Top Risks list represents risks that could have a major impact on the Project and require additional focus by management. There are other high rated risks that are not listed and are also in the process of being mitigated.

Figure 20. Risks Added

Risks Added in May 2015							
Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	Risk Rating
184.17	Elevator/ Escalator	There is a potential for cost escalation for delay of manufacturing and installing elevator/escalator due to reprourement of West Side Stations.	50%	2	1	0	1

Figure 21. Risks Deleted

Risks Deleted in May 2015					
Current Risk ID	Contract Package	Risk Description	Comments	Risk Rating	
				May '15	Apr '15
20.08	Core Systems Contract	Delays in access milestones of stations, or guideway interfaces to systems results in delays to core systems contractor substantial completion milestones.	HART has accepted the risk and is processing a change order.	22.5	22.5
59.06	City Center Guideway	Alignment change could impact ROW requirements not included in estimate, schedule or EIS.	HART will be prescriptive with the alignment to avoid re-opening the NEPA process.	12	12
35.06	City Center Guideway	Due to court delays, limited geotechnical information available at PE level. Additional costs for redesign may be incurred.	For the remaining few sites where geotech data was not collected, the risk is being transferred to the DB contractor and it will be apparent to bidders.	10.5	10.5
75.06	City Center Guideway	Delay to obtain property access for designers to perform preconstruction work impacts design quality and construction pricing.	Risk transfer to DB contractor. There are some past complications with permit of entry verses easement that are complicating agreement to all designers to access to some properties.	9	9
64.06	City Center Guideway	Assumption is water mains will be relocated around columns by addition of bends; this may not be allowed by BWS.	This risk is being transferred to the DB Contractor. AECOM sent information to BWS in November. No response yet. AECOM to follow up prior to NTP for their design.	7.5	7.5
4.06	City Center Guideway	Additional costs may arise through complicated stations and guideway integration.	Risk is being transferred to DB contractor to coordinate this design and construction interface.	6	6
7.06	City Center Guideway	More fiber optic cable lines than estimated may need to be relocated (number and type of cables in ducts to be relocated not known).	This risk is no longer likely as a result of additional data collection. Going forward, it will be treated as an unforeseen condition.	6	6
115.06	City Center Guideway	DKSG design schedule is lagging and may require redesign of guideway.	Risk transfer to DB Contractor to manage the entire design of guideway and stations.	6	6
169.06	City Center Guideway	Contractor laydown area limitation and/or conflicts on the East Segment may drive up bid prices.	Risk to be transferred to the DB contractor. HART may get involved with environmental clearance or be able to offer vacant parcels to the contractor for use.	6	6
17.05	Airport Guideway	Project design changes not covered in the FEIS may result in a need for additional environmental documentation and FTA review.	HART is taking a prescriptive approach with line and grade of the guideway. Therefore, the issue may be isolated to laydown areas.	5	5
17.06	City Center Guideway	Project design changes not covered in the FEIS may result in a need for additional environmental documentation and FTA review.	Eliminate duplicate with 59.06.	4	4
33.06	City Center Guideway	HART/CSC may require changes to design resulting in formal change orders.	Risk is being transferred to CSC contractor and minimize delays to the fixed facility contractors.	4	4
20.06	City Center Guideway	Late delivery of/ or acceptance of civils, structural or guideway contracts may delay systems installations.	Risk transfer to the DB contractor through partial access dates.	3.5	3.5
117.06	City Center Guideway	Underground obstruction delays pier/bent installation.	Risk is being transferred to the DB Contractor. Geotech boring conducted in most all column locations.	3	3

**6.7 Community Outreach**

**• Activities this month**

- With construction in the Kamehameha Highway corridor of Aiea and Pearl City in full swing, HART’s public outreach and communications team participated in several events to provide updated information on the project’s construction work, including presentations at a town hall meeting focused on transportation sponsored by the area’s lawmakers, in addition to several Neighborhood Board meetings.
- Providing accurate information to the public is essential to increasing awareness and understanding. HART’s outreach team launched an online feature designed to debunk rumors and misinformation — and provide accurate information about the project and its finances. “Myth Busters: Get the Rail Facts” was launched this month on the project website and via social media.

**• Construction Outreach**

- HART’s public outreach team also canvassed the Kamehameha Highway corridor in partnership with contractor Kiewit, to listen to concerns and feedback from businesses impacted by the project’s construction work. The one-on-one canvassing efforts also provided businesses with information about the next HART Business Alliance meetings, scheduled for June. HART’s Business Alliance meetings provide businesses with information and construction schedules specific to their areas, and include free workshops and resources for businesses of all sizes to help them successfully navigate the construction process.
- Traffic during construction is one of the top community concerns. Working with feedback received from the community regarding graduation season, HART worked with Kiewit to adjust work schedules and lane closures. HART continued to provide regular traffic updates to the media, issued weekly press releases, posted key traffic updates on its website and via social media, and included traffic updates in its weekly eBlasts.

*To date, HART’s outreach team has participated in:*

- 1,801 presentations and events
- 987 Neighborhood Board meetings

Figure 22. HART participated in several outreach events this month, including a session on transit-oriented development.



HART’s public outreach team participated in the Department of Planning and Permitting’s transit-oriented development workshop.

Figure 23. HART provided project information and answered questions at several Neighborhood Board meetings this month.



HART provided a project update and answered questions about rail construction work at the Nanakuli Neighborhood Board meeting this month.

**• Community Input**

- HART’s public information team responded to more than 120 inquiries and requests in May that came in via the agency’s website, email and 24-hour hotline. Inquiries this month primarily focused on construction activities, particularly traffic impacts.

• **Look Ahead**

Coming in June:

- HART’s Business Alliance, which includes representatives from businesses along the route, meets to discuss upcoming construction work and programs to assist businesses during the construction period.
- In anticipation of work moving into urban Honolulu, HART’s outreach team continues meeting with businesses in the Dillingham and urban core area of the 20-mile route.
- HART provides media with a tour of construction work at the Rail Operations Center, which is nearing completion.

**6.8 Staffing**

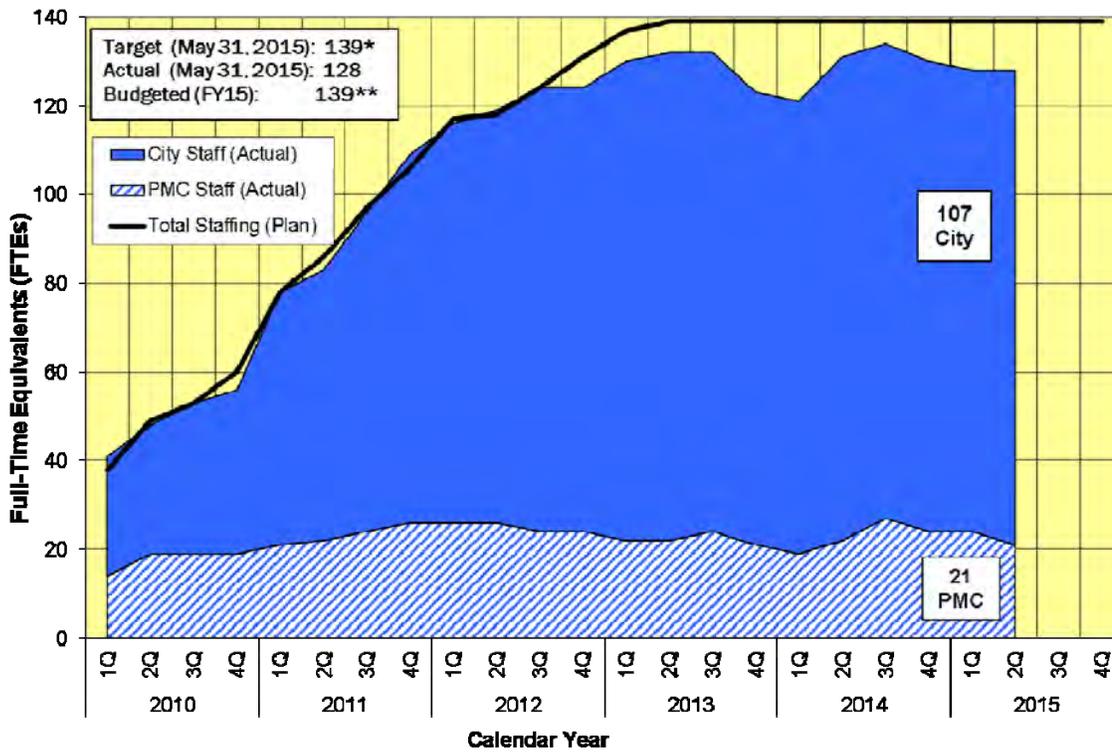
Figure 24. Staffing Activities

Staffing Activities				
Title	Group	New/Existing HART position (City or PMC)	Position Status	Start Month
<b>Executive Management</b>				
Senior Clerk (Receptionist)	Executive Management	Existing (City)	Recruiting via Civil Service	
<b>Design and Construction</b>				
Director of Design & Construction	Design & Construction	Existing (City)	Recruiting/Interviewing	
Assistant Project Manager	Construction (KHG)	New (City)	Recruiting	
Assistant Project Manager	Construction (WOFH)	New (City)	Recruiting	
Traffic Engineer	Utilities & Traffic Engineering	New (City)	Recruiting	
<b>Budget and Finance</b>				
Budget Analyst	Budget and Finance	New (City)	Selected/Processing	Jun
Secretary	Budget and Finance	Existing (City)	Recruiting	
<b>Procurement</b>				
Deputy Director of Procurement & Contracts	Procurement & Contracts	Existing (City)	Recruiting/Interviewing	
Contracts Officer	Procurement & Contracts	Existing (City)	Recruiting via Civil Service	
<b>Planning, Permits &amp; Right-of-Way</b>				
Planner V (Land Use)	Planning	Existing (City)	Selected - Civil Service	Jul
Planner III* (Environmental)	Planning	Existing (City)	Recruiting	
Planner VI* (Permits /Hazmat)	Planning	Existing (City)	Recruiting	
Secretary I	Right-of-Way	Existing (City)	Selected/Processing	Jul
Secretary I	Planning	Existing (City)	Filled	May
<b>Administrative Services</b>				
Personnel Clerk	Administrative Services	New (City)	Recruiting via Civil Service	

\*Actual hiring level will be commensurate with candidate’s qualifications.

HART currently receives direct project support in centralized functions from the following city departments: Honolulu Police Department (HPD), Department of Information Technology (DIT), Department of Budget and Fiscal Services (BFS), Department of Design and Construction (DDC), Corporation Counsel (COR) and Department of Human Resources (DHR); and from the State of Hawai’i Department of Transportation (HDOT) on Consultant Services Contracts.

Figure 25. Project Staffing (Actual vs. Planned)



\* In accordance with Staffing and Succession Plan Rev 5 (Under Revision)  
 \*\* 139 City positions authorized in FY 2015 HART Operating Budget

The actual number of employees reflects employees hired during this period as well as employees who left the project from both HART and the PMC staffs.

Note: For a project organization chart, see Appendix H.

# APPENDICES

## Appendix A. Action Items

The following are Action Items for HART and/or the PMOC, which are reviewed and discussed on a monthly basis.

Action Items						
Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Provide information and resolution on HECO's 50-foot offset requirement	HART	Mar-14	On-Going		On-going – Boom truck equipment was delivered in September 2014 and field testing began in October 2014. HECO evaluating site specific locations where truck may not fully address their requested clearance. HART provided a letter to HECO regarding the lease arrangement of the item. HART & HECO continue to meet on issue.
2	Resolve issue with AHJV regarding cost savings associated with change to 4-car trains	HART	Mar-14	Jun-15		Open – on-going
3	Resolve HECO issue with Davis-Bacon requirements	HART/FTA	Mar-14	On-going		Open – HECO waiver is pending. HART provided MOU to PMOC.
4	<b>Updates resulting from Risk Refresh:</b>					
4a	Update the Contract Packaging Plan	HART	Aug-14	Apr-15		In progress – Draft under review by PMOC.
4b	Re-baseline Financial Plan	HART	Apr-14	July-15		In progress.
4c	Re-baseline budget	HART	Apr-14	Jun-15		In progress.
4d	Re-baseline MPS	HART	Apr-14	Jun-15		In progress.
4f	Update RCMP (including Hold Points and Secondary Mitigation Measures)	HART	Sept-13	Jun-15		In progress – Draft under review by PMOC.
5	Prepare a Decision Matrix to track key milestone events	HART	Jan- 15	Apr-15	Apr-15	Complete
6	Track Cost Containment measures each month at the Cost Containment workshops to evaluate/measure proposed cost containment measures	HART	Jan-15	Apr-15	Apr-15	Complete
7	Prepare a Vehicle Status Chart to track the production status of all 80 rail transit vehicles	HART	Jan-15	Apr-15	Apr-15	Complete
8	Provide confirmation of the status of the approval of the Interstate Access Management Report (activity includes HDOT/FHWA action)	HART	Jan- 15	Prior to receipt of Bid	Apr-15	Complete
9	MPS Workshop	HART/ PMOC	Feb-15	TBD		To be scheduled when Preliminary Update of MPS is available.
10	Draft Project Management Plan	HART	Mar-15	Apr-15		Draft to PMOC before the April 2015 Quarterly Meeting.
11	Include construction safety statistics in the HART Monthly Report	HART	Apr-15	May-15		
12	Provide OP 54 (Readiness for Revenue Operations) checklist/roadmap	FTA/PMOC	Apr-15	Jun-15		

## Appendix B. Project Contingency Management General Background and Clarifications

The FFGA Baseline Budget for Project Contingency is approximately \$643.6M and consists of the following elements:

- 1) Unallocated Contingency – Reserve contingency to address unknown changes to the Project and not currently allocated to a particular work package.
- 2) Project Allocated Contingency – Contingency allocated to each work package to address potential uncertain changes within each respective work package.
- 3) Allowance – A reserve designated for Final Design contracts and committed under the contracts.

*Current Contingency Balance = \$510.4M*

*Current Known Changes Contingency = \$0M*

The \$643.6M Baseline Budget for Total Project Contingency does not include amounts for Known Changes yet to be finalized at the time the Bottom-Up Estimate (BUE) was prepared.

As the project progresses, budget transfers will be executed, moving budgeted project scope and budgeted contingencies as appropriate to reflect either a realized cost savings, cost overruns, or a transfer of scope. It is expected that project contingency will continue to be drawdown as the overall design is further developed, risks are identified, and construction progress continues to advance. The following list details ways in which project contingency can either increase or decrease:

- 1) The budgeted amount for a contract package is either lower or higher than the actual executed contract amount. Contingency will increase if the budgeted amount is higher than the actual contract amounts which results in a budget surplus, and vice versa if the budgeted amount is lower.
- 2) Increase of a contract amount through the execution of a change order or contract amendment. Contingency is decreased and transferred to the appropriate SCC.
- 3) Transfer of work scope, e.g. utility relocation, between contract packages through a change order. The scope value from one contract is decreased and transferred to Contingency. Contingency is then decreased by the same scope value and transferred to the other contract. Contingency is used as a “holding account” in this instance.
- 4) Revisions to contract packaging. Further evaluation of contract packages may be considered to seek budget savings and/or to mitigate cost or schedule impacts. Budget savings, if any, would be transferred to Contingency.
- 5) Utilization of allowance in design contracts. The allowance amount to be utilized will decrease this contingency category and will be transferred to the appropriate SCC.

### Changes Identified and Project Performance

HART and the PMOC continue to hold a monthly breakout session to review cost containment strategies and changes being considered for each contract. Changes are tracked by three categories which are determined by how well defined a change is and are summarized as Changes Identified in Project Cost reports. HART continually manages the strategy to avoid or mitigate as well as plan the timing of any potential changes. Breakout session discussions focus on opportunities to reduce costs and accelerate contract-scheduled activities to attain key milestones earlier than targeted. The session concludes with an overview of the cost and schedule drawdown curves, if and when changes might occur, in order to assess project performance against total project contingencies and buffer float.

The Risk and Contingency Management Plan (RCMP), Contract Packaging Plan (CPP), Master Project Schedule (MPS), Project Budget and Financial Plan updates are all in progress. The RCMP includes updates to the cost and schedule contingency drawdown curves, which establish minimum and buffer zone levels of cost and schedule contingency in accordance with FTA recommendations. Over the course of the project, if the cost or schedule contingency enter into the buffer zone (the area above the minimum contingency), Project Management will immediately implement actions to maintain the level of contingency appropriate for the project stage.

### Known Changes Contingency

Known Changes, though tracked separately from the Project Contingency established under the FFGA, functions like contingency and is designated as SCC 90.07 on project cost reports. In re-baselining the Project Budget for FFGA, a bottoms-up estimate (BUE) was developed for each work package identified in the CPP based on the level of design and current pricing of material, equipment, construction labor, professional services, real estate and all other costs. These revised estimates took into account the reduction of contingency to reflect the advancement of Final Design since the Preliminary Engineering phase. Contingency was then allocated in accordance with FTA guidelines and current risk modeling methodologies. The net effect was a reduction of approximately \$170M of contingency between the previous Final Design Project Budget and the FFGA Project Budget. Included in the base costs of the BUE were elements that were considered “Known” or pending changes that were still subject to final negotiations with contractors and the execution of change orders. The estimated costs for Known Changes were applied to work packages established under the FFGA. Based on the level of risk, the estimated costs for Known Changes were either classified as base cost or as separate contingency for specific work packages (contingencies eventually convert to base costs via change order). Of the total \$170M estimated for Known Changes, \$97M was classified as base cost and allocated to multiple contracts. The remaining \$74M was classified as “contingency” in order to process all changes using a consistent methodology of transferring budget from contingency to the appropriate base cost code when a change order is executed. As it was intended for this reserve, this line item has been debited to zero as all changes contemplated to draw-down against “known” contingency has been executed.

# HART Project Contingency Drawdown with Details

Data as of 05/22/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (\$)	Contingency Code
<b>July '12 (Bottoms-Up Estimate)</b>					
1)	FD-240	Farmington Highway Stations Group FD	Budget Transfer at Bottoms-Up Estimate from Project Scope to Contingency (contract allowance)	\$58,749.3	90.03 - Contract Allowance
2)	FD-430	Airport Section Guideway Utilities FD	Budget Transfer for Contract Award less than the ASGU FD contract budget	\$2,054.106	90.02 - Allocated Contingency
3)	MM-875	LEED Commissioning Services	Budget Transfer for Contract Award above the LEED Comm. Services contract budget	(\$35,929.3)	90.02 - Allocated Contingency
4)	DB-320	Kamehameha Highway Guideway DB	Budget Transfer for Contract Award above the RHG DB contract budget	(\$270,983.7)	90.02 - Allocated Contingency
5)	DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer for Ins. Covg per executed CO No. 004	\$3,995,230	90.02 - Allocated Contingency
			July '12 Contingency Drawdown	\$5,867,273	
			<b>July '12 - Ending Contingency Balance</b>	<b>\$649.4</b>	
<b>August '12</b>					
1)	FD-140	West Oahu Stations Group FD	Budget Transfer for Contract Awarded under WOSG FD contract budget	\$1,808,300	90.02 - Allocated Contingency
2)	FD-530	City Center Guideway Utilities FD	Budget Transfer for Contract Awarded under COSU FD contract budget	\$5,917,945	90.02 - Allocated Contingency
3)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 17 - Procure and install Portable Buildings	(\$2,870,000)	90.02 - Allocated Contingency
			August '12 Contingency Drawdown	\$5,068,145	
			<b>August '12 - Ending Contingency Balance</b>	<b>\$654.5</b>	
			<b>September '12</b>	<b>\$654.5</b>	
	N/A	N/A	No Contingency Drawdown	\$0	
			<b>September '12 Contingency Drawdown</b>	<b>\$0</b>	
			<b>September '12 - Ending Contingency Balance</b>	<b>\$654.5</b>	
<b>October '12</b>					
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 21 - Builders Risk Insurance Coverage	(\$80,899.3)	90.02 - Allocated Contingency
			October '12 Contingency Drawdown	(\$80,899.3)	
			<b>October '12 - Ending Contingency Balance</b>	<b>\$654.4</b>	
<b>November '12</b>					
1)	FD-440	Airport Stations Group FD	Budget Transfer for Contract Award under ASG FD contract budget	\$227,784	90.03 - Contract Allowance
2)	FD-340	Kamehameha Highway Stations Group FD	Budget Transfer for Contract Award under KHSG FD contract budget	\$202,488	90.03 - Contract Allowance
3)	MM-305	General Engineering Consultant	Budget Transfer to align contract budget with Committed value	(\$170,930)	90.02 - Allocated Contingency
			November '12 Contingency Drawdown	\$309,823	
			<b>November '12 - Ending Contingency Balance</b>	<b>\$654.7</b>	
<b>December '12</b>					
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 01 - Design & Engineering Cost Estimates	(\$275,000)	90.02 - Allocated Contingency
			December '12 Contingency Drawdown	(\$275,000)	
			<b>December '12 - Ending Contingency Balance</b>	<b>\$654.4</b>	
<b>January '13</b>					
1)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 01 - Acaola Rd alternative analysis	(\$15,983.3)	90.02 - Allocated Contingency
			January '13 Contingency Drawdown	(\$15,983.3)	
			<b>January '13 - Ending Contingency Balance</b>	<b>\$654.4</b>	
<b>February '13</b>					
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 26 - Ins. Covg Requirement/Additional BCGV at Ft. Weaver Rd	(\$1,670,176)	90.02 - Allocated Contingency
			February '13 Contingency Drawdown	(\$1,670,176)	
			<b>February '13 - Ending Contingency Balance</b>	<b>\$652.8</b>	
<b>March '13</b>					
1)	FD-240	Farmington Highway Stations Group FD	Executed Contract Amendment No. 09 - Waipahu Station sewer	(\$3,893)	90.03 - Contract Allowance
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 08 - Ins. Covg Requirements/DBT Covers Insulated Joints	(\$48,973)	90.02 - Allocated Contingency
			March '13 Contingency Drawdown	(\$48,973)	
			<b>March '13 - Ending Balance</b>	<b>\$652.3</b>	
<b>April '13</b>					
1)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 01 - Second elevator provision	(\$81,013)	90.03 - Contract Allowance
2)	DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer to offset Ins. Covg Requirement for Change Order No. 26	\$1,670,176	90.02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Budget Transfer to offset Ins. Covg Requirement for Change Order No. 06	\$434,000	90.02 - Allocated Contingency
4)	DB-320	Kamehameha Highway Guideway DB	Budget Transfer to Align current budget to contract Schedule of Milestones	\$800	90.02 - Allocated Contingency
			April '13 Contingency Drawdown	\$2,023,765	
			<b>April '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	
<b>May '13</b>					
	N/A	N/A	No Contingency Drawdown	\$0	
			<b>May '13 Contingency Drawdown</b>	<b>\$0</b>	
			<b>May '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	
<b>June '13</b>					
	N/A	N/A	No Contingency Drawdown	\$0	
			<b>June '13 Contingency Drawdown</b>	<b>\$0</b>	
			<b>June '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	

# HART Project Contingency Drawdown with Details

Data as of 05/22/15

#	Project Id.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (F+)	Contingency Code
<b>July '13</b>					
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 04 - Antenna Engineering Design Services	<b>\$654.3</b>	90 02 - Allocated Contingency
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 07 - Archeological Inventory Survey (AIS) Provisional Sum Part 2		90 02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 08 - Maintenance & Storage Facility Yard Switch Machines		90 02 - Allocated Contingency
4)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 09 - Yard Layout Revisions		90 02 - Allocated Contingency
5)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 10 - Train Configuration		90 02 - Allocated Contingency
6)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 11 - Preliminary Design & Supplemental Project Mtg		90 02 - Allocated Contingency
			<b>July '13 Contingency Drawdown</b>	<b>(65,254,109)</b>	
<b>August '13</b>					
			<b>July '13 - Ending Contingency Balance</b>	<b>\$649.1</b>	
1)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 30 - Archeological Inventory Survey (AIS) Provisional Part 2		90 02 - Allocated Contingency
2)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 32 - Kalo Channel Station Mod Concept		90 02 - Allocated Contingency
3)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 34 - Traditional Cultural Property Construction Partial Suspension		90 02 - Allocated Contingency
4)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 35 - Honolulu Station Relocation Design		90 02 - Allocated Contingency
5)	DB-320	Kaunoharua Highway Guideway, DB	Executed Change Order No. 08 - Archeological Inventory Survey (AIS) Provisional Part 2		90 02 - Allocated Contingency
6)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 02 - Canopy Redesign		90 03 - Contract Allowance
7)	MI-930	Elevator & Escalator Install/Int	Budget Transfer for Contract Awarded under ESE IM contract budget		90 02 - Allocated Contingency
			<b>August '13 Contingency Drawdown</b>	<b>(65,824,004)</b>	
<b>September '13</b>					
			<b>August '13 - Ending Contingency Balance</b>	<b>\$643.2</b>	
1)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 33 - Provisional Sum HDOT Joint Use and Occupancy		90 02 - Allocated Contingency
2)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 35 - Asphaltic Column Design Conflict		90 02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 12 - HNTB Design Escalation		90 02 - Allocated Contingency
4)	FD-240	Farrington Highway Stations Group FD	Executed Contract Amendment No. 10 - NTP 2 Delay/Design Delay from Core Systems Contract & West Oahu Farrington Highway DB Contract		90 02 - Allocated Contingency
			<b>September '13 Contingency Drawdown</b>	<b>(65,115,297)</b>	
<b>October '13</b>					
			<b>September '13 - Ending Contingency Balance</b>	<b>\$637.1</b>	
1)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 13 - Ins. Covs Requirements/ Roof Access Modification		90 02 - Allocated Contingency
2)	DB-200	Maintenance & Storage Facility DB	Budget Transfer for Change Order No. 13 for Ins. Covg Requirements		90 02 - Allocated Contingency
3)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 37 - Ala Ike Street Mod/ wdg at DR Horton & Farrington HWY		90 02 - Allocated Contingency
4)	DB-OM-520	Core Systems Design Build/OM	Executed Change Order No. 05 - Platform Screen Gates Systems		90 02 - Allocated Contingency
5)	FD-350	Dillingham and Kakaako Stations Group FD	Budget Transfer for Contract awarded under DHSG FD contract budget		90 01 - Unallocated Contingency
			<b>October '13 Contingency Drawdown</b>	<b>(62,734,737)</b>	
<b>November '13</b>					
			<b>October '13 - Ending Contingency Balance</b>	<b>\$615.0</b>	
1)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 38 - Insurance Coverage Requirement 04/2013		90 02 - Allocated Contingency
2)	DB-120	West Oahu Farrington Highway Guideway, DB	Budget Transfer for Change Order No. 038 for Ins. Covs. Requirements		90 02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 014 - Preliminary Design & Supplemental Project Management 2		90 02 - Allocated Contingency
4)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 015 - Yard Layout Revisions/RFF Structural Steel Modification		90 02 - Allocated Contingency
5)	DB-200	Maintenance & Storage Facility DB	Budget Transfer for Change Order No. 015 for Ins. Covs. Requirements		90 02 - Allocated Contingency
6)	FD-530	City Center Guideway Utilities FD	Executed Contract Amendment No. 01 - Archeological Inventory Survey (AIS) Suspension		90 02 - Allocated Contingency
7)	FD-240	Farrington Highway Station Group FD	Budget Transfer for Contract Award for FHSG FD II		90 01 - Unallocated Contingency
			<b>November '13 Contingency Drawdown</b>	<b>(64,947,881)</b>	
<b>December '13</b>					
			<b>November '13 - Ending Contingency Balance</b>	<b>\$610.0</b>	
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 05 - Ulenia St redesign scope impact		90 02 - Allocated Contingency
2)	FD-140	West Oahu Station Group FD	Executed Contract Amendment No. 03 - Design relocation of HECO 48kV and fiber optic lines		90 02 - Allocated Contingency
			<b>December '13 Contingency Drawdown</b>	<b>(6272,866)</b>	
<b>January '14</b>					
			<b>December '13 - Ending Contingency Balance</b>	<b>\$609.8</b>	
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 06 - Archeological Inventory Survey (AIS) Suspension		90 02 - Allocated Contingency
2)	FD-530	City Center Guideway Utilities FD	Executed Contract Amendment No. 02 - Soil Resistance Test and Max. Span Calculation		90 02 - Allocated Contingency
3)	MM-585	Construction Engineering & Inspection West	Budget Transfer for Contract Award less than GE&I West contract budget		90 02 - Allocated Contingency
4)	MM-585	Construction Engineering & Inspection East	Budget Transfer for Contract Award less than GE&I East contract budget		90 02 - Allocated Contingency
			<b>January '14 Contingency Drawdown</b>	<b>(61,428,718)</b>	
<b>February '14</b>					
			<b>January '14 - Ending Contingency Balance</b>	<b>\$608.3</b>	
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 07 - Resist & Sag Geotech Investigation		90 02 - Allocated Contingency
2)	HRT-000	HART ODC	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract		90 02 - Allocated Contingency
3)	MM-910	SEC II	Budget Transfer for Contract Award - Archeological & Cultural Monitoring & Core Systems Support contracts		90 02 - Allocated Contingency
4)	MM-960	Archeological & Cultural Monitoring	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract		90 02 - Allocated Contingency
5)	MM-962	Core Systems Support	Budget Transfer for Contract Award - Core Systems Support contract		90 02 - Allocated Contingency
			<b>February '14 Contingency Drawdown</b>	<b>(6,132,800)</b>	
			<b>February '14 - Ending Contingency Balance</b>	<b>\$608.2</b>	

# HART Project Contingency Drawdown with Details

Data as of 05/22/15

Project No.	Project Description	Budget Transfer/Change Description	Contingency Drawdown (k\$)	Contingency Code
<b>March '14</b>				
N/A	N/A	No Contingency Drawdown	\$0	
<b>March '14 Contingency Drawdown</b>				
March '14 - Ending Contingency Balance			\$608.2	
<b>April '14</b>				
April '14 - Ending Contingency Balance			\$608.2	
FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 04 - East Kapolei Staff Room Pre-Final Submittal	(\$50,243)	80.03 - Contract Allowance
FD-430	Airport Section Guideway Utility FD	Executed Contract Amendment No. 08 - Notice-to-Proceed 4&2/Provisional Sum for Design Support during bid	(\$1,568,014)	80.03 - Contract Allowance
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 016 - Rail Lubricators	(\$102,000)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 017 - Yard Layout Reconfiguration/Automated Train Operation Design	(\$2,125,000)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 018 - Rail Material Storage Plan	(\$3,700,000)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 019 - Train Wash Facility, Shortening	\$0	80.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 040 - Precast Yard Alternative Site	(\$12,400,000)	80.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 041 - Revised Track Alignment and Profile	(\$46,800)	80.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 042 - Sandwhich Isles Communications Utility Relocation @ North South Rd	(\$768,045)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 005 - Rebar Clear Spacing Design Criteria	\$0	80.02 - Allocated Contingency
April '14 Contingency Drawdown			(\$17,460,792)	
April '14 - Ending Contingency Balance			\$590.7	
<b>May '14</b>				
May '14 - Ending Contingency Balance			\$590.7	
FD-140	West Oahu Stations Group FD	Budget Transfer for Executed Contract Amendment No. 05 - Final Design for relocated Hoopili Station	\$220,123	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 008 - APCC work restrictions/abandoned utilities removal	(\$505,675)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 009 - Emergency walkway/insurance covg. Requirements 2013	(\$689,000)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 007 - Relocate TPSS to system site #3	\$887,054	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 006 - Relocate TPSS to system site #3	\$287,381	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Budget Transfer for Executed Contract Amendment No. 002 - Increase T&M contract value	(\$9,310)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Budget Transfer for Executed Contract Amendment No. 001 - LEED measurement and verification plan	\$22,500,000	80.01 - Unallocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 020 - CSC consolidated changes construction	\$170,000	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 025 - OSB reconfiguration	(\$22,300,018)	
May '14 Contingency Drawdown			\$568.4	
May '14 - Ending Contingency Balance			\$568.4	
DB-200	Maintenance & Storage Facility DB	Board Approved RFC 00010 - Amendment 1 Non-Rail Escalator	(\$5,000,000)	80.02 - Allocated Contingency
June '14 Contingency Drawdown			(\$5,000,000)	
June '14 - Ending Contingency Balance			\$563.4	
<b>July '14</b>				
July '14 - Ending Contingency Balance			\$563.4	
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 008 - Platform Screen Gate Mobilization	(\$898,194)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Budget Transfer for Contract Award above the Real Estate Map & Survey budget	(\$1,944,612)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Budget Transfer to Project Contingency from remaining "known" Changes balance	\$1,007,860	80.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Budget Transfer to Project Contingency from remaining "known" Changes balance	\$1,568,107	80.02 - Allocated Contingency
July '14 Contingency Drawdown			\$321,161	
July '14 - Ending Contingency Balance			\$563.7	
<b>August '14</b>				
August '14 - Ending Contingency Balance			\$563.7	
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 010 - Delay in issuance of Notice-to-Proceed 2 & 3	(\$1,328,000)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 006 - Passenger screen gates	(\$60,250)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Budget Transfer for Contract Award above Airport Section Utility Construction original budget	(\$2,756,574)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Budget Transfer due to scope transfer from Royto to Hazmat consultant	\$470,823	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Budget Transfer for Contract Award above On Call Contractor original budget	(\$1,900,435)	80.02 - Allocated Contingency
August '14 Contingency Drawdown			(\$4,323,188)	
August '14 - Ending Contingency Balance			\$559.4	
<b>September '14</b>				
September '14 - Ending Contingency Balance			\$559.4	
MM-350	OCIP Consultant Contract	Budget Transfer to unallocated contingency as estimate at completion is less than current budget	\$750,000	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 027 - Traditional Cultural Properties (TCP) Submittal	(\$473,593)	80.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 028 - Insurance Coverage Requirements 2014	(\$1,112,000)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 011 - Insurance Vehicle Criteria/Construction Safety Security Plan	(\$331,500)	80.02 - Allocated Contingency
DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 012 - Insurance Coverage Requirements 9/1/13 - 8/30/14	(\$1,400,000)	80.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 045 - Standard Specification Revisions 2.0	(\$2,660,000)	80.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 046 - Insurance Coverage Requirements 2014	(\$3,400,000)	80.02 - Allocated Contingency
DB-530	City Center Guideway Utilities FD	Executed Contract Amendment 004 - Aesthetic Station Column	(\$271,550)	80.02 - Allocated Contingency
DB-530	City Center Guideway Utilities FD	Executed Contract Amendment 005 - City Center Section Rescue Cart Scope Impact	(\$72,000)	80.02 - Allocated Contingency
DB-340	Kahehameha Highway Stations Group FD	Executed Contract Amendment 001 - Special Provisions Update/Shear Wave Analysis	(\$7,930)	80.03 - Contract Allowance
DB-340	Kahehameha Highway Stations Group FD	Executed Contract Amendment 003 - Historic Architect/Reflex Highway Sign	(\$11,910)	80.03 - Contract Allowance
DB-340	Kahehameha Highway Stations Group FD	Executed Contract Amendment 005 - Address Bus Shields at Aloha Station	(\$26,800)	80.03 - Contract Allowance
DB-430	Airport Section Guideway Utility FD	Executed Contract Amendment 006 - Address Bus Shields at Aloha Station	(\$26,800)	80.03 - Contract Allowance
DB-430	Airport Section Guideway Utility FD	Executed Contract Amendment 007 - Address Bus Shields at Pearl Harbor Station Redesign	(\$26,800)	80.03 - Contract Allowance
DB-430	Airport Section Guideway Utility FD	Executed Contract Amendment 011 - Airport Section Reserve Scope Impact	(\$45,000)	80.02 - Allocated Contingency
DB-140	West Oahu Stations Group FD	Executed Contract Amendment 007 - Traffic Signal Contract/Utility/Original Access Road	(\$12,700)	80.02 - Allocated Contingency
DB-140	West Oahu Stations Group FD	Executed Contract Amendment 007 - Traffic Signal Contract/Utility/Original Access Road	(\$9,386,161)	
September '14 Contingency Drawdown			\$9,386,161	
September '14 - Ending Contingency Balance			\$550.1	

# HART Project Contingency Drawdown with Details

Data as of 05/22/15

Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (k\$)	Contingency Code
<b>October '14</b>				
1)	DBOM-320 Core Systems Contract Design Build O&M	Executed Change Order No. 009 - WCH Guideway Alignment for CSC	\$550.1	90.01 - Unallocated Contingency
2)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 028 - Escalation due to Schedule Impacts		90.01 - Unallocated Contingency
3)	DB-320 Kamehameha Highway Guideway DB	Executed Change Order No. 013 - Station Load & Configuration Mods.		90.02 - Allocated Contingency
4)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 047 - Station Load & Configuration Mods.		90.01 - Unallocated Contingency
5)	FD-440 Airport Stations Group FD	Executed Contract Amendment No. 002 - Extension of PM Services		90.02 - Allocated Contingency
6)	FD-440 Airport Stations Group FD	Executed Contract Amendment No. 003 - Add Pedestrian Bridges to HIA Stations		90.02 - Allocated Contingency
7)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 001 - Extension of PM Services		90.03 - Contract Allowance
8)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 007 - Incorporation of Comments		90.01 - Unallocated Contingency
9)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 003 - Value Engineering		90.01 - Unallocated Contingency
10)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 004 - EOR/AR		90.01 - Unallocated Contingency
11)	FD-140 West Oahu Stations Group FD	Executed Contract Amendment No. 010 - Temporary Parking Lot Near UHWO/UHWO & Holoipi'i Sewerage Holding Tank		90.01 - Unallocated Contingency
12)	FD-140 West Oahu Stations Group FD	Executed Contract Amendment No. 011 - Extension of PM Services		90.03 - Contract Allowance
<b>October '14 Contingency Drawdown</b>			<b>(\$ 16,307,138)</b>	
<b>October '14 - Ending Contingency Balance</b>			<b>\$531.8</b>	
<b>November '14</b>				
1)	DBOM-320 Core Systems Contract Design Build O&M	Executed Change Order No. 012 - Delete Ticket Vending Machines	\$331.8	90.02 - Allocated Contingency
2)	FD-550 Bilingual Kaka'ako Stations Group FD	Executed Contract Amendment No. 002 - General Excise Tax Credit	\$385,588	90.02 - Allocated Contingency
<b>November '14 Contingency Drawdown</b>			<b>\$ 10,735,686</b>	
<b>November '14 - Ending Contingency Balance</b>			<b>\$542.49</b>	
<b>December '14</b>				
1)	DBOM-920 Core Systems Contract Design Build O&M	Executed Change Order No. 010 - HRT Train Mock-up Shipment/Delivery	\$542.5	90.02 - Allocated Contingency
2)	DBOM-920 Core Systems Contract Design Build O&M	Executed Change Order No. 013 - HECC Connection Charges		90.02 - Allocated Contingency
3)	DB-320 Kamehameha Highway Guideway DB	Executed Change Order No. 014 - Escalation due to Schedule Impacts		90.02 - Allocated Contingency
5)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 048 - Escalation due to Schedule Impacts		90.01 - Unallocated Contingency
<b>December '14 Contingency Drawdown</b>			<b>(\$ 18,143,716)</b>	
<b>December '14 - Ending Contingency Balance</b>			<b>\$523.78</b>	
<b>January '15</b>				
1)	DBOM-920 Core Systems Contract Design Build O&M	Executed Change Order No. 011 - Eliminate Station Manager Booths	\$523.8	90.02 - Allocated Contingency
2)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 050 - Escalation due to Schedule Impacts Subcontractor Aneiron Aggregate		90.01 - Unallocated Contingency
3)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 051 - Escalation due to Schedule Impacts Subcontractor Aneiron Aggregate		90.01 - Unallocated Contingency
4)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 052 - Escalation due to Schedule Impacts Subcontractor Aneiron Aggregate		90.01 - Unallocated Contingency
5)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 053 - Escalation due to Schedule Impacts Subcontractor Aneiron Aggregate		90.01 - Unallocated Contingency
6)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 054 - Escalation due to Schedule Impacts Subcontractor Aneiron Aggregate		90.01 - Unallocated Contingency
7)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 055 - Escalation due to Schedule Impacts Subcontractor Aneiron Aggregate		90.01 - Unallocated Contingency
8)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 056 - Escalation due to Schedule Impacts Subcontractor Aneiron Aggregate		90.01 - Unallocated Contingency
9)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 057 - Escalation due to Schedule Impacts Subcontractor Aneiron Aggregate		90.01 - Unallocated Contingency
10)	DBOM-920 Core Systems Contract Design Build O&M	Executed Change Order No. 014 - Eliminate Secondary Emergency Access at MSP		90.02 - Allocated Contingency
11)	FD-430 Airport Stations Group FD	Executed Contract Amendment No. 012 - Condeminate Soil, 7 Piers, Wayside Lubricators		90.02 - Allocated Contingency
12)	FD-550 Bilingual Kaka'ako Stations Group FD	Executed Contract Amendment No. 003 - Scope for Downtown Star/Civic Center Star/Kapalama Sta & Elie Ramps		90.02 - Allocated Contingency
13)	FD-550 Bilingual Kaka'ako Stations Group FD	Executed Contract Amendment No. 004 - Ala Moana Transit Ctr-Chinatown Sta & Betsch Expedited Station Loads		90.02 - Allocated Contingency
14)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 005 - Addition of Elie Ramps to THSG Stations		90.02 - Allocated Contingency
15)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 006 - Addition of 30' Guideway Section West Loch and Waipahu Stations		90.02 - Allocated Contingency
16)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 007 - M OCS to West Loch and Waipahu Sider Design		90.02 - Allocated Contingency
<b>January '15 Contingency Drawdown</b>			<b>(\$ 988,243)</b>	
<b>January '15 - Ending Contingency Balance</b>			<b>\$519.79</b>	
<b>February '15</b>				
1)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 058 - Kalo Drainage Channel/Geotechnical	\$519.79	90.02 - Allocated Contingency
2)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 059 - Revision of Waipahu Guideway, LCC Station & Pedestrian Vibration Criteria		90.02 - Allocated Contingency
3)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 060 - Waikaele Scour Design Actuals		90.02 - Allocated Contingency
4)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 061 - Kalo Scour Design Actuals		90.02 - Allocated Contingency
5)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 062 - West Loch and UHWO Station Revisions of Guideway		90.02 - Allocated Contingency
6)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 063 - Procurement & Delivery LCC Modular Blog		90.01 - Unallocated Contingency
<b>February '15 Contingency Drawdown</b>			<b>(\$ 1,986,881)</b>	
<b>February '15 - Ending Contingency Balance</b>			<b>\$515.59</b>	
<b>March '15</b>				
1)	DBOM-920 Core Systems Contract Design Build O&M	Executed Change Amendment No. 015 - Test and Storage Track Changes at MSP	\$515.59	90.02 - Allocated Contingency
2)	FD-140 West Oahu Stations Group FD	Executed Change Amendment No. 013 - WOODS Rebid and VE Items 4:88 Bay Station Canopy Roofs, Change to CSC Dev location		90.03 - Contract Allowance
3)	FD-140 West Oahu Stations Group FD	Executed Change Amendment No. 013 - WOODS Rebid and VE Items 4:88 Bay Station Canopy Roofs, Change to CSC Dev location		90.03 - Contract Allowance
4)	DB-530 City Center Guideway Utilities FD	Executed Change Amendment No. 008 - Management Extension thru October 2014		90.02 - Allocated Contingency
5)	DB-530 City Center Guideway Utilities FD	Executed Change Order No. 001 - HDOT A Utility Relocation at Piers		90.02 - Allocated Contingency
6)	FD-340 Kamehameha Highway Stations Group FD	Executed Change Amendment No. 006 - Misc. RFI's Interface Items		90.02 - Allocated Contingency
7)	FD-340 Kamehameha Highway Stations Group FD	Executed Change Amendment No. 006 - Aloha Stadium Low Impact Development Requirement		90.03 - Contract Allowance
<b>March '15 Contingency Drawdown</b>			<b>(\$ 1,970,538)</b>	
<b>March '15 - Ending Contingency Balance</b>			<b>\$510.68</b>	

# HART Project Contingency Drawdown with Details

Date as of 05/22/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (\$)	Contingency Code
<b>April '15</b>				<b>\$510.68</b>	
1)	FD-140	West Oahu Stations Group FD	Redesign of East Kapolei Escalator	(\$66,000)	90.02 - Allocated Contingency
2)	FD-140	West Oahu Stations Group FD	Hopili Grading	(\$ 175,000)	90.03 - Contract Allowance
3)	FD-140	West Oahu Stations Group FD	Redesign of TPSS Trench at SS3 and CSC Cabinets at East Kapolei	(\$26,000)	90.02 - Allocated Contingency
4)	DBB-525	Airport Section Guideway 7 Pier Construction	Contractor to Perform CSL Testing	(\$17,276)	90.02 - Allocated Contingency
5)	DBB-120	West Oahu Fanning Highway Guideway DB	Hazmat Assessment for LCC Portables	(\$9,174)	90.02 - Allocated Contingency
April '15 Contingency Drawdown				<b>(\$296,552)</b>	
<b>*May '15 - Board Approved Changes Only - Pending Execution</b>				<b>\$510.39</b>	
	N/A	N/A	No changes brought to the board this period	\$0	
			Subtotal Board Approved Contingency Drawdown	\$0	
<b>May '15 - Ending Contingency Balance (Pending Execution)</b>				<b>\$510.39</b>	

**Appendix C. Project Cost Reports** (data as of April 24, 2015)

Cost reports are run from the HART Contract Management System (CMS)

**Project Costs by Contract**



Costs Reported as of Month Ending: April 2015

**Project Monthly Cost Report by Contract - One Line Summary**

CPP No	Title	A Original	B COMMITTED Changes	C=A+B Current*	D AFE AFE**	E INCURRED Incurred To Date	F PERCENT %
A RT	Project Wide ART	0	0	0	0	0	0%
CCH-100	Inactive Hartz/Qty.CCH	15,348,443	0	15,348,443	0	14,325,228	37%
CCH-101	HART/Qty Dept of BFS	105,092	0	105,092	0	0	0%
CCH-102	HART/Qty DDC Land Division	256,201	0	256,201	0	173,182	68%
CCH-107	HART/Qty Corporation Counsel (CDR)	1,692,366	0	1,692,366	0	149,468	9%
CCH-108	Board of Water Supply (BWS)	928,325	0	928,325	0	928,325	100%
DB-120	West Oahu/Farrington Hwy Guideway	482,924,000	140,682,472	623,606,472	623,606,472	387,568,591	62%
DB-200	Maintenance & Storage Facility DB	195,258,000	79,550,008	274,808,008	207,888,742	194,183,226	71%
DB-320	Kamehameha Hwy Guideway DB	372,150,000	16,365,863	388,515,863	388,515,863	199,117,289	36%
DBB-165	SPCD - West Side SG Construction	0	0	0	0	0	0%
DBB-275	SPCD-Pearl Highlands Pkg. Str. Constr.	0	0	0	0	0	0%
DBB-450	SPCD-Airport Section Utility Reloc.	0	0	0	0	0	0%
DBB-460	SPCD-Airport Guideway/Util Constr.	0	0	0	0	0	0%
DBB-470	SPCD-Airport Station Group Constr.	0	0	0	0	0	0%
DBB-505	Airport Section Utilities Constr.	28,418,974	0	28,418,974	27,989,022	1,279,386	5%
DBB-510	City Center Section Utilities Constr.	0	0	0	0	0	0%
DBB-520	SPCD-Airport-City Center Gdwy. Cntr.	0	0	0	0	0	0%
DBB-525	Airport Section Guideway 7 Pier. Cnstr.	3,973,000	508,241	4,481,241	4,481,241	3,796,241	85%
DBB-550	SPCD-City Segment Util Relocations	0	0	0	0	0	0%
DBB-580	SPCD-City Center Guideway/Cnstr.	0	0	0	0	0	0%
DBB-570	SPCD-Dillingham St. Group Constr.	0	0	0	0	0	0%
DBB-572	SPCD-City Center Station Constr.	0	0	0	0	0	0%
DBB-580	SPCD-Dillingham/Kaka'ako SG Cntr.	0	0	0	0	0	0%
DBB-800	Park-and-Ride Lots Construction	0	0	0	0	0	0%
DBO M-920	Core Systems Design Build D/M	573,782,793	21,243,044	595,025,837	579,110,825	126,214,247	21%
FD-140	West Oahu Station Group FD	7,789,000	2,225,305	10,014,305	9,167,505	8,923,882	89%
FD-240	Farrington Highway Stations Group 2	9,300,696	4,857,349	14,158,045	12,930,376	12,387,564	87%
FD-245	SPCD-Pearl Highlands Pkg. Str. FD	0	0	0	0	0	0%
FD-340	Kamehameha Hwy Station Group FD	8,702,592	309,176	9,011,768	8,356,672	8,219,319	91%
FD-430	Airport Sect. Guideway/Utilities FD	38,840,960	3,769,872	42,610,832	42,610,832	39,771,629	93%
FD-440	Airport Station Group FD	10,177,365	1,224,840	11,402,205	10,372,862	9,718,742	85%
FD-530	City Center Guideway/Utilities FD	43,948,220	2,295,303	46,183,523	43,587,202	38,057,052	82%
FD-542	SPCD-City Center Stations(3). FD	0	0	0	0	0	0%

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Costs Reported as of Month Endings: April 2015  
**Project Monthly Cost Report by Contract - One Line Summary**

C/P No	Title	A		B		C=A+B		D	E	F
		Original	COMMITTED Changes	Current*	AFE**	INCURRED Incurred To Date	PERCENT %			
FD-550	Dillingham and Kaka'ako SG FD	SOM	18,321,318	652,529	18,974,447	15,399,142	10,667,500	56%		
ED-600	Park-and-Ride Lcks. Final Design	SOM	0	0	0	0	0	0%		
HRT-200	HART Labor		37,351,342	0	37,351,342	0	37,519,021	99%		
HRT-201	HART ODC Contracts		15,758,154	0	15,758,154	0	15,114,711	96%		
M-900	Project Wide Fare Collection DFI	MI	0	0	0	0	0	0%		
M-930	Elevators & Escalators Install/Maint	SOM	50,382,714	0	50,382,714	5,442,108	3,879,288	8%		
MM-180	SPCD-West-Dahu/Farrington-Stat CEI		0	0	0	0	0	0%		
MM-280	SPCD-WORTH/HSG DE&I(REPA CK&GED)	CPFF	0	0	0	0	0	0%		
MM-290	Construction Engrg. & Inspection West	CPFF	54,232,480	0	54,232,480	16,650,000	9,577,079	18%		
MM-385	SPCD-Pearl Highlands Garage Rmpps CEI	CPFF	0	0	0	0	0	0%		
MM-480	SPCD-Airport Guideway/Utilities CEI		0	0	0	0	0	0%		
MM-500	SPCD-By MM959 CEI East	CPFF	0	0	0	0	0	0%		
MM-525	SPCD-By MM859 CEI East	CPFF	0	0	0	0	0	0%		
MM-580	SPCD-City Center Guideway/Util CEI		0	0	0	0	0	0%		
MM-590	SPCD-By MM959 CEI East	CPFF	0	0	0	0	0	0%		
MM-595	Construction Engrg. & Inspection East	CPFF	63,083,417	0	63,083,417	45,257,000	8,658,069	14%		
MM-600	SPCD-UHWO Pkg-Hooplii Stn Presh-CEI	CPFF	0	0	0	0	0	0%		
MM-900	Program Mgt Support Constl (PM SC-1)	CPFF	36,727,162	0	36,727,162	20,700,000	0	0%		
MM-901	Program Mgt Support Constl (PM SC-2)	CPFF	33,376,897	0	33,376,897	26,680,730	30,548,966	92%		
MM-905	MM-905 Gen Engrg Constl EIS/PE	CPFF	0	78,564,942	78,564,942	78,564,942	74,157,822	94%		
MM-910	MM-910 Gen Engrg Constl FD-Construct	CPFF	150,000,000	0	150,000,000	150,000,000	149,306,313	100%		
MM-913	MM-913 Gen Engrg Reconnect	CPFF	46,143,277	0	46,143,277	13,078,208	15,848,848	34%		
MM-915	HDOT Traffic Mgmt. Consult.	T&M	1,600,000	-1,400,000	3,000,000	40,000,000	2,249,114	75%		
MM-920	HDOT Coordination Constl WDFH	T&M	3,000,000	7,500,000	10,500,000	10,000,000	6,156,993	59%		
MM-921	HDOT Coordination Constl KHG	T&M	10,000,000	-1,400,000	8,600,000	5,000,000	2,691,163	34%		
MM-922	HDOT Coord. Constl-Airport	T&M	12,000,000	-5,600,000	6,400,000	3,000,000	1,972,892	31%		
MM-923	HDOT Coordination Constl City Center	T&M	0	0	0	0	0	0%		
MM-925	HDOT Labor - Highway Group	T&M	550,000	0	550,000	1,815,633	1,406,234	256%		
MM-926	HDOT Labor - Airport Group	T&M	0	0	0	0	0	0%		
MM-930	HDOT State SOA Manager & Consultant	T&M	1,272,400	563,142	1,835,542	843,167	661,003	36%		
MM-935	Real Estate Consultant	T&MTz	3,000,000	3,627,665	6,627,665	4,817,665	3,445,413	54%		
MM-937	Real Estate Consultant - Maps/Surv.	CPFF	2,998,000	0	2,998,000	1,500,000	508,128	17%		
MM-940	Kaka'ko Consultant	T&MTz	1,000,000	0	1,000,000	500,000	481,434	48%		

\* Current Committed = Original Contract + CCO/Amendment  
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Costs Reported as of Month Ending: April 2015  
**Project Monthly Cost Report by Contract - One Line Summary**

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CPP No.	Title	A		B		C-A+B		D		E		F
		Original	Changes	COMMITTED	Current *	AFE	AFE**	INCURRED	Incurred To Date	PERCENT		
MM-945	Dr-Call Contractor	1,000,000	989,951	1,989,951	1,989,951	1,799,951	1,044,886	52%				
MM-946	Dr-Call Hazmat Removal Contractor	3,075,000	0	3,075,000	3,075,000	1,000,000	1,867,277	61%				
MM-950	O/C/P Consultant	1,250,000	0	1,250,000	1,250,000	833,750	833,750	67%				
MM-951	Owner-Controlled Insurance Program	41,000,000	0	41,000,000	41,000,000	0	19,584,117	48%				
MM-960	Archaeological & Cultural Monitoring	459,517	0	459,517	459,517	459,517	319,512	69%				
MM-962	Core Systems Support	49,988,889	0	49,988,889	49,988,889	3,600,000	7,081,984	16%				
MM-964	Safety and Security Consultant	4,699,573	0	4,699,573	4,699,573	2,500,000	1,582,760	34%				
MM-975	LEED Commissioning Services for MSF	278,630	9,310	288,540	288,540	288,540	58,860	20%				
OTHER	Project Wide	0	0	0	0	0	0	0%				
PA-101	Programmatic Agreement Humanities	0	0	0	0	0	0	0%				
PA-102	Programmatic Agreement HPC	400,000	0	400,000	400,000	200,000	137,683	34%				
PA-103	Programmatic Agreement HPC Park Inpr	0	0	0	0	0	0	0%				
ROW	Real Estate / Right-of-Way	89,885,511	0	89,885,511	89,885,511	1,219,922	78,542,753	87%				
UTIL	Utilities by Utility Companies	90,560,619	-8,027,656	82,532,963	82,532,963	78,904,537	18,862,734	19%				
<b>Total Project:</b>		<b>2,612,188,226</b>	<b>367,076,767</b>	<b>2,979,264,993</b>	<b>2,979,264,993</b>	<b>2,420,965,116</b>	<b>1,490,398,979</b>					

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\* Current Committed = Original Contract + CCO/Amendment  
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Project Costs by SCC – Summary



Costs Reported as of Month Endings: April 2015  
Project Monthly Cost Report by SCC Summary

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SCC	Title	BUDGET		COMMITTED	AFE**	ESTIMATE AT COMPLETION	Variance	INCURRED	
		Baseline	Transfers						
		A	B	D	E	F	G	H=C-G	I
		Current	Current*	AFE**	Est. At Completion***	Est. At Completion***	Variance	Incurred To Date	
<b>1. Subtotal 10 - 80 SCC Costs</b>									
10.	Guideway & Track Elements	1,114,215,147	39,375,055	544,258,648	30,545,087	0	1,153,590,202	0	177,160,122
20.	Stations Stops Terminals Intermodal	421,804,740	(25,138,472)	50,982,714	0	0	396,666,268	0	3,879,288
30.	Support Facilities:Yards,Shops, Admin	32,535,015	21,771,122	114,681,137	19,317,473	0	114,306,137	0	64,848,121
40.	Sitework & Special Conditions	983,178,121	50,741,529	718,481,720	161,815,844	(270,304)	1,033,919,650	0	424,088,518
50.	Systems	221,284,301	26,296,231	232,420,319	27,039,099	0	247,580,532	0	25,075,274
60.	ROW, Land, Existing Improvements	197,937,947	528,621	93,215,331	329,820	5,000,000	197,926,568	0	82,270,306
70.	Vehicles	186,829,020	4,713,997	191,474,521	1,448,224	0	191,543,017	0	21,203,394
80.	Professional Services	1,087,830,119	14,870,846	1,028,416,089	127,767,073	(9,661,882)	1,102,700,965	0	685,427,384
A.C.	Provisional Pay Requests	0	0	0	0	0	0	0	6,050,000
<b>Subtotal:</b>		4,305,074,410	133,158,923	2,971,920,473	367,259,120	(4,932,186)	4,438,233,339	0	1,490,012,418
<b>2. NTP</b>									
NTP	Authorized For Expenditure	0	0	0	2,049,699,706	0	0	0	0
<b>Subtotal:</b>		0	0	0	2,047,189,706	0	0	0	0
<b>3. Contingency</b>									
CONTR	Allocated Contingency	541,689,349	(77,750,708)	7,344,515	3,997,289	237,129,383	463,938,635	0	386,361
PRU	Unallocated Contingency	101,871,170	(55,408,221)	46,462,949	0	0	46,462,949	0	0
<b>Subtotal:</b>		643,560,513	(133,158,923)	510,401,584	3,997,289	237,129,383	510,401,584	0	386,361
<b>4. Finance Charges - Eligible</b>									
OTH	Finance Charges	173,058,243	0	173,058,243	0	0	173,058,243	0	0
<b>Subtotal:</b>		173,058,243	0	173,058,243	0	0	173,058,243	0	0
<b>FTA TOTAL PROJECT COSTS 5,124,693,166</b>									
		0	5,124,693,166	2,979,264,993	-3,420,465,115	232,197,197	5,121,693,166	0	1,490,398,979
<b>4. Finance Charges - Ineligible Costs</b>									
FINC	Finance Charges	42,000,000	0	42,000,000	0	0	42,000,000	0	0
<b>Subtotal:</b>		42,000,000	0	42,000,000	0	0	42,000,000	0	0
<b>INELIGIBLE COSTS</b>									
		0	42,000,000	0	0	0	42,000,000	0	0
<b>Total Project:</b>		5,163,693,166	0	2,979,264,993	2,420,955,115	232,197,197	5,163,693,166	0	1,490,398,979

\* Current Committed = Original Contract + CCO/Amendment  
 \*\* AFE = Authorized For Expenditure (Latest NTP Amounts or equal to current commitment Plus Executed Change Orders/Amendments)  
 \*\*\* Changes Identified= Pending + Probable + Potential Changes  
 \*\*\*\* Est. At Completion = Original Contract + CCO/Amendments + Changes Identified

Project Costs by SCC – Level 2

Costs Reported as of Month Ending: April 2015  
Project Monthly Cost Report by SCC Details

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SCC	Title	A		B		C=A+B		D		E		F		G		H=C-G		I
		Baseline	Transfers	Transfers	Current	Current	Current	Current	Current	Current	Current	Current	Current	Current	Current	Current	Current	
		BUDGET		COMMITTED		AFE**		ESTIMATE AT COMPLETION		Variance		Incurred To Date						
		Transfers		Current*		AFE**		Changes ID'd***		Est. At Completion***		Variance		Incurred To Date				
<b>1. Subtotal 10 - 80 SCC Costs</b>																		
10.0	Guideway & Track Elements	1,114,215,147	39,375,055	1,153,590,202	544,259,648	30,545,997	0	1,153,590,202	0	1,153,590,202	0	177,160,122	0	177,160,122	0	17,378	0	130,853,457
10.02	Guideway: A-grade semi-exclusive	0	17,378	17,378	17,378	17,378	0	17,378	0	17,378	0	0	0	0	0	0	0	0
10.04	Guideway: Aerial Structure	1,022,380,871	36,381,516	1,058,762,187	458,938,433	20,865,982	0	1,058,762,187	0	1,058,762,187	0	0	0	0	0	0	0	0
10.08	Guideway: Retained Cut or Fill	7,482,844	(1,055,688)	6,426,256	6,426,256	0	0	6,426,256	0	6,426,256	0	0	0	0	0	0	0	0
10.09	Track: Direct Fixation	79,347,205	3,097,822	82,445,027	74,637,831	9,630,851	0	82,445,027	0	82,445,027	0	0	0	0	0	0	0	0
10.11	Track: Ballasted	3,293,724	(1,593,849)	2,697,875	2,697,875	0	0	2,697,875	0	2,697,875	0	0	0	0	0	0	0	0
10.12	Track: Special (Switches, turnouts)	1,700,603	1,530,876	3,231,479	1,530,876	30,876	0	3,231,479	0	3,231,479	0	0	0	0	0	0	0	0
20.0	Stations, Stops, Terminals, Intermodal	421,804,740	(83,198,421)	338,606,288	50,982,714	0	0	338,606,288	0	338,606,288	0	0	0	0	0	0	0	0
20.01	A-grade station, stop, shelter,...	6,111,332	0	6,111,332	0	0	0	6,111,332	0	6,111,332	0	0	0	0	0	0	0	0
20.02	Aerial station, stop, shelter, mall	294,563,457	(21,400,000)	273,163,457	0	0	0	273,163,457	0	273,163,457	0	0	0	0	0	0	0	0
20.06	Automobile parking multi-story str	66,408,765	0	66,408,765	0	0	0	66,408,765	0	66,408,765	0	0	0	0	0	0	0	0
20.07	Elevators, Escalators	54,721,186	(3,738,472)	50,982,714	50,982,714	0	0	50,982,714	0	50,982,714	0	0	0	0	0	0	0	0
30.0	Support Facilities: Yards, Shops, Admin	92,636,016	21,771,122	114,306,137	114,306,137	18,917,473	0	114,306,137	0	114,306,137	0	0	0	0	0	0	0	0
30.02	Light Maintenance Facility	7,591,888	(3,095)	7,588,793	7,588,793	0	0	7,588,793	0	7,588,793	0	0	0	0	0	0	0	0
30.03	Heavy Maintenance Facility	38,089,138	4,595,814	42,684,952	43,049,952	5,132,922	0	42,684,952	0	42,684,952	0	0	0	0	0	0	0	0
30.04	Storage or Maintenance of Way Buil	7,797,460	964,571	8,762,031	8,762,031	1,026,121	0	8,762,031	0	8,762,031	0	0	0	0	0	0	0	0
30.05	Yard and Yard Track	39,046,529	16,215,832	55,262,361	55,262,361	12,098,430	0	55,262,361	0	55,262,361	0	0	0	0	0	0	0	0
40.0	Sitework & Special Conditions	983,178,121	50,741,529	1,033,919,650	719,491,720	181,815,344	(250,300)	1,033,919,650	0	1,033,919,650	0	424,098,518	0	424,098,518	0	1,354,455	0	57,074,792
40.01	Demolition, Clearing, Earthwork	29,890,158	(1,741,059)	28,239,099	8,589,486	692,302	0	28,239,099	0	28,239,099	0	0	0	0	0	0	0	0
40.02	Site Utilities, Utility Relocation	299,449,756	9,394,408	308,834,164	201,049,008	146,981,176	0	308,834,164	0	308,834,164	0	0	0	0	0	0	0	0
40.03	Haz. mat'l, contain'd soil removal	9,199,237	(5,421,634)	3,777,603	3,091,085	16,085	(270,304)	3,777,603	0	3,777,603	0	0	0	0	0	0	0	0
40.04	Environmental Mitigation	26,979,122	4,976,801	31,955,923	16,545,497	2,689	0	31,955,923	0	31,955,923	0	0	0	0	0	0	0	0
40.05	Site structures, retaining walls,	7,998,960	1,134,077	9,133,037	8,974,511	71,663	0	9,133,037	0	9,133,037	0	0	0	0	0	0	0	0
40.06	Pedestrian/bike access/landscaping	41,073,897	741,177	41,815,074	4,991,868	(4,566)	0	41,815,074	0	41,815,074	0	0	0	0	0	0	0	0
40.07	Auto, bus, van accessways	181,979,367	(10,796,632)	171,182,515	36,270,071	15,015,555	0	171,182,515	0	171,182,515	0	0	0	0	0	0	0	0
40.08	Temporary Facilities/Indirect Cost	386,517,824	52,464,611	438,982,235	438,982,235	144,897,440	0	438,982,235	0	438,982,235	0	0	0	0	0	0	0	0
50.0	Systems	221,284,301	26,296,231	247,580,532	232,420,819	27,038,099	0	247,580,532	0	247,580,532	0	0	0	0	0	0	0	0
50.01	Train control and signals	81,982,656	24,391,140	106,363,696	106,363,696	23,961,050	0	106,363,696	0	106,363,696	0	0	0	0	0	0	0	0
50.02	Traffic signals and crossing prot.	10,458,226	(206,980)	10,251,336	0	0	0	10,251,336	0	10,251,336	0	0	0	0	0	0	0	0
50.03	Traction power supply: substation	29,500,826	1,379,890	30,880,806	30,880,806	(87,485)	0	30,880,806	0	30,880,806	0	0	0	0	0	0	0	0
50.04	Traction power distribution: cat	32,878,150	5,059,838	37,937,988	33,028,111	7,941,115	0	37,937,988	0	37,937,988	0	0	0	0	0	0	0	0

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Costs Reported as of Month Endings: April 2015  
**Project Monthly Cost Report by SCC Details**

SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G	
		Baseline	Transfers	BUDGET	Current	COMMITTED	AFE**					Changes ID'd***	ESTIMATE AT COMPLETION
<b>1. Subtotal 10 - 80 SCC Costs</b>													
50	Systems	221,284,301	26,298,231	247,582,532	282,420,319	27,039,999	0	247,582,532	0	25,075,274	0	25,075,274	0
50.05	Communications	53,691,339	6,133,477	59,824,816	59,824,816	5,579,419	0	59,824,816	0	9,843,368	0	9,843,368	0
50.06	Fare collection system and equipment	9,159,277	(10,291,178)	(1,131,901)	(1,431,901)	(10,350,000)	0	(1,431,901)	0	(1,191,901)	0	(1,191,901)	0
50.07	Central Control	3,613,827	(180,096)	3,453,791	3,453,791	0	0	3,453,791	0	3,453,791	0	3,453,791	0
80	Roadway, Land, Existing Improvements	197,397,947	529,621	197,926,568	93,215,231	329,820	5,000,000	197,926,568	5,000,000	0	0	82,270,306	0
80.01	Purchase or lease of real estate	179,980,664	250,821	179,611,485	86,259,954	52,020	6,000,000	179,611,485	6,000,000	0	0	74,304,820	0
80.02	Relocation of existing households	18,037,283	277,800	18,315,083	6,945,477	2,778,000	0	18,315,083	0	0	0	7,965,486	0
70	Vehicles	186,829,020	4,719,937	181,543,017	191,474,521	1,446,224	0	181,543,017	0	21,203,354	0	21,203,354	0
70.01	Light Rail	186,721,386	5,915,687	172,637,073	172,568,577	1,446,224	0	172,637,073	0	14,473,908	0	14,473,908	0
70.06	Non-revenue vehicles	14,346,923	(1,320,375)	13,026,548	13,026,548	0	0	13,026,548	0	6,729,486	0	6,729,486	0
70.07	Spare parts	5,760,711	118,685	5,879,396	5,879,396	0	0	5,879,396	0	0	0	0	0
80	Professional Services	1,097,830,119	14,870,946	1,102,700,965	1,026,416,089	127,767,073	(9,851,882)	1,102,700,965	0	885,427,394	0	885,427,394	0
80.01	Preliminary Engineering	34,055,262	24,644,185	118,699,447	109,567,127	20,905,682	0	118,699,447	0	101,789,664	0	101,789,664	0
80.02	Final Design	228,321,632	(5,221,555)	223,100,077	206,141,880	31,226,953	830,779	223,100,077	0	154,982,516	0	154,982,516	0
80.03	Project Management Design & Cons	363,849,768	(44,051,192)	319,798,586	356,880,049	65,948,725	(9,707,624)	319,798,586	0	282,151,433	0	282,151,433	0
80.04	Const. Admin. & Management	199,656,728	(35,961,872)	163,694,857	158,430,396	4,045,764	672	163,694,857	0	65,233,877	0	65,233,877	0
80.05	Professional Liability & other ins	46,549,724	28,781,938	75,331,662	43,174,657	700,500	0	75,331,662	0	21,377,167	0	21,377,167	0
80.06	Legal; Permits Review Fees ect.,	67,641,005	(211,086)	67,429,919	35,564,005	2,516,420	0	67,429,919	0	17,970,925	0	17,970,925	0
80.07	Surveys, Testing, Investigation, I	21,759,396	47,121,102	68,880,498	67,789,497	1,465,121	0	68,880,498	0	22,534,237	0	22,534,237	0
80.08	Start up	65,996,664	(230,695)	65,765,969	48,868,977	961,909	(775,609)	65,765,969	0	19,387,565	0	19,387,565	0
ACR	Provisional Pay Requests	0	0	0	0	0	0	0	0	6,050,000	0	6,050,000	0
ACR	Provisional Request For Payment	0	0	0	0	0	0	0	0	6,050,000	0	6,050,000	0
<b>Subtotal:</b>		4,305,074,410	133,158,929	4,438,233,339	2,971,920,479	367,259,120	(4,892,186)	4,438,233,339	0	1,490,012,418	0	1,490,012,418	0
<b>2. NTP</b>													
NTP	Authorized For Expenditure	0	0	0	0	2,049,698,706	0	2,049,698,706	0	0	0	0	0
NTP	Notice To Proceed	0	0	0	0	2,049,698,706	0	2,049,698,706	0	0	0	0	0
<b>Subtotal:</b>		0	0	0	0	2,049,698,706	0	2,049,698,706	0	0	0	0	0

\* Current Committed = Original Contract + CCO/Amendment  
 \*\* AFE = Authorized For Expenditure (Latest NTP Amounts or equal to current commitment Plus Executed Change Orders/Amendments)  
 \*\*\* Changes Identified= Pending + Probable + Potential Changes  
 \*\*\*\* Est. At Completion = Original Contract + CCO/Amendments + Changes Identified



Costs Reported as of Month Ending: April 2015  
**Project Monthly Cost Report by SCC Details**

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SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G	I
		Baseline	Transfers	Current	Current*	AFE**	Changes ID'd***	Est. At Completion****	Variance	Incurred To Date			
<b>3. Contingency</b>													
00.01	Allocated Contingency	541,889,343	(177,950,708)	463,938,635	7,344,515	3,937,289	237,129,383	463,938,635	0	386,561			
90.02	Allocated Contract Contingency	540,101,323	(80,190,189)	459,911,142	3,937,289	3,937,289	229,663,584	459,911,142	0	386,561			
90.03	Allowances	1,588,014	2,439,479	4,027,493	3,347,226	0	7,465,799	4,027,493	0	0			
90.07	Known Change Contingency	0	0	0	0	0	0	0	0	0			
PRJ	Unallocated Contingency	101,871,170	(55,009,221)	46,862,949	0	0	0	46,862,949	0	0			
90.01	Unallocated Project Contingency	101,871,170	(55,009,221)	46,862,949	0	0	0	46,862,949	0	0			
<b>Subtotal:</b>		643,560,513	(133,168,929)	510,401,584	7,344,515	3,937,289	237,129,383	510,401,584	0	386,561			
<b>4. Finance Charges - Eligible</b>													
OTH	Finance Charges	173,058,243	0	173,058,243	0	0	0	173,058,243	0	0			
100.1	Finance Charges: Project-Eligible	173,058,243	0	173,058,243	0	0	0	173,058,243	0	0			
<b>Subtotal:</b>		173,058,243	0	173,058,243	0	0	0	173,058,243	0	0			
<b>FTA TOTAL PROJECT COSTS 5,124,693,166</b>													
		0	0	5,124,693,166	2,370,264,993	2,420,955,115	232,197,197	5,124,693,166	0	1,490,396,979			
<b>4. Finance Charges - Ineligible Costs</b>													
FINC	Finance Charges	42,000,000	0	42,000,000	0	0	0	42,000,000	0	0			
100.2	FTA Non-Eligible Costs	42,000,000	0	42,000,000	0	0	0	42,000,000	0	0			
<b>Subtotal:</b>		42,000,000	0	42,000,000	0	0	0	42,000,000	0	0			
<b>INELIGIBLE COSTS</b>													
		0	0	42,000,000	0	0	0	42,000,000	0	0			
<b>Total Project:</b>		5,163,693,166	0	5,163,693,166	2,379,264,993	2,420,955,115	232,197,197	5,163,693,166	0	1,490,396,979			

\* Current Committed = Original Contract + CCO/Amendment  
 \*\* AFE = Authorized For Expenditure (Latest NTP Amounts or equal to current commitment Plus Executed Change Orders/Amendments)  
 \*\*\* Changes Identified= Pending + Probable + Potential Changes  
 \*\*\*\* Est. At Completion = Original Contract + CCO/Amendments + Changes Identified

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Appendix D. Procurement and Contract Status

Awarded Contracts						
Contract Code	Contract Name	Contractor Name	Advertise Date	Contract Date	Issue HTP	Proposed Substantial Completion Date
DB-120	West O'ahu/Farrington Highway Guideway (WOFH)	Kiewit Infrastructure West Company (KIWC)	Apr 03 '09	Nov 11 '09	Dec 01 '09	Jul 04 '16
DB-200	Maintenance and Storage Facility (MSF)	Kiewit / Kobayashi Joint Venture (KKJV)	Jul 24 '09	June 30 '11	Jul 25 '11	Apr 15 '16
DB-320	Kamehameha Guideway (KHG)	Kiewit Infrastructure West Company (KIWC)	Mar 19 '10	June 30 '11	Jul 12 '11	Sep 16 '16
DBOM-920	Core Systems Contract	Ansaldo Honolulu JV	Aug 17 '09	Nov 28 '11	Jan 13 '12	Mar 31 '19
MI-930	Elevators and Escalators	Schindler Elevator Corporation	Dec 18 '12	Jul 31 '13	Aug 02 '13	Jul 05 '18
FD-140	West O'ahu Station Group Final Design and Support	URS Corporation	Jun 14 '10	Jun 14 '12	Jun 15 '12	Jun 30 '16
FD-240	Farrington Highway Station Group Final Design and Support -2	URS Corporation	Jun 10 '13	Sep 27 '13	Sep 30 '13	Nov 14 '16
FD-340	Kamehameha Highway Station Group Final Design (includes H2/R2 Ramp) and	Anil Verma Associates, Inc.	Jun 28 '11	Nov 16 '12	Nov 26 '12	Oct 31 '16
FD-430	Airport Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Jan 26 '11	Dec 22 '11	Jan 05 '12	Jun 30 '17
FD-530	City Center Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Dec 16 '11	Jul 30 '12	Jul 31 '12	Apr 30 '18
FD-440	Airport Station Group Final Design and Support	AECOM Technical Services, Inc.	Mar 30 '12	Nov 7 '12	Nov 14 '12	Jul 15 '17
FD-650	Dillingham and Kaka'ako Station Groups "East Side Stations" Final Design and	Perkins+Will	Nov 16 '12	Aug 15 '13	Jul 31 '13	Jul 30 '18
MM-290	Construction Engineering & Inspection West Side Sections	PGH Wong Engineering, Inc.	Jul 26 '13	Jan 9 '14	Jan 09 '14	Mar 01 '19
MM-595	Construction Engineering & Inspection East Side Sections	URS Corporation	Jul 26 '13	Jan 07 '14	Jan 09 '14	Mar 01 '19
MM-901	Program Management Support Consultant -2 (PMSC-2)	InfraConsult LLC	Aug 03 '11	Feb 28 '12	Mar 08 '12	Mar 07 '16
MM-910	General Engineering Consultant II (GEC-2) (Final Design and Construction)	Parsons Brinckerhoff	Sep 03 '09	Jun 30 '11	Aug 02 '11	Dec 31 '14
MM-913	General Engineering Consultant III (GEC-3)	CH2M HILL	Jul 26 '13	Dec 5 '13	Dec 05 '13	Apr 5 '19
MM-935	Real Estate Consultant	Paragon Partners, Ltd.	Apr 01 '11	Mar 14 '12	Mar 14 '12	Mar 13 '17
MM-937	Real Estate Mapping & Surveying	R.M. Towill Corporation	Nov 15 '13	May 22 '14	May 23 '14	Dec 30 '17
MM-940	Kāko'o Consultant	Pacific Legacy, Inc.	May 20 '11	Mar 29 '12	Mar 30 '12	Feb 14 '17
MM-950	Owner-Controlled Insurance Program (OCIP) Consultant	Marsh USA, Inc.	Jan 31 '12	May 10 '12	Jun 05 '12	May 09 '17
MM-951	Owner-Controlled Insurance Program (OCIP) Brokerage Services	Aon Risk Services, Inc., of Hawaii	Jun 04 '13	Apr 9 '14	Apr 08 '14	Mar 30 '19
MM-960	Archaeological & Cultural Monitoring	Cultural Surveys Hawai'i	Sep 10 '13	Jan 15 '14	Jan 15 '14	May 30 '18
MM-962	CORE Systems Support	Lea+Elliott, Inc.	Sep 13 '13	Feb 10 '14	Feb 11 '14	Mar 01 '19
MM-964	Safety / Security Support	Lawson & Associates, Inc.	Oct 23 '13	Apr 23 '14	May 01 '14	Dec 14 '17
MM-975	LEED Commissioning Services for the Maintenance and Storage Facility (MSF)	Enovity, Inc.		Oct 6 '10	Oct 07 '10	Jan 14 '16
PA-102	Historic Architecture Design Services	Fung Associates, Inc.	Mar 15 '13	Aug 1 '13	Aug 01 '13	May 01 '16
MM-915	HDOT Traffic Management Coordination Consultant	ICX Transportation Group, Inc.	Aug 15 '11	Jun 5 '12	Jun 12 '12	Jul 01 '17
MM-920	HDOT Design Coordination Consultant - West O'ahu/Farrington Highway	AECOM Technical Services, Inc.		Jun 7 '11	Jun 08 '11	Jun 15 '18
MM-921	HDOT Design Coordination Consultant - Kamehameha Highway Guideway Section	AECOM Technical Services, Inc.		Jun 28 '12	Jun 29 '12	Jul 15 '15
MM-922	HDOT Design Coordination Consultant - Airport and City Center Guideway	SSFM International, Inc.		Jun 8 '12	Jun 12 '12	Jun 15 '18
MM-925	HDOT Labor Master Agreement WOFH	HDOT		Oct 27 '10	Oct 27 '10	Oct 27 '19
MM-945	On-Call Construction Contractor	Royal Contracting Co. Ltd.	Jun 02 '14	Aug 6 '14	Aug 14 '14	Mar 03 '19
MM-946	On-Call Hazardous Materials (HazMat) Removal Contractor	CH2M HILL		Aug 23 '12	Sep 07 '12	Feb 15 '17
MM-947	On-Call Construction Contractor II	Royal Contracting Co. Ltd.	Mar 17 '15	May 21 '15	May 21 '15	May 21 '20
DBB-385	Ramp H2R2	Royal Contracting Co. Ltd.	Jan 30 '15	May 18 '15	May 18 '15	Jun 17 '16
DBB-505	Airport Section Utilities Construction	Nan, Inc.	Dec 17 '13	Jun 30 '14	Oct 6 '14	Dec 22 '15
DBB-525	Airport Section Guideway Seven (7) Pier Construction Contract	HDCC / CJA JV	Jul 09 '14	Sep 18 '14	Sep 18 '14	Apr 22 '15

Remaining Contracts						
Contract Code	Contract Name	Advertise Date	Bids Due/Part 1 Proposals Due	RFP Part 2 Proposals Due	Issue NTP	Projected Substantial Completion Date
AP00	Art-in-Transit	May 9 '13	-	-	TBD	TBD
DB-275	Pearl Highlands Parking Structure / Bus Transit Center	Mar 03 '14	Jun 03 '14	TBD	TBD	TBD
DBB-271	Farrington Hwy Stations Group Construction	Dec 19 '14	Mar 03 '15	-	TBD	TBD
MM-970	Fare Collection System Technical Support Consultant	Mar 24 '15	Apr 27 '15	-	TBD	TBD
MM-596	Construction Engineering and Inspection (CE&I) II Contract	Mar 25 '15	May 20 '15	-	TBD	TBD
DB-450	Airport Guideway and Stations	Apr 07 '15	Jul 21 '15	Jan 26 '16	Mar 14 '16 Jun 14 '16	Jul 19 '19
DBB-171	West O'ahu Stations Group Construction	Apr 13 '15	Jun 16 '15	-	Jul 08 '15	Nov 30 '17
DBB-510	City Center Utilities	TBD	TBD	-	TBD	TBD
DB-550	City Center Guideway and Stations	Aug 04 '15	Oct 01 '15	Apr 15 '16	Jun 1 '16 Nov 1 '16	TBD
DBB-371	Kamehameha Hwy Stations Group Construction	Aug 18 '15	Nov 03 '16	-	Dec 01 '15	Aug 31 '18
DBB-600	East Kapolei and UH/West O'ahu Park and Ride Lots	Nov 14 '16	Feb 15 '17	-	Apr 03 '17	Mar 01 '19

Appendix E. Vehicle Carshell Progress Tracker

HONOLULU AB FABRICATION TRACKER

CAR SHELL SERIAL NUMBER	CENTER ROOF ASSY & WELDING	CENTER FLOOR ASSY & WELDING (2 PANEL SET)	CENTER ROOF MACHINING	CENTER FLOOR MACHINING (2 PANEL SET)	ROOF ASSY & WELDING	FINAL ROOF ASSY & WELDING TEST	UNDER FRAME ASSY & WELDING	FINAL UNDERFRAME ASSY & INSPECTION	UNDERFRAME CLEANING AND PAINTING	CAR SHELL ASSY & WELDING 1	CAR SHELL ASSY & WELDING 2	CAR SHELL CALIBRATION	WATER TEST	PAINTING	INSULATION	FLOORING	CAR SHELL FINAL INSPECTION & WEIGHING	COMPLETED CAR SHELL
MJ/001												5/23/2015						7/19/2015
E/001												5/23/2015						7/19/2015
MJ/002												5/23/2015						7/19/2015
E/002	E/003		E/003									5/23/2015						7/19/2015
MJ/003												8/22/2015						10/8/2015
E/003												8/22/2015						10/8/2015
MJ/004												8/22/2015						10/8/2015
E/004												8/22/2015						10/8/2015
MJ/005												8/22/2015						10/8/2015
E/005																		
MJ/006																		
E/006																		
MJ/007																		
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Date: 5/20/2015

CHANGED

NON CONFORMITY

NON CONFORMITY

COMPLETE  
IN PROCESS

## Appendix F. DBE Participation

HART has established a Disadvantaged Business Enterprise (DBE) program in accordance with the regulations of the U.S. Department of Transportation (USDOT), Title 49, Code of Federal Regulations, Part 26 (49 CFR Part 26). To be certified as a DBE, a firm must be small business owned and controlled by socially and economically disadvantaged individuals.

FTA funds totaling approximately \$1.764 billion in year of expenditure dollars (\$1.550 billion New Starts funds plus \$0.214 billion Section 5307/ARRA funds) will be expended for Project related goods and services. A project goal of 13% or approximately \$229 million dollars has been established for awards to DBEs through Federal Fiscal Year 2018.

It is the policy of HART to ensure that DBEs as defined in 49 CFR Part 26 have an equal opportunity to receive and participate in USDOT-assisted contracts.

DBE Participation (9/24/07 to 5/31/15)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
David's Fencing	238990	APA	M	CT-HRT-10H0137 DB-120	\$6,800	
				CT-DTS-1100195 DB-320	\$129,816	
				CT-HRT-1000449 DB-200	\$52,821	\$189,437
Glad's Landscaping	561730	APA	M	CT-HRT-10H0137 DB-120	\$303,790	\$303,790
Don's Makiki	484110	APA	M	CT-HRT-10H0137 DB-120	\$537,031	
				CT-HRT-10H0449 DB-200	\$41,232	
				CT-DTS-1100195 DB-320	\$60,714	\$638,977
Pacific Preferred Contractors Corp.	237310	APA	M	CT-HRT-10H0137 DB-120	\$59,881	\$59,881
PAC Electric	238210	APA	F	CT-HRT-10H0137 DB-120	\$4,387,962	\$4,387,962
PMJ Builders	238310	APA	M	CT-HRT-10H0137 DB-120	\$43,866	
				CT-DTS-1100195 DB-320	\$107,100	\$150,966
Standard Sheetmetal & Mechanical	236220	APA	M	CT-HRT-10H0449 DB-200	\$6,105	\$6,105
LP&D Hawaii	541320	APA	M	SC-DTS-1100013 FD-240	\$219,911	\$219,911
Ace Land Surveying	541370	NA	M	SC-DTS-1100013 FD-240	\$38,700	\$38,700
Integrated Security Tech.	561621	O	F	CT-HRT-1200106 DBOM-920	\$105,180	\$105,180
LKG-CMC	541618	O	F	SC-HRT-11H0131 MM-905	\$2,600,462	
				SC-DTS-0700001 **** MM-910	\$2,783,277	
				SC-HRT-1400051 MM-595	\$165,546	
				SC-HRT-1400049 MM-962	\$190,609	\$5,739,894
Lawson & Associates	541690	O	F	SC-HRT-11H0131 MM-905	\$740,962	
				SC-DTS-0700001 **** MM-910	\$150,141	
				SC-HRT-1400061 MM-964	\$619,800	\$1,510,903
Gary K. Omori	541618	APA	M	SC-HRT-11H0131 MM-905	\$388,609	
				SC-DTS-0700001 **** MM-910	\$392,920	\$781,529

DBE Participation (9/24/07 to 5/31/15)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
Pat Lee & Assoc.	541618	APA	M	SC-HRT-11H0131 MM-905	\$402,791	
				SC-DTS-0700001 **** MM-910	\$374,110	\$776,901
212 Harakawa	541430	APA	F	SC-HRT-11H0131 MM-905	\$358,141	
				SC-DTS-0700001 **** MM-910	\$354,758	\$712,899
JAD & Associates	541330	APA	M	SC-DTS-0700001 **** MM-910	\$508,355	\$508,355
Pacific Architects	541310	APA	M	SC-DTS-0700001 **** MM-910	\$39,273	\$39,273
Nagame Okawa*	541310	APA	M	SC-DTS-0700001 MM-910	\$67,014	\$67,014
Consulting Structural Hawaii	541330	APA	M	SC-DTS-0700001 **** MM-910	\$298,557	\$298,557
Bright Light Marketing Group	541613	APA	F	SC-HRT-1200038 FD-430	\$162,813	
				SC-HRT-1200149 FD-530	\$191,227	
				SC-HRT-1300022 FD-440	\$134,912	\$488,952
Ki Concepts	541320	APA	M	SC-HRT-1200077 MM-922/923	\$25,020	\$25,020
Miyabara Associates	541320	APA	M	SC-HRT-1300022 FD-440	\$99,850	\$99,850
Anil Verma Associates, Inc.**	541350	HA	M	SC-HRT-1200111 FD-340	\$3,303,778	\$3,303,778
AMR Estimating Services ***	541330	HA	M	SC-HRT-11H0131 MM-905	\$135,281	
				SC-HRT-1400027 MM-913	\$515,149	\$650,430
The Nakoa Companies	541620	NA	M	CT-HRT-1200106 DBOM-920	\$3,843	\$3,843
Hawaiiya Technologies	238210	APA	F	CT-HRT-10H0449 DB-200	\$27,514	
				CT-HRT-1200106 DBOM-920	\$20,142	\$47,656
Element Environmental	541620	APA	M	SC-HRT-1400050 MM-290	\$437,314	\$437,314
PSC Consultants	541330	APA	M	SC-HRT-1400050 MM-290	\$23,656	\$23,656
Bow Construction Management	541330	APA	M	SC-HRT-1400050 MM-290	\$117,763	\$117,763
FIC, LLC	541611	APA	M	SC-HRT-1400051 MM-595	\$784,178	\$784,178
The Solis Group	541620	O	F	SC-HRT-1400027 MM-913	\$583,617	\$583,617
Island Hauling	484110	APA	M	CT-HRT-1000449 DB-200	\$18,147	\$18,147
ADS System Safety Consulting *****	541620	BA	M	SC-HRT-1400061 MM-964	\$797,018	\$797,018
Dovetail Consulting	541330	BA	F	MOU-11-SO-1 MM-930	\$709,497	\$709,497
<b>Total</b>						<b>\$24,626,953</b>

\* Nagame Okawa's countable participation is limited to the period from 1/2/09 to 2/16/10. The company graduated from the DBE program on 2/16/10.

\*\* Anil Verma Associates, Inc. is a prime contractor and was certified as a DBE effective 6/26/13.

\*\*\* AMR Estimating Services, Inc. was certified as a DBE effective 10/25/13.

\*\*\*\* DBE participation from 9/24/07 to 9/17/13.

\*\*\*\*\* ADS System Safety Consulting was certified as a DBE effective 8/7/14.

**Race Categories**

<b>APA</b>	Persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands, (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Juvalu, Nauru, Federated States of Micronesia or Hong Kong
<b>BA</b>	Persons having origins in any of the black racial groups of Africa
<b>HA</b>	Persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin regardless of race
<b>NA</b>	Persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians
<b>SAA</b>	Persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka
<b>O</b>	Any other group whose members are designated as socially and economically disadvantaged by the SBA

## Appendix G. Risk

Risk by Contract Package				
Contract Packages	Apr. 2015 # of Risks	May 2015 Update		
		Total # of Risks	New Risks	Deleted Risks
Project Wide	4	4	0	0
WOFH Guideway	21	21	0	0
Pearl Highlands	4	4	0	0
Maintenance and Storage Facility	5	5	0	0
Kamehameha Highway Guideway	18	18	0	0
Core Systems Contract	9	8	0	1
Elevator/Escalator	2	3	1	0
Airport Utilities	2	2	0	0
Farrington Highway Stations	5	5	0	0
West Oahu Stations	5	5	0	0
Kam. Highway Stations	8	8	0	0
Airport Guideway	19	18	0	1
City Center Guideway	41	29	0	12
Airport Section Stations	16	16	0	0
City Center Section Stations	14	14	0	0
<b>Total</b>	<b>173</b>	<b>160</b>	<b>1</b>	<b>14</b>

## Notes of Significance:

Design contracts for Airport and City Center Sections are still underway for procurement and contract package preparation. When this process is complete, the guideway and stations for each group will be combined; it will be tracked separately in the mean time.

Comparison of Risk Ratings								
Contract Package/Section	April 2015 Update # of Risks				May 2015 Update # of Risks			
	Total	High	Medium	Low	Total	High	Medium	Low
Project Wide	4	1	2	1	4	1	2	1
WOFH Guideway	21	4	12	5	21	4	12	5
Pearl Highlands Garage	4	0	4	0	4	0	4	0
Maintenance and Storage Facility	5	0	4	1	5	0	4	1
Kamehameha Highway Guideway	18	1	10	7	18	1	10	7
Core Systems Contract	9	1	4	4	8	0	4	4
Elevator/Escalator	2	0	2	0	3	0	2	1
Airport Utilities	2	1	1	0	2	1	1	0
Farrington Highway Stations	5	0	5	0	5	1	4	0
West Oahu Stations	5	0	5	0	5	0	5	0
Kam. Highway Stations	8	0	3	5	8	0	3	5
Airport Guideway	19	3	14	2	18	3	13	2
City Center Guideway	41	9	27	5	29	11	15	3
Airport Stations	16	3	12	1	16	3	12	1
City Center Stations	14	0	12	2	14	0	12	2
<b>Total</b>	<b>173</b>	<b>23</b>	<b>117</b>	<b>33</b>	<b>160</b>	<b>25</b>	<b>103</b>	<b>32</b>

## Notes:

Significant reductions in design related risks on the Airport Guideway and Airport Stations Group as the package is in procurement.

Appendix H. Project Organization Chart

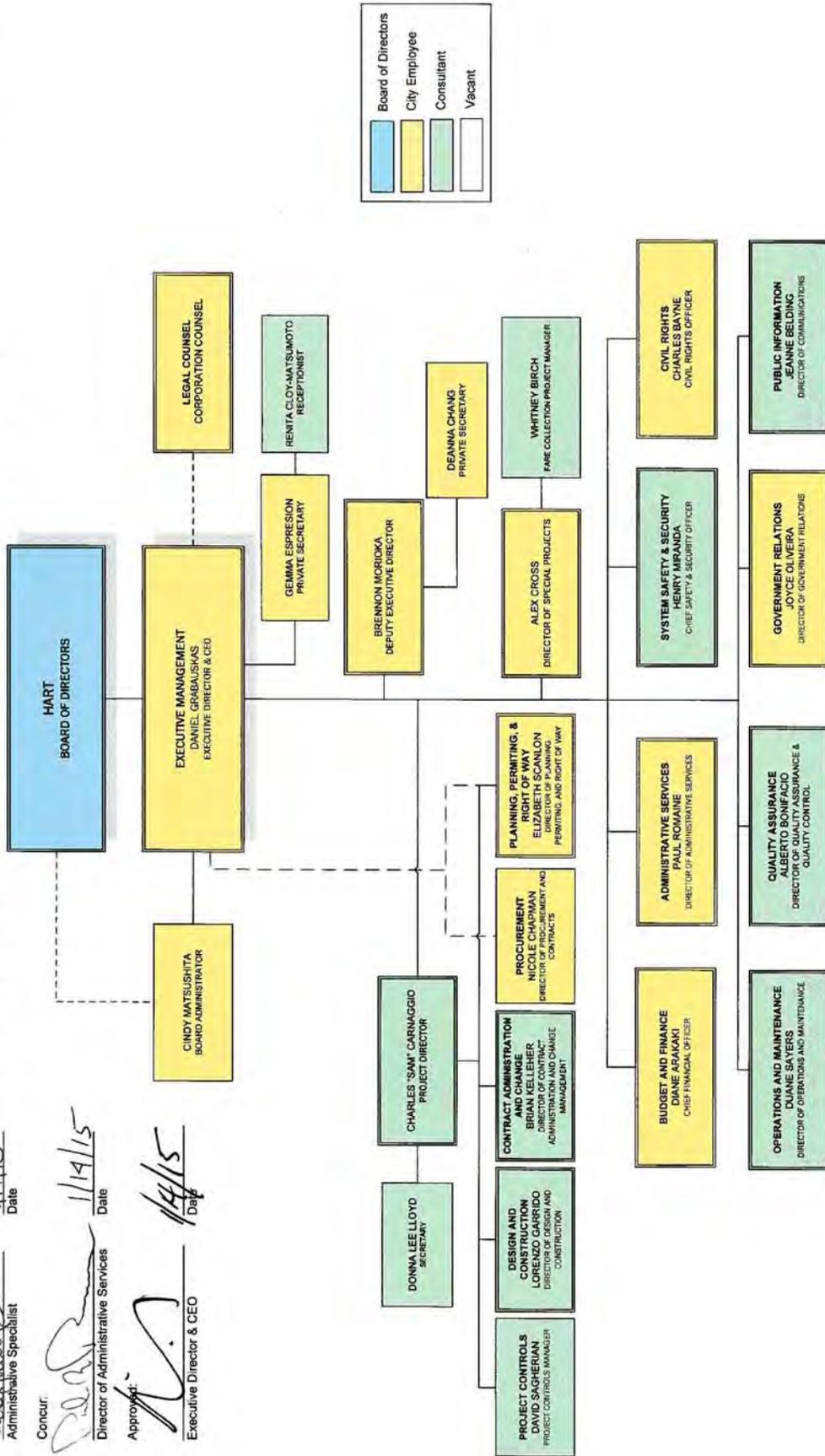
January 14, 2015

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION (HART)

Prepared by: *[Signature]*  
 Administrative Specialist  
 Date: 1/14/15

Concur: *[Signature]*  
 Director of Administrative Services  
 Date: 1/14/15

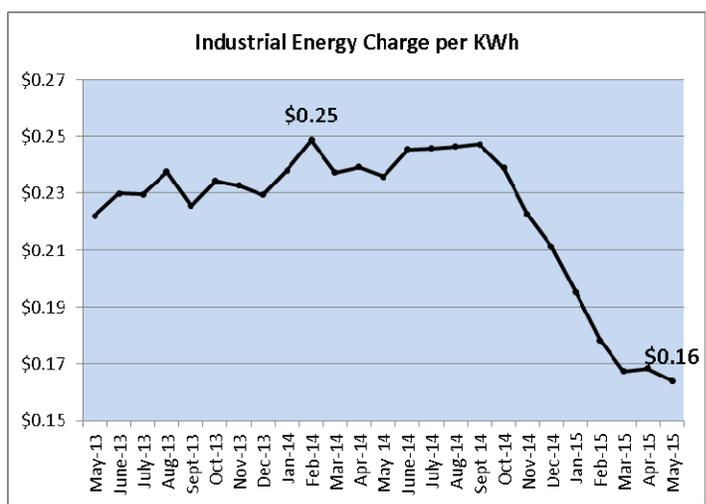
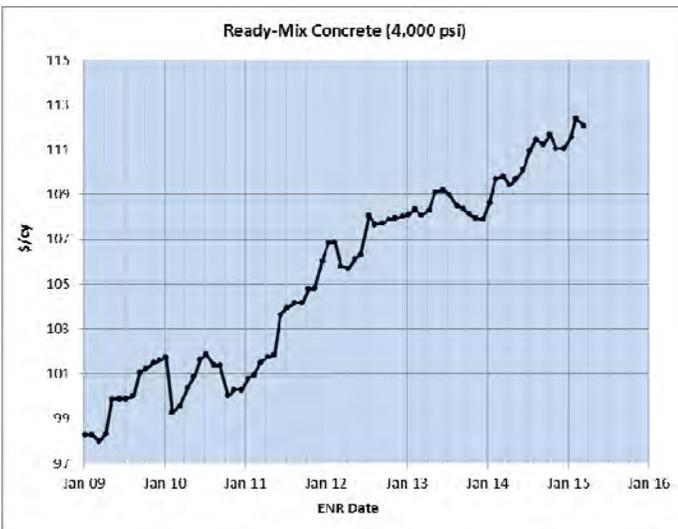
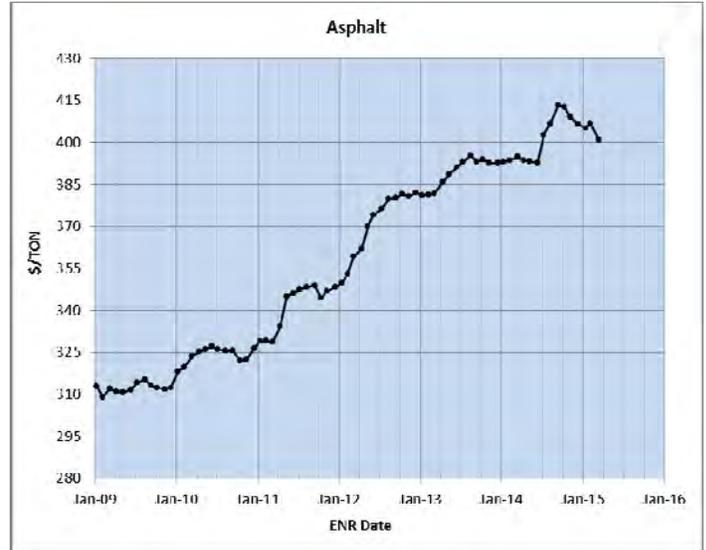
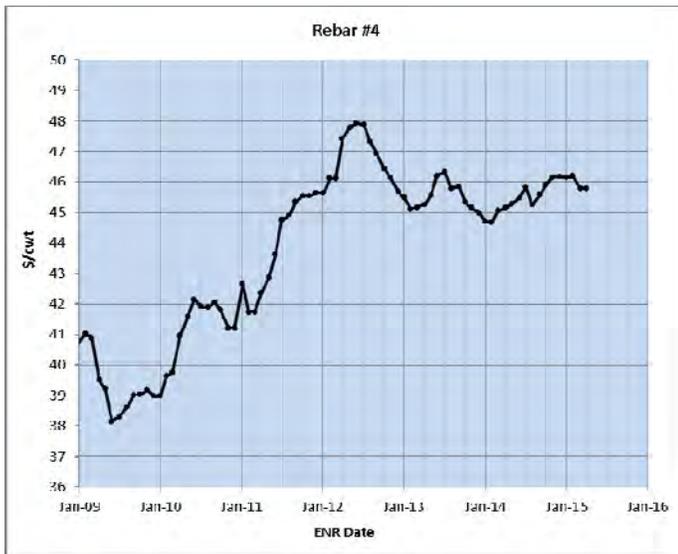
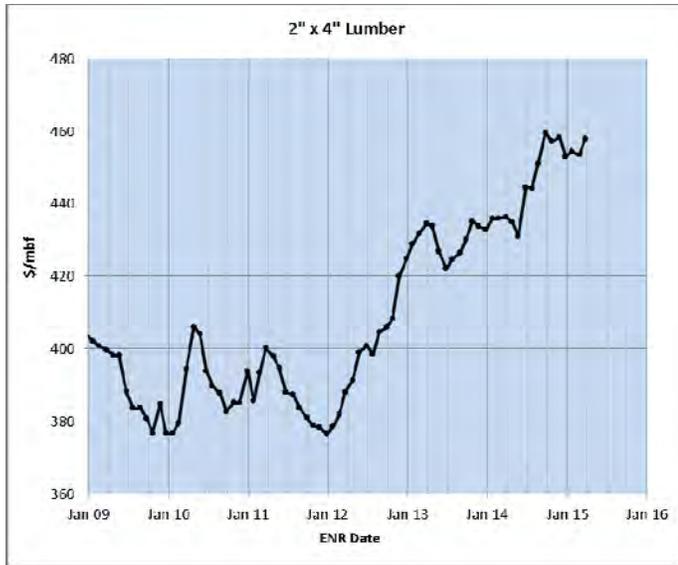
Approved: *[Signature]*  
 Executive Director & CEO  
 Date: 1/14/15



Board of Directors
City Employee
Consultant
Vacant

### Appendix I. Indices on Key Commodities

The following charts represent the cost trends on some of the key materials used in the program.



Source: HECO: Effective Rate Summary for DS Rate

### Appendix J. Project Photos



Guideway construction in West O'ahu.



Equipment storage site.



Balanced Cantilever construction near the H-1/H-2 Freeway merge.



Construction near the H-1/H-2 Freeways.



Construction along Kamehameha Highway.



Future Aloha Stadium Station.



Operations and Servicing Building (OSB).



Wheel Truing Building and OSB.



Maintenance of Way Building.



Casting Yard.

# **PMOC MONTHLY REPORT**

## **Honolulu Rail Transit Project**

City and County of Honolulu

Honolulu Authority for Rapid Transportation (HART)

Honolulu, HI

May 2015 (FINAL)

PMOC Contract Number: DTFT60-14-D-00012

Task Order No. 3: Honolulu Rail Transit Project

Project No: DC-27-5288

Work Order No. 1

OPs Referenced: OP 1 and 25

**Jacobs Engineering Group, Inc.**

**319 E. Warm Springs Road, Suite 200, Las Vegas, Nevada 89119**

William Tsiforas, (702) 938-5400, [william.tsiforas@jacobs.com](mailto:william.tsiforas@jacobs.com)

Length of Time Assigned: Five Years (November 18, 2009 through February 23, 2015)

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- Appendix A: Acronym List
- Appendix B: Contract Status
- Appendix C: Bidding Schedule
- Appendix D: Project Overview and Map (Transmitted as a separate file)
- Appendix E: Safety and Security Checklist (Transmitted as a separate file)

## 1.0 EXECUTIVE SUMMARY

### 1.1 Project Description

- **General Description:** The Project is a 20-mile-long elevated fixed guideway rail system along Oahu's south shore between East Kapolei and Ala Moana Center. The Project will include 21 stations. The alignment is elevated, except for a 0.6-mile at-grade portion at the Leeward Community College station. The Project is planned to be delivered in four guideway segments.
  - Segment I (West Oahu/Farrington Highway) – East Kapolei to Pearl Highlands (7 miles/7 stations)
  - Segment II (Kamehameha Highway) – Pearl Highlands to Aloha Stadium (4 miles/2 stations)
  - Segment III (Airport) – Aloha Stadium to Middle Street (5 miles/4 stations)
  - Segment IV (City Center) – Middle Street to Ala Moana Center (4 miles/8 stations)
- **Length:** 20 miles
- **No. of Stations:** 21
- **Additional Facilities:** Maintenance and Storage Facility and parking facilities
- **Vehicles:** 80 vehicles
- **Ridership Forecast:** Weekday boardings – 104,300 (2020); 119,600 (2030)

### 1.2 Project Status

- Status of primary construction contracts:
  - West Oahu /Farrington Highway (WOFH) Design-Build (DB) Contract –
    - Contract is approximately 62.4% complete based on earned value (design and construction activities). The planned earned value at this time is approximately 73.6%.
    - The contract is approximately six months behind schedule. The delay is the result of less than planned production rates and lack of site access. HART and KIWC have been working to mitigate impacts to critical path activities. A revised baseline schedule was submitted by the contractor, but rejected by HART. HART requested that the schedule be resubmitted by KIWC via the Change Order process to quantify any extended overhead or escalation that may have resulted due to delays beyond KIWC's control. It is anticipated that the substantial completion milestone will be modified to reflect the 6-month delay.
    - Approximately three-miles of guideway have been erected.
    - Overall quality of the contract is good.
  - Kamehameha Highway Guideway (KHG) DB Contract –
    - The contract is approximately 37.7% complete based on earned value (design and construction activities). The planned earned value at this time is approximately 72.7%.
    - The contract is approximately seven months behind schedule. The delay is the result of less-than-planned production rates and lack of site access.

- HART and KIWC have been working to mitigate impacts to critical path activities. HART received a revised baseline schedule from the contractor, but it was rejected by HART. HART requested that the schedule be resubmitted by KIWC via the Change Order process to quantify any extended overhead or escalation that may have resulted due to delays beyond KIWC's control.
- Casting of segments is scheduled to begin in April 2015, and guideway erection is scheduled to begin in August 2015. However, there are HECO transmission line clearance issues associated with the guideway that may delay the shaft and guideway erection.
  - KIWC is mobilizing a third guideway erection truss to help mitigate the WOFH and KHG delays.
- Maintenance and Storage (MSF) DB Contract –
    - The contract is approximately 71.0% complete based on earned value (design and construction activities). The planned earned value at this time is approximately 73%. Building structures are essentially complete with interior build out continuing.
    - Contract substantial completion date has slipped 10 calendar days due to weather that impacted construction operations. KKJV and HART are working to mitigate the impacts to the critical path, which are not significant.
    - Building structures are moving along well with installation of tilt-up wall panels.
    - Overall quality of the contract is good.
  - Core Systems Design-Build-Operate-Maintain (DBOM) Contract –
    - The contract is approximately 20.0% complete based on expenditures (design, manufacturing, and construction activities). The planned completion at this time is approximately 21%.
    - AHJV revised its baseline contract schedule, which has been approved. However, re-procurement of Westside Stations Group and use of DB for the eastside guideway and stations will result in another revision to the CSC schedule. The revised baseline schedule will be available in June/July 2015 after all interface milestones are finalized.
    - Limited construction work (MSF signal house) is anticipated to begin in June 2015; significant construction activity will not begin until fall 2015.
    - Hitachi, LTD has an agreement to purchase AnsaldoBreda and Ansaldo STS from Finmeccania S.P.A. The sale is expected to close later this year.
    - HART performed a Buy America Audit of the LRVs. HART intends to report the percentage based on the trainset, not type of car (End and Middle). Based on the trainset, the US content is 63%. Based on the type of car, the percentages are 64% (E car) and 62% (M car), which satisfy the minimum 60% US content for rail vehicles under Buy America.
  - Airport Advanced Utilities Construction Contract –
    - Work was scheduled to begin in March 2015, but has been delayed until at least June 2015 due to issues with Navy right of entry (ROE) for construction. HART has not been able to secure the necessary easements

from the Navy to date. There are potential construction delays as a result of the lack of ROE.

- Overall design of the project is approximately 84.7% complete as of March 2015. The planned completion at this time is approximately 91.2%. However, this percent complete may change as a result of utilizing DB procurement strategy for the Airport and City Center guideway and stations sections.
- Overall utilities installed on the project are approximately 14.8% as of March 2015. The planned completion at this time is approximately 26.1%.
- Overall construction of the project is approximately 25.3% complete as of March 2015. The planned completion at this time is approximately 33.6%.
- Appendix B of this report provides the status of the current design and construction contracts.

### 1.3 PMOC Issues or Concerns

The following key issues or concerns have been identified:

- Project Controls:
  - Budget – HART’s current Estimate at Completion (EAC) indicates that the Project cost will most likely exceed the FFGA budget primarily due to the AIS, federal lawsuit delays, subsequent impact of current market conditions, and several other items that are anticipated to be an additional cost to the project. HART is reviewing the project budget and will update the EAC accordingly.
  - Contingency – HART indicates a forecasted amount of \$303 million remaining in contingency (\$11.5 million in unallocated and \$291.8 million in allocated contingency). However, this does not fully reflect impacts of the Westside Stations bids, the updated cost estimate for the Airport/City Center Guideway Contract, and several items that have been included in the EAC.
  - Funding – HART collected \$65 million in tax revenue for the quarter that ended in March 2015. The amount was \$9 million above quarterly projections based on HART's financial plan, which is encouraging. HART has indicated that it will not have access to \$210 million in Section 5307 funds for the project. HART and the City must identify substitute funding to address the loss of these funds in an update of the Financial Plan, which is due to FTA in July 2015. HART also will take advantage of low interest rates and an improved borrowing plan to save an estimated \$60-75 million in borrowing costs.

The Hawaii State Legislator passed House Bill 134, which would extend the City and County of Honolulu's current 0.5% surcharge on the state's General Excise Tax (GET) for the rail transit project for an additional five years through 2027. The legislative session closed on May 17, 2015. Preliminary estimates are that the GET extension could generate approximately \$1.8 billion in revenue. The Governor has 45 calendar days from May 17, 2015 to sign the legislation, and the City Council will need to amend an ordinance to enact the tax extension. The City Council cannot enact the measure before July 1, 2015 (start of Fiscal Year)

but must take action by December 15, 2015. If passed by the City Council, the Mayor must then sign the measure.

- Cost Containment/Cost Reduction Measures – The PMOC has discussed the project cost on a monthly basis with HART in an effort to ensure that cost issues are proactively addressed. HART has recently implemented Cost Containment and Cost Reduction measures in an effort to mitigate the cost increase. These efforts include:
  - Significant revision of the project’s contract packaging strategy
  - Development of a detailed cost reduction matrix that focuses on the remaining construction contracts (Value Engineering)
  - Review of interface milestones to help relieve schedule compression where possible
  - Review of various options related to financing of the project
  - Identification of items that could be considered Operations & Maintenance costs
  - Development of a HART Decision Milestone Matrix.

The PMOC will continue to hold Cost Containment Workshops with HART on a monthly basis to review the Cost Reduction Measures Matrix and HART’s Decision Milestone Matrix. Nevertheless, it is still anticipated that the Project cost will most likely exceed the FFGA budget. Therefore, in addition to the matrices, HART should begin initiating plans that identify a course of action, such as Secondary Mitigation Measures, and start to implement them.

- Schedule – Master Project Schedule will require revision as a result of the re-packaging of the remaining contracts. A preliminary update of the MPS was provided to the PMOC in March 2015. The PMOC will await an MPS update before performing a detailed review. HART indicated that a revised MPS will be available in June 2015.
- Procurement –
  - Farrington Highway Station Group Construction – Invitation for Bids (IFB) was issued in December 19, 2014. Bids were received on March 3, 2015. The apparent low bid was \$78.9 million. HART received a bid protest notification from the second low bidder on March 9, 2015. Notification of the appeal was provided to the FTA on March 11, 2015. HART denied the bid protest on April 14, 2015. The protester filed an appeal with the Department of Commerce and Consumer Affairs (DCCA) on April 20, 2015. A hearing is scheduled for May 20, 2015. The project schedule is potentially delayed approximately 3 months due to the bid protest. However, HART is working to mitigate the potential schedule delay. The PMOC is not aware of any cost impacts associated with the bid protest.
  - West Oahu Stations Group – Invitation for Bids (IFB) was issued in April 2015. Bids are due June 16, 2015.
  - Kamehameha Highway Station Stations Group – IFB will be issued in August 2015.

- Airport Guideway and Stations DB Contract – This contract will include a two-part Request for Proposals (RFP). Part I was issued in April 2015 with responses due June 9, 2015. However, HART has extended the response period six weeks to allow for Joint Venture (JV) teams to form. Part II responses (price and technical) will be due in January 2016. Some of HART’s staff have expressed concern whether viable teams are forming. HART will check with DCCA to see if any new JV teams have applied for a contracting license.
  - City Center and Stations DB Contract – This contract will include a two-part RFP. Part I will be issued August 2015. Part II will be issued in October 2015. NTP is anticipated for June 2016.
  - Design Contracts – HART has limited the designers’ activity for the Airport/City Center Guideway and Utilities Contract and Eastside Stations Group to supporting preparation of the eastside DB contracts.
  - Pearl Highlands Parking Structure DB Contract – HART has deferred this procurement with the next solicitation action scheduled for July 2015.
  - H2R2 Ramp – Contract was awarded in May 2015 to Royal Contracting for \$5.2M. The protest period ended on May 12, 2014.
  - Fare Collection Technical Support Consultant – Proposals were received on February 17, 2015. Two proposals were received by HART, but three proposals are needed per HART requirements. HART is seeking legal opinion for an exception to this requirement in order to evaluate the two proposals submitted.
  - Fare Collection System - Request for Proposal (RFP) is anticipated to be released in May 2015, but is contingent upon an MOU with the City.
- HART intends to build an interim park-n-ride facility at the University of Hawaii West Oahu Station. This facility would be in use until the developer completes the structure over the Kaloi Channel that allows for access to the permanent location of the park-n-ride facility. HART is evaluating the issue to determine whether to use federal or local funds to build the interim facility. UH-West Oahu intends to use the interim facility for campus parking after HART no longer has need for the facility. However, it is not known how long the interim facility will be in use before the permanent facility can be constructed. If federal funds are to be used, clarification is needed to determine the anticipated period that the facility would be utilized by HART.
  - Hawaiian Electric Companies (HECO)
    - HECO has a collective bargaining agreement that has different wage scales and allows payment to its labor forces biweekly, which does not satisfy Davis-Bacon. HECO has requested a waiver at the state and federal level on its collective bargaining agreement that has different wage scales and allows payment to its labor forces biweekly. HART is coordinating to resolve this with HECO.
    - HART, HECO, and their consultants are completing detailed power consumption analyses.
    - The cost for activation of the Traction Power Substations was not initially included in the project estimate. A change order will be required to address this cost, which is still being assessed. This issue has been partially captured in HART’s EAC.

- 50-foot Offset Issue –
  - HECO and HART have begun high-level meetings to discuss numerous issues, including the offset issue. HECO has now indicated that offsets must be maintained to accommodate future pole replacement. The proposed use of a telescoping bucket truck would only mitigate line maintenance issues. This may have a tremendous impact on both schedule and cost. It affects both existing and future construction contracts for all segments.
  - HART has acknowledged that under-grounding of portions of the overhead power lines will likely be required along limited lengths of the guideway. HECO provided HART with a report from its consultant regarding the potential extents of under-grounding. HECO’s preliminary estimate has not been validated by HART. HART has indicated that some costs have been included in the EAC to cover HECO undergrounding, additional HECO work in City Center, and service connections. However, the PMOC strongly recommended that HART prepare an independent cost estimate for all additional HECO-related costs given their potential order of magnitude.

#### 1.4 Core Accountability Items

Project Status: FFGA		Original at FFGA	Current Estimate
<b>Cost</b>	Cost Estimate	\$5,122,000,000	\$5,122,000,000**
<b>Contingency</b>	Unallocated Contingency	\$101,900,000	\$11,500,000
	Total Contingency (Allocated plus Unallocated)	\$643,600,000	\$303,000,000
<b>Schedule</b>	Revenue Service Date (RSD)	1/31/2020	1/31/2020
<b>Total Project Percent Complete</b>			
Based on Expenditures		33.4% (as of March 27, 2015)	
Based on Earned Value*		33.4%	

\*Overall project progress is based on the weighted value progress of the individual construction and design contracts.

\*\*Does not reflect HART’s current EAC, which has not been validated and does not include all known potential costs.

Major Issues	Status	Comments/Planned Action
Potential Cost & Schedule Delays	HART has experienced delays and has incurred costs as a result of both the state and federal lawsuits.	<ul style="list-style-type: none"> <li>• Budget – HART’s current Estimate at Completion (EAC) indicates that the Project cost will most likely exceed the FFGA budget primarily due to the AIS, federal lawsuit delays, subsequent impact of current market conditions, and several other items that are anticipated to be an additional cost to the project. HART is reviewing the project budget and will update the EAC accordingly.</li> </ul> <p>The PMOC has discussed the project cost and schedule on a monthly basis with HART in an effort to ensure that cost and schedule issues are proactively addressed. HART has recently implemented Cost Containment and Cost Reduction measures in an effort to mitigate the cost increase.</p> <p>The PMOC will continue to hold Cost Containment Workshops with HART on a monthly basis to review the Cost Reduction Measures Matrix and HART’s Decision Milestone Matrix. Nevertheless, it is still anticipated that the Project cost will most likely exceed the FFGA budget. Therefore, in addition to the matrices, HART should begin initiating plans that identify a course of action, such as Secondary Mitigation Measures, and start to implement them.</p> <ul style="list-style-type: none"> <li>• Schedule – Master Project Schedule will require revision as a result of the re-packaging of the remaining contracts. A preliminary update of the MPS was provided to the PMOC in March 2015. The PMOC will await an MPS update before performing a detailed review. HART indicated that a revised MPS will be available in June 2015.</li> <li>• Cost Reduction Matrix – HART will continue to update the matrix.</li> <li>• Decision Milestone Matrix – HART will continue to update the matrix.</li> </ul>

Major Issues	Status	Comments/Planned Action
Funding Shortfall	Section 5307 funds will not be made available and GET receipts continue to be an issue.	<ul style="list-style-type: none"> <li>• HART collected \$65 million in tax revenue for the quarter that ended in March 2015. The amount was \$9 million above quarterly projections based on HART's financial plan, which is encouraging. HART has indicated that it will not have access to \$210 million in Section 5307 funds for the project. HART and the City must identify substitute funding to address the loss of these funds in an update of the Financial Plan, which is due to FTA in July 2015. HART also will take advantage of low interest rates and an improved borrowing plan to save an estimated \$60-75 million in borrowing costs.</li> <li>• The state legislature passed a measure that would extend the City and County of Honolulu's current 0.5% surcharge on the state's General Excise Tax (GET) for the rail transit project for an additional five years through 2027. The legislative session closed on May 17, 2015. Preliminary estimates are that the GET extension could generate approximately \$1.8 billion in revenue. The Governor has 45 calendar days from May 17, 2015 to sign the legislation, and the City Council will need to amend an ordinance to enact the tax extension. The City Council cannot enact the measure before July 1, 2015 (start of Fiscal Year) but must take action by December 15, 2015. If passed by the City Council, the Mayor must then sign the measure.</li> </ul>
Post-Rod Changes	HART is considering several proposed design changes that may require additional environmental review.	FTA and HART hold bi-weekly meetings to discuss the status of any potential changes. HART has submitted or will submit information on each proposed change for FTA to determine the level of documentation required to assess impacts and subsequent mitigation measures.
Hawaii Electric Company (HECO)	50-foot offset requirement	<ul style="list-style-type: none"> <li>• 50-foot Offset Issue – HECO and HART have begun high-level meetings to discuss numerous issues, including the offset issue. HECO has now indicated that offsets must be maintained to accommodate future pole replacement. The proposed use of a telescoping bucket truck would only mitigate line maintenance issues. This may have a tremendous impact on both schedule and cost. It also affects ongoing and future DB contracts in all segments.</li> <li>• HART has acknowledged that under-grounding of portions of the overhead power lines will likely be required along limited lengths of the guideway. HECO provided HART with a report from its consultant regarding the potential extents of under-grounding. HECO's preliminary estimate has not been validated by HART. HART has indicated that some costs have been included in the EAC to cover HECO undergrounding, additional HECO work in City Center, and service connections. However, the PMOC strongly recommended that HART prepare an independent cost estimate for all additional HECO-related costs, given their potential order of magnitude.</li> </ul>
<b>Date of Next Quarterly Meeting:</b>	August 18, 2015	

## **2.0 BODY OF REPORT**

### **2.1 Grantee's Capabilities and Approach**

#### **2.1.1 Technical Capacity and Capability (TCC)**

HART has gone through a considerable number of organizational changes since the FFGA was executed in December 2012. Project staff has begun updating the project's numerous plans and procedures to reflect these changes. The PMOC met with HART to discuss the timing of each plan that will require updating as a result of the organization and procedural changes that have occurred.

It should be noted that the April Quarterly Meeting Report stated that the Deputy Director of Design & Construction was leaving the Project. However, it was Director of Design & Construction that left the Project, and HART is recruiting to fill the position as a City employee.

The PMOC has recommended that HART review its staffing and consider changes to streamline the organization. HART has begun reviewing the project organization to determine if changes can be made to be more effective. HART's update of the management plans must incorporate any organizational changes that have been made to date or any proposed changes. It is critical that any changes be documented in the various management plans immediately.

The acquisition of URS by AECOM was finalized October 17, 2014. HART has determined the AECOM acquisition of URS has created a Conflict of Interest (COI), which URS has been unsuccessful in resolving. HART subsequently issued a notice of termination letter to URS on March 10, 2015. URS will continue to provide services under a firewall arrangement until HART has re-procured and awarded a contract to a replacement contractor and remaining work is transitioned to the replacement contractor. AECOM will be retained by HART to develop the bridging documents (design) needed for Airport/City Center Guideway DB contract.

#### **2.1.2 Project Controls for Scope, Quality, Schedule, Cost, Risk, and Safety**

##### Schedule

- **Preliminary Engineering (PE):** FTA approved entrance into PE on October 16, 2009
- **Record of Decision (ROD):** ROD was issued on January 18, 2011.
- **Final Design (FD):** FTA approved entrance into FD on December 29, 2011.
- **Full Funding Grant Agreement (FFGA):** Executed on December 19, 2012.
- **Grantee Target Start of Revenue Operations for Full Alignment:** July 2019
- **FFGA Revenue Service Date (RSD):** January 31, 2020

##### Cost

- HART's current Estimate at Completion (EAC) indicates that the Project cost will most likely exceed the FFGA budget primarily due to the AIS, federal lawsuit delays, subsequent impact of current market conditions, and several other items that are anticipated to be an additional cost to the project. HART is reviewing the project budget and will update the EAC accordingly.

- The current estimated contingency is not sufficient to complete the project. HART is currently assessing the remaining contract strategy including implementation of primary risk mitigations measures and value engineering to reduce project cost impacts. HART should begin initiating plans that identify a course of action, such as Secondary Mitigation Measures, and start to implement them.
- The Hawaii State Legislature passed House Bill 134, which allows the City and County of Honolulu to extend the current 0.5% surcharge on the state's General Excise Tax (GET) for the rail transit project for an additional five years through 2027. The legislative session closed on May 17, 2015. Preliminary estimates are that the GET extension could generate approximately \$1.8 billion in revenue. The Governor has 45 calendar days from May 17, 2015 to sign the legislation, and the City Council will need to amend an ordinance to enact the tax extension. The City Council cannot enact the measure before July 1, 2015 (start of Fiscal Year) but must take action by December 15, 2015. If passed by the City Council, the Mayor must then sign the measure.

### Quality

- The contractor damaged (cracked) two precast segments during erection of the WOFH guideway structure. These segments were incorporated into a single span of the structure, but a review and analysis must be completed to determine whether repairs can be completed or if the segments must be replaced. HART indicated that KWIC will replace the two precast segments instead of repairing them. This work has begun. On March 31, 2015, KIWC completed the replacement of the two precast segments and Span 67 has been realigned into the guideway.
- WOFH Span 17 Damage and Repair – During the erection in March 2015, four segments were damaged due to unbalanced support from the temporary bearings. KIWC continues to evaluate the extent of the damage, and a root cause analysis and repair procedure alternatives was submitted to HART for review.
- Span 105 Damage and Repair – The span shifted on the jacks while being set in April 2015 into its final horizontal and vertical position. Due to this incident, final span alignment operations were temporarily suspended to re-evaluate the procedures. KIWC is currently erecting a temporary platform to support the span during the realignment (sliding) process.
- WOFH Column 151 Damage and Repair – In April 2015, Column 151 was poured, but after formwork was removed, the lower concrete surface of the column exhibited large areas of honeycombing and rock pockets with localized areas of exposed vertical and horizontal reinforcing, possibly due to insufficient concrete consolidation. KIWC has completed the repairs in accordance with their Concrete Repair Procedure approved by the Engineer of Record (EOR).
- Following is a summary of Non-Conformance Reports (NCR) that have been issued on the project:

Contract	Description	NCRs		
		Issued	Closed	Open
DB-120	West Oahu/Farrington Highway	339	252	87
DB-200	Maintenance and Storage Facility	24	24	0
DB-320	Kamehameha Highway Guideway	52	40	12
DBOM-920	Core Systems Contract	63	44	19

It should be noted that the increase in Open NCRs for the WOFH DB Contract is primarily the result of items identified in the precast yard and the concrete consolidation issues with drilled shafts. However, KIWC has developed measures to correct these NCRs and help prevent issues in the future.

### System Safety and Security

- HART Design Conformance Checklists, including CELs/CILs for active projects, are going through the Safety and Security Review Committee (SSRC) for approval. However, Construction Conformance and Testing Verification is lagging.
- HART must update the Safety and Security Roadmap on a monthly basis and provide it to the PMOC a week prior to the Monthly Meeting with the PMOC.
- HART is in the process of updating the Safety and Security Management Plan (SSMP), Safety and Security Certification Plan (SSCP) and Construction Safety Plan (CSP) to conform to pending update of the PMP.
- HART is revising its Contract Packaging Plan and will update the Airport, Navy, and System-wide Threat and Vulnerability Analyses (TVAs) to conform to pending update of the Contract Packaging Plan.
- HART Safety Open Concerns List is being updated on a monthly basis to include any open items from the active contracts.
- HART will be receiving LRVs during the 1<sup>st</sup> Quarter of 2016. Prior to any dynamic testing, HART must provide HDOT with all design, construction, and inspection verification and meet the requirements of its SOA Program Plan before HDOT will approve HART for interim testing. HART is working on vehicle certification planning activities to comply with the HDOT Program Plan.
- HART Safety and Security Certification Manager is no longer working on the project as of the beginning of May 2015. The HART Chief Safety and Security Manager and other HART staff are performing the duties of the Safety and Security Certification Manager while a search for a new candidate is underway.
- The Airport 7 Pier Project is nearing completion. HART will perform close out, including final safety certification.

### Real Estate

The PMOC had identified some issues regarding progress of HART's real estate activities:

- The number of outstanding parcels remains significant:
  - HART has closed 81 of 234 properties needed.
  - HART has completed 101 of 234 appraisals.
- Acquisitions are improving but are still behind schedule. It appears that some parcels may require condemnation. HART proposed the use of irrevocable right of entry documents (Right of Entry, Possession and Use Agreement) to gain control of a parcel prior to condemnation. This approach is a modification of the current

procedures, and HART has updated the RAMP to include this approach. FTA provided concurrence on the use of a right of entry to provide sufficient interest to justify the construction.

- All private property site access for the guideway is complete for KHG. KIWC has identified 14 permanent easement locations for relocated utilities. HART is working with KIWC to resolve these easements, but they are becoming critical and could impact construction work.
- HART has several easements pending from U.S. Navy for the Airport Section, which are particularly necessary for the Airport Utility contractor. These easements are critical and could impact construction work. HART is working with the Navy to complete the documentation as quickly as possible. The Navy has committed to providing construction Rights of Entry for locations by mid-July 2015.
- University of Hawaii (UH) requested that the HART contractor enter into a separate right of entry to construct on University property. The University maintains that the current Right of Entry (ROE) with HART only addresses preliminary work and does not cover on-site construction, and that the University can refuse to admit the contractor. KIWC and UH are close to finalizing the ROE for the Leeward Community College, which will serve as the model for all others ROEs with UH.
- Eminent Domain – Five cases were forwarded by staff to the HART Board of Directors on May 21, 2015 for condemnation to support Procurement of the Airport Guideway and Stations DB contracts. The HART Board approved the resolution, which allows staff to forward the matter for consideration by the Honolulu City Council. HART anticipates bringing the matter on the five cases back to the HART board on July 16, 2015. HART continues to negotiate with each property owner in an attempt to reach mutual agreement. The PMOC has scheduled a real estate workshop with HART for June 2015 where we will discuss the details of these condemnations.

### **2.1.3 Compliance with Applicable Statutes, Regulations, Guidance and FTA Agreements**

#### National Environmental Policy Act (NEPA)

- Proposed Design Changes/Refinement – HART is considering several proposed design refinements that may require additional environmental review. FTA and HART hold bi-weekly meetings to discuss the status of any potential changes. HART has submitted or will submit information on each proposed change for FTA to determine the level of documentation required to assess impacts and subsequent mitigation measures.

## **2.2 Project Scope**

The Project is a 20-mile fixed guideway rail system along Oahu's south shore between East Kapolei and Ala Moana Center. This Project is based on the Airport Alignment, which includes 21 stations. The alignment is elevated, except for a 0.6-mile at-grade portion at the Leeward Community College Station. The Project is planned to be delivered in four guideway segments:

- Segment I (West Oahu/Farrington Highway) – East Kapolei to Pearl Highlands (7 miles/7 stations)

- Segment II (Kamehameha Highway) – Pearl Highlands to Aloha Stadium (4 miles/2 stations)
- Segment III (Airport) – Aloha Stadium to Middle Street (5 miles/4 stations)
- Segment IV (City Center) – Middle Street to Ala Moana Center (4 miles/8 stations)

The alignment will average a total of 104,300 weekday boardings at the RSD in the year 2020 and 119,600 weekday boardings in the year 2030. The project is currently the subject of extensive Transit Oriented Development (TOD) planning corridor-wide. Key areas include Ala Moana, Kakaako, Chinatown/Downtown, Pearl City, Waipahu, and Kapolei. The initial fleet will include 80 “light metro” rail vehicles.

### **2.2.1 Status of Design/Construction Documents**

- The status of each contract is provided in Appendix B. The table in Section 1.2 provides a summary of Design Percent Complete on all contracts provided for the project. Final Design work and engineering activities are still proceeding on all other contracts that have been awarded to date. Overall design of the project is approximately 85% complete as of April 2015. However, this percent complete may change as a result of utilizing DB procurement strategy for the Airport and City Center guideway and stations sections.

### **2.2.2 Status of Third-Party Agreements**

The following agreements are critical and will impact the project if not completed in the near term:

- Aloha Stadium Construction Right of Entry (CROE) – The CROE has been executed for the Kamehameha Highway Guideway with the Stadium Authority. This clears the way for guideway construction to begin in the area. HART is negotiating with the Stadium Authority for the park-and-ride construction right of entry.
- University of Hawaii Right of Entry – University of Hawaii (UH) requested that the HART contractor enter into a separate right of entry to construct on University property. University maintains that the current ROE with HART only addresses preliminary work, does not cover on-site construction, and that the University can refuse to admit the contractor. KIWC and UH are close to finalizing the ROE for the Leeward Community College, which will serve as the model for all other ROEs with UH
- U.S. Navy – HART has several easements pending from the U.S. Navy for the Airport Section, which are particularly needed for the Airport Utility contractor. These easements are critical and could impact construction work. HART is working with the Navy to complete the documentation as quickly as possible. The Navy has committed to providing construction Rights of Entry for locations by mid-July 2015.

### **2.2.3 Delivery Method**

As a result of project delays, HART has revised the Contract Packaging Plan (CPP). The revised strategy will impact numerous aspects of the project, including the schedule. The current strategy includes the following contracts:

- Farrington Highway Station Group Construction – Invitation for Bids (IFB) was issued in December 19, 2014. Bids were received on March 3, 2015. The apparent low bid was \$78.9 million. HART received a bid protest notification from the second low bidder on March 9, 2015. Notification of the appeal was provided to the FTA on March 11, 2015. HART denied the bid protest on April 14, 2015. The protester filed an appeal with the Department of Commerce and Consumer Affairs (DCCA) on April 20, 2015. A hearing is scheduled for May 20, 2015. The project schedule is potentially delayed approximately 3 months due to the bid protest. However, HART is working to mitigate the potential schedule delay. The PMOC is not aware of any cost impacts associated with the bid protest.
- West Oahu Stations Group – Invitation for Bids (IFB) was issued in April 2015. Bids are due June 16, 2015.
- Kamehameha Highway Station Stations Group – IFB will be issued in August 2015.
- Airport Guideway and Stations DB Contract – This contract will include a two-part Request for Proposals (RFP). Part I was issued April 7, 2015. Part II will be issued in July 2015. NTP is anticipated for February 2016.
- City Center and Stations DB Contract – This contract will include a two-part RFP. Part I will be issued August 2015. Part II will be issued in October 2015. NTP is anticipated for June 2016.
- Design Contracts – HART has limited the designers’ activity for the Airport/City Center Guideway and Utilities Contract and Eastside Stations Group to supporting preparation of the eastside DB contracts.
- Pearl Highlands Parking Structure DB Contract – HART has deferred this procurement with the next solicitation action scheduled for July 2015.
- H2R2 Ramp – Contract was awarded in May 2015 to Royal Contracting for \$5.2M. The protest period ended on May 12, 2014.
- Fare Collection Technical Support Consultant – Proposals were received on February 17, 2015. Two proposals were received by HART but three proposals are needed, per HART requirements. HART is seeking legal opinion for an exception to this requirement in order to evaluate the two proposals submitted.
- Fare Collection System - Request for Proposal (RFP) is anticipated to be released in May 2015, but is contingent upon an MOU with the City.

#### **2.2.4 Core Systems and Vehicle Status**

AHJV will design, furnish, install, test, and commission passenger vehicles, operating systems, auxiliary vehicles and equipment, and appurtances, in support of incremental opening of the System. The following table provides a status of the Core Systems and Vehicle activities associated with the project:

Core System Description	Status
<b>General</b>	
Staffing	AHJV has filled all open positions to date.
Schedule	AHJV revised its baseline contract schedule, and it has been approved. However, re-procurement of Westside Stations Group and use of DB for the eastside guideway and stations will result in another revision to CSC schedule. The revised baseline schedule will be available in 2-3 months after all interface milestones are finalized, which is anticipated to occur in June 2015.
Design Status	<p>Following are the approximate levels of design completion</p> <ul style="list-style-type: none"> <li>• LRVs – 85% (Interim Design), 5% (Final Design)</li> <li>• Train Control – 94% (Interim Design), 82% (Final Design)</li> <li>• Traction Power – 100% (Interim Design), 96% (Final Design)</li> <li>• Communications – 100% (Interim Design), 29% (Final Design)</li> <li>• Fire Detection – 100% (Interim Design), 50% (Final Design)</li> <li>• PSG, UPS, MPV – N/A (Interim Design), 59% (Final Design)</li> </ul> <p>(Note: HART reports earned value only for the overall contract, not for design of the individual components.)</p>
NTP Delay Claim	AHJV has asserted that it has had a 9-month delay in starting work due to CSC protest. This issue is in mediation, but mediation is delayed awaiting AHJV input to proceed.
Fare Collection System	HART is coordinating with DTS to establish a city-wide fare system. HART intends to utilize fare gates (closed transit system). Request for Proposal (RFP) for the Fare System is anticipated to be released May 2015, but is contingent upon an MOU with the City.
System Performance Design	There are some concerns with AHJV’s method for calculating headways and round-trip times. HART received updated System Performance Documents and continues discussions with AHJV. Alignment changes from Airport and City Center Fixed Facility Contractors may affect system performance. A full analysis must still be completed.
Ship America	AHJV is negotiating terms with a carrier to transport the LRVs from Italy to US mainland and from US mainland to Hawaii. Once that agreement is finalized, HART will provide confirmation to FTA.
<b>Hawaiian Electric Companies (HECO)</b>	
Estimated Traction Power Demand	HART is to provide HECO with AHJV simulations to estimate power demand based on actual operation scenarios. AHJV submitted revised simulations and discussions with HECO are ongoing.
Activation Dates	HART and HECO are coordinating project schedule and HECO activation start dates for power. The cost for activation of the Traction Power Substations was not included in the project estimate. A change order will be required to address this cost, which is still being assessed. This issue has been partially captured in HART’s EAC.
Service Requests	AHJV has submitted HECO service requests for all system sites. Design coordination is progressing.
<b>Vehicle Subsystem</b>	
Vehicle Schedule	HART is closely monitoring vehicle production in Italy and working with Ansaldo Breda to prepare for final assembly start-up in Pittsburgh, CA. HART met with AHJV in late January 2015 to discuss schedule and activities planned for early 2015. Shipment of the first LRV to Honolulu is scheduled for February 2016.

<b>Core System Description</b>	<b>Status</b>
Car Production	Extrusion of car bodies began in November 2014. Final assembly of the first LRV in Pittsburg, CA is scheduled to begin in July 2015.
4-car Trains	<p>HART now plans to start revenue service with 4-car trains in place of the initial plan of 2-car trains based on FTA's acceptance in December 2013. It is anticipated that HART and AHJV will resolve the commercial terms for change to 4-car trains in June 2015.</p> <p>HART performed a Buy America Audit of the LRVs. They intend to report the percentage based on the trainset, not type of car (E and M). Based on the trainset, the US content is 63%. Based on the type of car, the percentages are 64% (E car) and 62% (M car), which satisfy the minimum 60% US content for rail vehicles under Buy America.</p>
Vehicle Status Checklist	HART developed a Vehicle Status Chart to track the production of all 80 LRVs. Chart will be included in HART's Monthly Report in June 2015.
<b>Traction Electrification Subsystem</b>	
Uninterruptible Power Supply (UPS)	UPS loads are under discussion between HART and AHJV.
Middle Street AM Antenna	HART designers are investigating options for shielding of communications equipment from Electromagnetic Interference (EMI) due to proximity of AM radio tower near Middle Street. HART is evaluating alternatives to shielding including the potential to relocate the carrier that utilizes the antenna.
<b>O&amp;M Subsystem</b>	
MSF O&M	AHJV has provided preliminary MSF Operations Plans, but will resubmit to better follow HART's O&M Plan and FTA guidelines.
<b>Fire Detection Subsystems</b>	
Fire Detection	Fire Detection configuration is needed for the Operations Service Building (OSB).

Hitachi, LTD has an agreement to purchase AnsaldoBreda and Ansaldo STS from Finmeccania S.P.A. The sale is expected to close later this year. It is not anticipated that the sale will have a negative impact on the project.

## 2.3 Project Management Plan and Sub-Plans

HART is in the process of updating several of its procedures and management plans. These updates are necessary due to HART organizational changes and the contract packaging changes that are being implemented. It is critical for HART to update these plans and procedures soon. HART has provided target dates for the various management plan updates:

<b>Plan</b>	<b>Date for DRAFT Submittal (Target)</b>	<b>Note</b>
Project Management Plan (PMP)	(April 2015)	PMP will be available for review in April 2015 without detailed budget and schedule information. HART will incorporate this information when it becomes available (tentatively June 2015).
Contract Packaging Plan (CPP)	March 2015	Under PMOC review
Risk and Contingency Management Plan (RCMP)	March 2015	Under PMOC review
Financial Plan	(July 2015)	
Real Estate Acquisition and Management Plan (RAMP)	November 2014	DRAFT RAMP has been reviewed; FINAL RAMP will be available in May 2015

## 2.4 Project Schedule Status

The Master Project Schedule (MPS) will require revision as a result of the re-packaging of the remaining contracts. A preliminary update of the MPS was provided to the PMOC in March 2015. The PMOC will await an MPS update before performing a detailed review. HART indicated that a revised MPS will be available in June 2015.

HART has engaged the new GEC III consultant and the new CE&I consultants during the MPS refinement process and has received valuable input and validation thus far. Furthermore, the PMOC provided HART a forensic schedule analysis report that indicated various errors, warnings, and general “housekeeping” items needing correction. HART project control staff has addressed most of the comments, although this process will need to be conducted again after the update of the MPS is available.

Following is the status of the individual contract schedules:

- West Oahu /Farrington Highway (WOFH) Design-Build (DB) Contract – The contract is approximately six months behind schedule. The delay is the result of less than planned production rates and lack of site access. HART and KIWC have been working to mitigate impacts to critical path activities. A revised baseline schedule was submitted by the contractor, but rejected by HART. HART requested that the schedule be resubmitted by KIWC via the Change Order process to quantify any extended overhead or escalation that may have resulted due to delays beyond KIWC’s control. It is anticipated that the substantial completion milestone will be modified to reflect the 6-month delay.
- Kamehameha Highway Guideway (KHG) DB Contract – The contract is approximately seven months behind schedule. The delay is the result of less-than-planned production rates and lack of site access. HART and KIWC have been working to mitigate impacts to critical path activities. HART received a revised baseline schedule from the contractor,

but it was rejected by HART. HART requested that the schedule be resubmitted by KIWC via the Change Order process to quantify any extended overhead or escalation that may have resulted due to delays beyond KIWC's control.

- Maintenance and Storage (MSF) DB Contract – Contract substantial completion date has slipped 10 calendar days due to weather that impacted construction operations. KKJV and HART are working to mitigate the impacts to the critical path, which are not significant.
- Core Systems Design-Build-Operate-Maintain (DBOM) Contract –AHJV revised its baseline contract schedule, which has been approved. However, re-procurement of Westside Stations Group and use of DB for the eastside guideway and stations will result in another revision to the CSC schedule. The revised baseline schedule will be available in June/July 2015 after all interface milestones are finalized.

The following is a look ahead for important activities associated with the Project:

Period: June 2015 – October 2015		
Activity	Responsibility	Date
Monthly Progress Meeting	FTA, HART and PMOC	June 10, 2015
PMOC Change Order Review	HART and PMOC	June 9-11, 2015
Monthly Progress Meeting	FTA, HART and PMOC	July 8, 2015
Risk Refresh	FTA, HART and PMOC	To be determined
Quarterly Meeting	FTA, HART and PMOC	August 18, 2015
Monthly Progress Meeting	FTA, HART and PMOC	September 09, 2015
Monthly Progress Meeting	FTA, HART and PMOC	October 14, 2015

## 2.5 Project Cost Status

The grantee's Base Cost Estimate (BCE) dated March 19, 2012 is \$5.122 billion in Year-of-Expenditure (YOE) dollars, including \$644 million in allocated and unallocated contingency (or 15.0% of the BCE) and \$173 million in financing costs. Of the \$644 million in total contingency, \$101 million is unallocated. The current Project Budget is as follows:

Source	Amount
Base Cost Estimate	\$4,305 billion
Total Contingency	\$0.644 billion
Finance Charges	\$0.173 billion
<b>Total Project Cost</b>	<b>\$5.122 billion</b>

**Total Expenditures to Date – \$1.445 billion (through March 2015)**

### 2.5.1 Standard Cost Category (SCC)

The FFGA SCC Workbook is submitted as a separate electronic file. The following table presents the FFGA budget, expenditures to date, and Estimate at Completion (EAC) for each SCC.

SCC	SCC Description	FFGA Budget	Base Cost	Allocated Cont.	Incurred
<b>10</b>	<b>GUIDEWAY &amp; TRACK ELEMENTS</b>	<b>1,275,328,962</b>	<b>1,114,305,144</b>	<b>161,023,818</b>	<b>166,700,715</b>
10.04	Guideway: Aerial structure	1,175,328,184	1,022,380,670	152,947,514	0
10.08	Guideway: Retained cut or fill	8,077,393	7,492,943	584,450	121,413,088
10.09	Track: Direct fixation	86,332,027	79,437,204	6,894,823	45,287,627
10.11	Track: Ballasted	3,550,634	3,293,724	256,910	0
10.12	Track: Special (switches, turnouts)	2,040,724	1,700,603	340,121	0
<b>20</b>	<b>STATIONS, STOPS, TERMINALS, INTERMODA</b>	<b>506,165,689</b>	<b>421,804,742</b>	<b>84,360,947</b>	<b>3,738,473</b>
20.01	At-grade station, stop, shelter, mall, terminal, platform	7,333,599	6,111,333	1,222,266	0
20.02	Aerial station, stop, shelter, mall, terminal, platform	353,476,148	294,563,457	58,912,691	0
20.06	Automobile parking multi-story structure	79,690,518	66,408,765	13,281,753	0
20.07	Elevators, escalators	65,665,424	54,721,187	10,944,237	3,738,473
<b>30</b>	<b>SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>	<b>99,425,456</b>	<b>92,535,013</b>	<b>6,890,443</b>	<b>59,242,474</b>
30.02	Light Maintenance Facility	8,161,279	7,591,887	569,392	1,330,103
30.03	Heavy Maintenance Facility	40,906,889	38,099,138	2,807,751	16,572,526
30.04	Storage or Maintenance of Way Building	8,382,270	7,797,460	584,810	3,034,614
30.05	Yard and Yard Track	41,975,018	39,046,528	2,928,490	38,305,231
<b>40</b>	<b>SITWORK &amp; SPECIAL CONDITIONS</b>	<b>1,103,867,264</b>	<b>980,569,426</b>	<b>123,297,838</b>	<b>410,963,274</b>
40.01	Demolition, Clearing, Earthwork	34,695,802	29,980,157	4,715,645	1,337,145
40.02	Site Utilities, Utility Relocation	350,694,801	299,449,755	51,245,046	53,443,376
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	7,228,935	6,590,542	638,393	1,829,371
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks	30,841,906	26,979,122	3,862,784	8,255,641
40.05	Site structures including retaining walls, sound walls	8,637,582	7,998,960	638,622	2,436,091
40.06	Pedestrian / bike access and accommodation, landscaping	48,262,816	41,073,897	7,188,919	347,500
40.07	Automobile, bus, van accessways including roads, parking lots	212,536,181	181,979,369	30,556,812	3,965,621
40.08	Temporary Facilities and other indirect costs during construction	410,969,241	386,517,624	24,451,617	339,348,529
<b>50</b>	<b>SYSTEMS</b>	<b>247,460,781</b>	<b>221,284,483</b>	<b>26,176,298</b>	<b>23,464,663</b>
50.01	Train control and signals	91,492,532	81,982,556	9,509,976	2,250,972
50.02	Traffic signals and crossing protection	12,524,011	10,458,227	2,065,784	0
50.03	Traction power supply: substations	32,873,934	29,500,927	3,373,007	342,747
50.04	Traction power distribution: catenary and third rail	36,426,286	32,878,150	3,548,136	12,159,477
50.05	Communications	59,889,234	53,691,339	6,197,895	9,843,368
50.06	Fare collection system and equipment	10,221,753	9,159,277	1,062,476	(1,131,901)
50.07	Central Control	4,033,031	3,614,007	419,024	0
<b>Construction Subtotal (10 - 50)</b>		<b>3,232,248,152</b>	<b>2,830,498,808</b>	<b>401,749,344</b>	<b>664,109,599</b>

SCC	SCC Description	FFGA Budget	Base Cost	Allocated Cont.	Incurred
<b>60</b>	<b>ROW, LAND, EXISTING IMPROVEMENTS</b>	<b>222,188,386</b>	<b>197,397,947</b>	<b>24,790,439</b>	<b>80,926,510</b>
60.01	Purchase or lease of real estate	201,658,907	179,360,664	22,298,243	73,365,879
60.02	Relocation of existing households and businesses	20,529,479	18,037,283	2,492,196	7,560,631
<b>70</b>	<b>VEHICLES</b>	<b>208,501,186</b>	<b>186,829,020</b>	<b>21,672,166</b>	<b>21,203,394</b>
70.02	Heavy Rail	186,061,066	166,721,385	19,339,681	14,473,908
70.06	Non-revenue vehicles	16,011,166	14,346,923	1,664,243	6,729,486
70.07	Spare parts	6,428,954	5,760,712	668,242	0
<b>80</b>	<b>PROFESSIONAL SERVICES</b>	<b>1,183,826,026</b>	<b>1,090,438,814</b>	<b>93,387,212</b>	<b>675,264,276</b>
80.01	Preliminary Engineering	95,120,484	94,055,262	1,065,222	101,789,664
80.02	Final Design	257,934,908	228,321,632	29,613,276	153,102,410
80.03	Project Management for Design and Construction	385,825,694	366,458,463	19,367,231	278,006,369
80.04	Construction Administration & Management	218,155,752	199,656,728	18,499,024	63,347,647
80.05	Professional Liability and other Non-Construction Insurance	52,138,030	46,549,724	5,588,306	21,359,823
80.06	Legal; Permits; Review Fees by other agencies, cities, etc.	76,135,125	67,641,006	8,494,119	17,493,798
80.07	Surveys, Testing, Investigation, Inspection	24,955,327	21,759,335	3,195,992	21,999,861
80.08	Start up	73,560,706	65,996,664	7,564,042	18,164,704
<b>90</b>	<b>Subtotal (10 - 80)</b>	<b>4,846,763,750</b>	<b>4,305,164,589</b>	<b>541,599,161</b>	<b>1,441,503,779</b>
	<b>UNALLOCATED CONTINGENCY</b>	101,871,170	0	101,871,170	0
<b>100</b>	<b>Subtotal (10 - 90)</b>	<b>4,948,634,920</b>	<b>4,305,164,589</b>	<b>643,470,331</b>	<b>1,441,503,779</b>
	<b>FINANCE CHARGES</b>	173,058,242			0
	<b>Total Project Cost (10 - 100)</b>	<b>5,121,693,162</b>	<b>4,305,164,589</b>	<b>643,470,331</b>	<b>1,441,503,779</b>
	<b>Provisional Request for Payment</b>				3,324,972
	<b>Total Project Cost (10 - 100)</b>	<b>5,121,693,162</b>	<b>4,305,164,589</b>	<b>643,470,331</b>	<b>1,444,828,751</b>

## 2.5.2 Contingency

HART's current forecast indicates a balance of uncommitted contingency of \$303 million (\$11.5 million in unallocated and \$291.8 million in allocated contingency). However, this does not reflect impacts of the Westside Stations bids, the updated cost estimate for the Airport/City Center Guideway Contract, and several items that have been reflected in the EAC.

## 2.5.3 Funding Sources

The following are the project capital revenue (funding) sources:

Source	Amount
General Excise Tax (GET)	\$3.358 billion
Section 5309	\$1.550 billion
Section 5307	\$0.210 billion
American Recovery and Reinvestment Act (ARRA)	\$0.004 billion
<b>Total</b>	<b>\$5.122 billion</b>

Following is the status of HART's GET receipts:

- HART has received approximately \$1.404 billion in GET funds since 2007.
- HART has received approximately \$1.026 billion in GET funds since Preliminary Engineering, which began in October 2009.

HART collected \$65 million in tax revenue for the quarter that ended in March 2015. The amount was \$9 million above quarterly projections based on HART's financial plan, which is encouraging. HART has indicated that it will not have access to \$210 million in Section 5307 funds for the project. HART and the City must identify substitute funding to address the loss of these funds in an update of the Financial Plan, which is due to FTA in July 2015. HART also will take advantage of low interest rates and an improved borrowing plan to save an estimated \$60-75 million in borrowing costs.

The Hawaii State Legislature passed House Bill 134, which allows the City and County of Honolulu to extend the current 0.5% surcharge on the state's General Excise Tax (GET) for the rail transit project for an additional five years through 2027. The legislative session closed on May 17, 2015. Preliminary estimates are that the GET extension could generate approximately \$1.8 billion in revenue. The Governor has 45 calendar days from May 17, 2015 to sign the legislation, and the City Council will need to amend an ordinance to enact the tax extension. The City Council cannot enact the measure before July 1, 2015 (start of Fiscal Year) but must take action by December 15, 2015. If passed by the City Council, the Mayor must then sign the measure.

## **2.6 Project Risk**

A Risk Refresh Workshop was performed on April 15, 2014. Some of the conclusions and recommendations in the PMOC report included:

- HART's estimate falls short of the predicted FTA cost risk model outcome by \$265 million. HART should review its project estimate and determine how to reduce costs to close this gap. It should be noted that this gap was identified prior to bids being received for the WSSG contract. This gap will increase, but will not be known until updated estimates of the remaining contracts are available.
- The PMOC-recommended amount of secondary mitigation is \$195.5 million.
- Strong controls must be put in place immediately to avoid future rapid contingency reduction. The frequency and the levels of project management to which these statistics are reported should be improved and monitored monthly.
- The PMOC and HART should engage in a focused "cost containment workshop" on a monthly basis to monitor the efforts taken to avoid rapid contingency usage.
- The FFGA RSD of January 2020 can be achieved; however, HART must implement strong schedule and contract management throughout the remainder of the project.

The PMOC has discussed the project cost on a monthly basis with HART in an effort to ensure cost issues are proactively addressed. HART has recently implemented Cost Containment and Cost Reduction measures in an effort to mitigate the cost increase. These efforts include:

- Significant revision of HART's contract packaging strategy
- Development of a detailed cost reduction matrix that focuses on the remaining construction contracts (Value Engineering)
- Review of interface milestones to help relieve schedule compression where possible
- Review of various options relate to financing of the project
- Identification of items that could be considered Operations & Maintenance costs
- Development of a HART Decision Milestone Matrix.

HART will continue to update the Cost Reduction Measures matrix and Decision Milestone Matrix on a regular basis (at least monthly). The PMOC will continue to hold Cost Containment Workshops with HART on a monthly basis to review the Cost Reduction Measures Matrix and HART's Decision Milestone Matrix. Nevertheless, it is still anticipated that the Project cost will most likely exceed the FFGA budget.

It is anticipated that the another Risk Refresh will be completed once the updated MPS is available and the engineers estimates for the Airport Guideway and Stations DB Contract and the City Center and Stations DB Contract are developed.

## 2.7 Action Items

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Provide information and resolution on HECO's 50-foot offset requirement	HART	Mar-14	On-Going		On-going – HART & HECO continue to meet on issue at highest levels.
2	Resolve issue with AHJV regarding cost savings associated with change to 4-car trains	HART	Mar-14	Jul-15		Open – discussions with AHJV on-going
3	Resolve HECO issue with Davis-Bacon requirements	HART/FTA	Mar-14	On-going		Open – HECO waiver is pending. HART provided MOU to PMOC.
4	<b>Updates resulting from Risk Refresh:</b>					
4a	Update the Contract Packaging Plan	HART	Aug-14	Jun-15		In progress – Draft provided to PMOC but changes may be incorporated on updated estimate and schedule
4b	Re-baseline Financial Plan	HART	Apr-14	July-15		In progress
4c	Re-baseline budget	HART	Apr-14	Jun-15		In progress
4d	Re-baseline MPS	HART	Apr-14	Jun-15		In progress
4f	Update RCMP (including Hold Points and Secondary Mitigation Measures)	HART	Sept-13	Jun-15		In progress – PMOC provided review comments; conference call may be scheduled to address comments and HART's responses.
5	MPS Workshop	HART/PMOC	Feb-15	TBD		To be scheduled when Preliminary Update of MPS is available.
6	Draft Project Management Plan	HART	Mar-15	Jun-15		Preliminary Draft provided to PMOC in April; DRAFT PMP pending updates of estimates and MPS.
7	Include construction safety statistics in the HART Monthly Report	HART	Apr-15	Jun-15		
8	Provide OP 54 (Readiness for Revenue Operations) checklist/roadmap	FTA/PMOC	Apr-15	Jun-15		
9	Provide confirmation that Ship America requirements will be satisfied	HART	May-15	Jul-15		

## APPENDICES

### Appendix A: Acronym List

AHJV	▪ Ansaldo Honolulu Joint Venture
AIS	▪ Archeological Inventory Survey
APS	▪ Adjusted Project Schedule
ARRA	▪ American Recovery and Reinvestment Act
ASG	▪ Airport Station Group
ATC	▪ Alternative Technical Concept
AUG	▪ Airport Utilities Group
AVI	▪ Automatic Vehicle Indication
AVL	▪ Automatic Vehicle Location
BCE	▪ Base Cost Estimate
BFMP	▪ Bus Fleet Management Plan
CCUG	▪ City Center Utilities Group
CE&I	▪ Construction Engineering and Inspection
CMP	▪ Construction Management Plan
CPM	▪ Critical Path Method
CPP	▪ Contract Packaging Plan
CROE	▪ Construction Right of Entry
CSC	▪ Core Systems Contract
CSSO	▪ Chief Safety and Security Officer
DAGS	▪ Department of Accounting & General Services
DB	▪ Design-Build
DBB	▪ Design-Bid-Build
DBOM	▪ Design-Build-Operate-Maintain
DCCA	▪ Department of Commerce and Consumer Affairs
DHHL	▪ Department of Hawaiian Home Lands
DLIR	▪ Department of Labor and Industrial Relations
DLNR	▪ Department of Land and Natural Resources
DOE	▪ Department of Education
DOT	▪ Department of Transportation
EAC	▪ Estimate at Completion
EIS	▪ Environmental Impact Statement
FD	▪ Final Design
FEIS	▪ Final Environmental Impact Statement
FFGA	▪ Full Funding Grant Agreement
FHSG	▪ Farrington Highway Station Group
FHWA	▪ Federal Highway Administration
FTA	▪ Federal Transit Administration
FY	▪ Fiscal Year
GEC	▪ General Engineering Consultant
GET	▪ General Excise Tax
GSA	▪ General Services Administration
HART	▪ Honolulu Authority for Rapid Transportation
HCC	▪ Honolulu Community College
HCDA	▪ Hawaii Community Development Authority
HDOT	▪ Hawaii Department of Transportation
HECO	▪ Hawaiian Electric Company
HNTB	▪ Howard, Needles, Tammen & Bergendoff
IFB	▪ Invitation to Bid
ITP	▪ Inspection Test Plans
JU&O	▪ Joint Use & Occupancy
KHG	▪ Kamehameha Highway Guideway

KHSG	▪ Kamehameha Highway Stations Group
KIWC	▪ Kiewit Infrastructure West Company
KKJV	▪ Kiewit Kobayashi Joint Venture
LCC	▪ Leeward Community College
LEED	▪ Leadership in Energy and Environmental Design (LEED)
MMP	▪ Mitigation Monitoring Program
MOA	▪ Memorandum of Agreement
MOT	▪ Maintenance of Traffic
MOW	▪ Maintenance of Way
MPS	▪ Master Project Schedule
MSF	▪ Maintenance and Storage Facility
NCR	▪ Non-Compliance Report
NEPA	▪ National Environmental Policy Act
NTP	▪ Notice to Proceed
OCCC	▪ Oahu Community Correctional Center
OCIP	▪ Owner Controlled Insurance Program
OP	▪ Oversight Procedure
PA	▪ Programmatic Agreement
PE	▪ Preliminary Engineering
PM	▪ Project Manager
PMC	▪ Project Management Consultant
PMOC	▪ Project Management Oversight Contractor
PMP	▪ Project Management Plan
PSG	▪ Platform Screen Gate
PW	▪ Project-wide
QA	▪ Quality Assurance
QAM	▪ Quality Assurance Manager
QAP	▪ Quality Assurance Plan
QMP	▪ Quality Management Plan
RAMP	▪ Real Estate Acquisition and Management Plan
RCMP	▪ Risk and Contingency Management Plan
RFMP	▪ Rail Fleet Management Plan
RFB	▪ Request for Bids
RFP	▪ Request for Proposals
RFQ	▪ Request for Qualifications
ROD	▪ Record of Decision
ROE	▪ Right of Entry
ROW	▪ Right of Way
RSD	▪ Revenue Service Date
SCC	▪ Standard Cost Category
SHPD	▪ State Historic Preservation Division
SOA	▪ State Oversight Agency
SS	▪ Safety and Security
SSCM	▪ Safety and Security Certification Manager
SSCP	▪ Safety and Security Certification Plan
SSMP	▪ Safety and Security Management Plan
SSPP	▪ System Safety Program Plan
SSSPS	▪ System Safety and Security Program Standards
TCC	▪ Technical Capacity and Capability
UH	▪ University of Hawaii
UPS	▪ Uninterruptible Power Supply
VE	▪ Value Engineering
WOFH	▪ West Oahu/Farrington Highway
WOSG	▪ West Oahu Stations Group
WSSG	▪ Westside Stations Group
YOE	▪ Year of Expenditure

## Appendix B: Contract Status

The following table provides the status of various ongoing contracts within this Project:

Contract	Description	Contractor	Base Contract Value	Change Orders	Change Order %	Current Contract Value	Expended	% Exp.	DBE	Award Date	Compl. Date
MM-901	Program Management Support Consultant (PMSC-2)	HDR/InfraConsult LLC	\$33,376,897	Amendment No. 4d. 3/18/14		\$40,993,274	\$29,182,181	87.4%	0%	Mar 2012	Mar 2016
Notes/Issues:											
MM-910	General Engineering Consultant (GEC II)	Parsons Brinkerhoff	\$300,000,000				\$132,000,000		0%	Jun 2011	Pending
Notes/Issues:		Contract closeout is pending.									
MM-913	General Engineering Consultant (GEC III)	CH2M Hill	\$46,143,277			\$46,143,277	\$14,972,227	32.4%	2.13%	Dec 2013	Mar 2019
Notes/Issues:		▪ None at this time									
MM-290	Construction Engineering and Inspection (West)	PGH Wong Engineering, Inc	\$54,232,480			\$54,232,480	\$9,544,338	17.6%	0.94%	Jan 2014	Jan 2020
Notes/Issues:		▪ None at this time.									
MM-595	Construction Engineering and Inspection (East)	AECOM/URS Corporation	\$63,083,417			\$63,083,417	\$7,010,106	11.8%	1.51%	Jan 2014	Dec 2018
Notes/Issues:		▪ HART has determined the AECOM acquisition of URS has created a Conflict of Interest (COI) that URS has been unsuccessful in resolving. HART subsequently issued a notice of termination letter to URS on March 10, 2015. To prevent disruption of services, URS will continue to provide services under a firewall arrangement until HART has re-procured and awarded a contract to a replacement contractor and remaining work is transitioned to the replacement contractor.									
MM-962	Core System Contract Oversight Consultant	Lea + Elliott, Inc	\$43,988,989			\$43,988,989	\$6,487,216	14.7%	0.41%	Feb 2014	Aug 2019
Notes/Issues:		▪ None at this time.									
DB-120	West Oahu/Farrington Highway DB	KIWC	\$482,924,000	\$140,682,472	22.5%	\$623,606,472	\$377,175,209	60.5%	0.76%	Nov 2009	Jul 2016

Contract	Description	Contractor	Base Contract Value	Change Orders	Change Order %	Current Contract Value	Expended	% Exp.	DBE	Award Date	Compl. Date
	Notes/Issues:	<ul style="list-style-type: none"> <li>Agreement called for issuance of all four NTPs within 120 calendar days of December 1, 2009.</li> <li>CCO has been approved by HART Board to resolve compensation associated with NTP and AIS Delays. Resolution does not include some components of escalation, which will be settled on case-by-case basis.</li> <li>Contract is approximately six months behind schedule. The delay is the result of less than planned production rates and lack of site access. HART and KIWC have been working to mitigate impacts to critical path activities. HART received a revised baseline schedule from the contractor, but it was rejected. HART has requested that the schedule be resubmitted via the Change Order process.</li> </ul>									
DB-200	Maintenance and Storage Facility DB	Kiewit/Kobayashi JV	\$195,258,000	\$70,600,008	36.1%	\$274,358,008	\$185,123,743	67.5%	0.08%	Jun 2011	Apr 2016
	Notes/Issues:	<ul style="list-style-type: none"> <li>CCO has been approved by HART Board to resolve compensation associated with NTP and AIS Delays. Resolution does not include some components of escalation, which will be settled on case-by-case basis.</li> <li>Contract substantial completion date has slipped 10 calendar days due to weather that impacted construction operations. KKJV and HART are working to mitigate the impacts to the critical path, which are not significant.</li> </ul>									
DB-320	Kamehameha Highway Guideway DB	KIWC	\$372,150,000	\$11,515,363	3%	\$388,515,363	\$132,892,290	33.4%	0.08%	Jun 2011	Sep 2016
	Notes/Issues:	<ul style="list-style-type: none"> <li>CCO has been approved by HART Board to resolve compensation associated with NTP and AIS Delays. Resolution does not include some components of escalation, which will be settled on case-by-case basis.</li> <li>Contract is approximately seven months behind schedule. The delay is the result of less than planned production rates and lack of site access. HART and KIWC have been working to mitigate impacts to critical path activities. HART received a revised baseline schedule from the contractor, but it was rejected. HART has requested that the schedule be resubmitted via the Change Order process.</li> <li>KIWC is mobilizing a third guideway erection truss to help mitigate the WOFH and KHG delays.</li> </ul>									
DBOM-920	Core Systems Contract	Ansald/Honolulu JV	\$573,782,793	\$29,198,490	5%	\$595,139,998	\$118,156,179	19.9%	0.029%	Nov 2011	Mar 2019
	Notes/Issues:	<ul style="list-style-type: none"> <li>AHJV has asserted that it has had a 9-month delay in starting work due to CSC protest. This issue is in mediation, but mediation is delayed awaiting AHJV input to proceed.</li> <li>HART now plans to start revenue service with 4-car trains in place of the initial plan of 2-car trains based on FTA's acceptance in December 2013. It is anticipated that HART and AHJV will resolve the commercial terms for change to 4-car trains in May 2015.</li> <li>AHJV revised their baseline contract schedule, and it has been approved. However, re-procurement of Westside Stations Group and use of DB for the eastside guideway and stations will result in another revision to CSC schedule. The revised baseline schedule will be available in 2-3 months after all interface milestones are finalized.</li> </ul>									
MI-930	Elevators and Escalators Install & Maintain	Schindler Elevator Corporation	\$50,982,714	\$0	0%	\$50,982,714	\$3,738,473	21.0%	0%	May 2013	Jul 2018
	Notes/Issues:	<ul style="list-style-type: none"> <li>None at this time.</li> </ul>									

Contract	Description	Contractor	Base Contract Value	Change Orders	Change Order %	Current Contract Value	Expended	% Exp.	DBE	Award Date	Compl. Date
FD-140	West Oahu Station Group Construction FD	URS, Inc.	\$7,789,000	\$2,376,305	23.9%	\$9,920,305	\$8,587,327	86.6%	0%	Jun 2012	Dec 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>West Oahu Stations Group – IFB was issued in April 2015. Bids are due June 16, 2015.</li> </ul>									
FD-240	Farrington Highway Station Group FD	HDR, Inc. / URS	\$9,300,696	\$2,907,349	31%	\$14,198,045	\$12,366,404	87.1%	4.7%	Jan 2011	Dec 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>Bids were received on March 3, 2015.</li> <li>FFGA budget for this stations group was \$55 million, and the current Engineers Estimate was \$76 million. The apparent low bid was \$78.9 million.</li> <li>HART received a bid protest notification from the second low bidder on March 11, 2015. HART rejected the protest and the bidder filed an appeal with the DCCA. A hearing is scheduled for May 20, 2015.</li> </ul>									
FD-340	Kamehameha Highway Station Group Construction FD	Anil Verma, Inc.	\$8,702,592	\$352,176	3.9%	\$9,011,768	\$7,867,143	87.3%	37.71%	Nov 2012	Dec 2016
Notes/Issues:		<ul style="list-style-type: none"> <li>Revised engineer's estimate exceeds the FFGA budget.</li> <li>Kamehameha Highway Station Stations Group – IFB will be issued in August 2015.</li> </ul>									
FD-430	Airport Section Guideway and Utilities FD	AECOM	\$38,840,960	\$3,711,172	9.5%	\$42,610,832	\$39,626,445	83.0%	0.42%	Dec 2011	Jun 2017
Notes/Issues:		<ul style="list-style-type: none"> <li>Airport Guideway will be combined with Airport Stations into a DB Contract. This contract will include a two-RFP. Part I was issued in April 2015 with responses due June 9, 2015. However, HART has extended the response period 6 weeks to allow for JV teams to form. Part II responses (price and technical) will be due in January 2016. Some of HART's staff have expressed concern whether viable teams are forming. HART will check with DCCA to see if any new JV teams have applied for a contracting license.</li> <li>Revised engineer's estimate exceeds the FFGA budget.</li> </ul>									
FD-440	Airport Station Group Construction FD	AECOM	\$10,177,365	\$1,224,840	10.7%	\$11,402,205	\$9,718,742	85.2%	2.31%	Nov 2012	Jul 2017
Notes/Issues:		<ul style="list-style-type: none"> <li>HART has limited the designers' activity to supporting preparation of the eastside DB contracts.</li> </ul>									
FD-530	City Center Section Guideway and Utilities FD	AECOM	\$43,948,220	\$1,282,803	2.9%	\$46,183,523	\$37,934,209	82.1%	0.44%	Jul 2012	May 2018
Notes/Issues:		<ul style="list-style-type: none"> <li>City Center Guideway will be combined with Dillingham/Kaka'ako Stations Group into a DB Contract. This contract will include a two-RFP. Part I will be issued August 2015. Part II will be issued in October 2015. NTP is anticipated for June 2016.</li> <li>Revised engineer's estimate exceeds the FFGA budget.</li> </ul>									

Contract	Description	Contractor	Base Contract Value	Change Orders	Change Order %	Current Contract Value	Expended	% Exp.	DBE	Award Date	Compl. Date
FD-550	Dillingham and Kaka'ako Station Group Construction FD	Perkins & Will	\$18,321,918	\$0	0%	\$18,974,447	\$10,396,963	58.0%	0%	Jun 2013	Jul 2018
Notes/Issues:		<ul style="list-style-type: none"> <li>HART has limited the designers' activity to supporting preparation of the eastside DB contracts.</li> </ul>									
DBB-505	Airport Section Utilities Construction	Nan	\$28,413,973	\$0	0%	\$28,413,973	\$0.00	0%	0%	Jul 2014	Jun 2016
Notes/Issues		<ul style="list-style-type: none"> <li>Work was scheduled to begin in March 2015 but has been delayed until at least June 2015 due to issues with NAVY right of entry.</li> </ul>									
DBB-525	Airport Section Guideway Seven Pier Construction	HDCC/CJA JV	\$3,973,000	\$490,863	10%	\$4,463,863	\$3,536,152.00	79.2%	0%	Sep 2014	Feb 2015
Notes/Issues		<ul style="list-style-type: none"> <li>Construction activities ongoing.</li> </ul>									

## Appendix C: Procurement Schedule

Contract No.	Type Service	Description	Status	Advertise	Due Date	NTP	Complete
DB-275	Design/Build	Pearl Highlands Parking Structure/Bus Transit Center	Suspended				
DBB-271	Construction	Farrington Highway Stations Group	Bids received; pending protest resolution	Dec 2014	Mar 2015	TBD – pending protest resolution	Jul 2017
DBB-385	Construction	Ramp H2R2	Pending	Jan 2015	Apr 2015	TBD	May 2016
DBB-171	Construction	West Oahu Stations Group	Pending	Apr 2015	Jun 2015	Jul 2015	Nov 2017
DBB-371	Construction	Kamehameha Stations Group	Pending	Aug 2015	Nov 2015	Dec 2015	Aug 2018
DB-450	Design/Build	Airport Guideway and Stations	Pending	Apr 2015	Dec 2015	Feb 2016	Jul 2019
DBB-510	Construction	City Center Utilities	Pending	Jun 2015	Aug 2015	Oct 2015	Mar 2017
DB-550	Design/Build	City Center Guideway and Stations	Pending	Aug 2015	Apr 2016	Jun 2016	Dec 2019

## Appendix D: Project Overview and Map

**Date:** May 2015  
**Project Name:** Honolulu Rail Transit Project  
**Grantee:** City and County of Honolulu  
**FTA Regional contact:** Catherine Luu  
**FTA HQ contact:** Kim Nguyen

### SCOPE

**Description** The proposed Project is an approximately 20-mile rail alignment extending from East Kapolei to Ala Moana Center.

**Guideway** The majority of the Project is to be built on aerial structure, but the Project also includes a short at-grade section (0.6 miles).

**Stations** 21 stations (20 aerial and 1 at-grade)

**Support Facility** Maintenance and Storage Facility (located near Leeward Community College)

**Vehicles** 80 light metro rail

**Ridership** 104,300 weekday boardings in 2019; 119,600 weekday boardings in 2030

### SCHEDULE

10/09 Approval Entry to PE	03/19 Estimated RSD at Entry to PE
12/11 Approval Entry to FD	03/19 Estimated RSD at Entry to FD
06/12 Request for FFGA	03/19 Estimated RSD at Request for FFGA
12/12 FFGA	01/20 RSD at FFGA

### COST

\$5.348 B Total Project Cost (\$YOE) at Approval Entry to PE  
\$5.126 B Total Project Cost (\$YOE) at Approval Entry to FD  
\$5.122 B Total Project Cost (\$YOE) at request for an FFGA  
\$5.122 B Total Project Cost (\$YOE) at FFGA

\$1.455B Amount of Expenditures at date of this report  
33.4% complete (Total Project Expenditures/Total Project Cost)

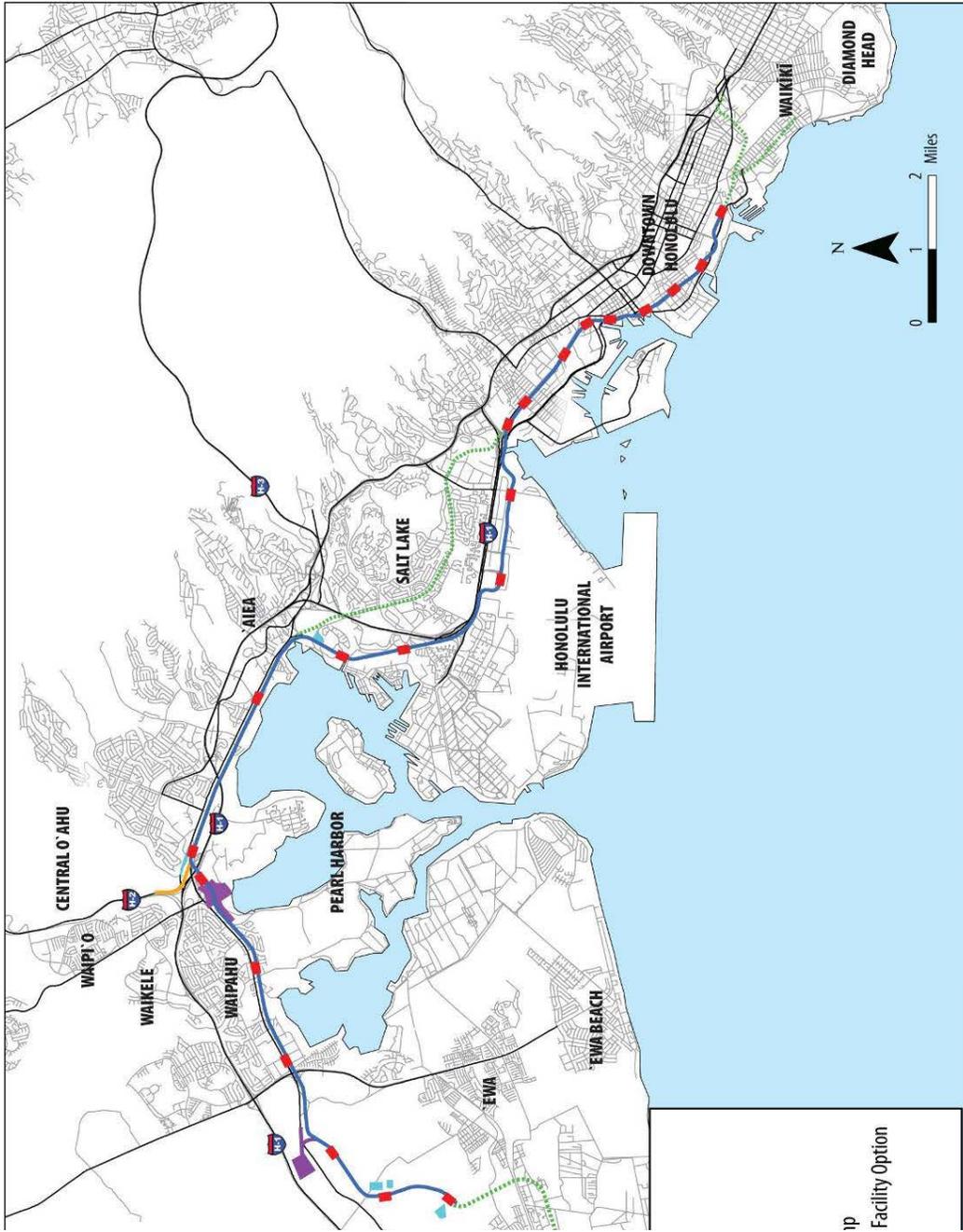
## Appendix E: Safety and Security Checklist

<b>Project Overview</b>			
Project Name	Honolulu Rail Transit Project		
Project mode (Rail, Bus, BRT, Multimode)	Rail		
Project phase (Preliminary Engineering, Final Design, Construction, or Start-up)	FD		
Project Delivery Method (Design/Build, Design/Build/Operate Maintain, CMGC, etc.)	DB, DBB and DBOM		
<b>Project Plans</b>	<b>Version</b>	<b>Review by FTA</b>	<b>Status</b>
Safety and Security Management Plan	3.0	Y	Complete
Safety and Security Certification Plan	2.0	Y	Complete
System Safety Program Plan			Submittal date Mar-13
System Security Plan or Security and Emergency Preparedness Plan (SSEPP)		N	TBD
Construction Safety and Security Plan	1.0	Jun-11	Submitted in Mar-11
<b>Safety and Security Authority</b>	<b>Y/N</b>	<b>Status</b>	
Is the grantee subject to 49 CFR Part 659 state safety oversight requirements?	Y		
Has the state designated an oversight agency as per Part 659.9	Y	Executive Order 10-04 effective April 6, 2010	
Has the oversight agency reviewed and approved the grantee's SSPP as per Part 659.17?	N	Submission/Approval in 2013	
Has the oversight agency reviewed and approved the grantee's Security Plan or SEPP as per Part 659.21?	N	Submission/Approval in 2013	
Did the oversight agency participate in the last Quarterly Program Review Meeting?	Y	April 16, 2014	
Has the grantee submitted its safety certification plan to the oversight agency?	N	SOA information	
Has the grantee implemented security directives issues by the Department Homeland Security, Transportation Security Administration?	N	None issued to date	
<b>SSMP Monitoring</b>			
Is the SSMP project-specific, clearly demonstrating the scope of safety and security activities for this project?	Y		
Grantee reviews the SSMP and related project plans to determine if updates are necessary?	Y		
Does the grantee implement a process through which the Designated Function (DF) for Safety and DF for Security are integrated into the overall project management team? Please specify.	Y		
Does the grantee maintain a regularly scheduled report on the status of safety and security activities?	Y	Reported Monthly	
Has the grantee established staffing requirements, procedures and authority for safety and security activities throughout all project phases?	Y		
Does the grantee update the safety and security responsibility matrix/organization chart as necessary?	Y		
Has the grantee allocated sufficient resources to oversee or carry out safety and security activities?	Y		
Has the grantee developed hazard and vulnerability analysis techniques, including specific types of analysis to be performed during different project phases?	Y		

Does the grantee implement regularly scheduled meetings to track to resolution any identified hazards and/or vulnerabilities?	Y	
Does the grantee monitor the progress of safety and security activities throughout all project phases? Please describe briefly.	Y	
Does the grantee ensure the conduct of preliminary hazard and vulnerability analyses? Please specify analyses conducted.	Y	
Has the grantee ensured the development of safety design criteria?	Y	
Has the grantee ensured the development of security design criteria?	Y	
Has the grantee verified conformance with the safety and security requirements in the design?	N	Will be done during FD/Construction
Has the grantee identified conformance with safety and security requirements in equipment and materials procurement?	N	Will be done during FD/Construction
Has the grantee verified construction specification conformance?	N	Will be done during construction
Has the grantee identified safety and security critical tests to be performed prior to passenger operations?	N	Will be done during Rail Activation phase
Has the grantee verified conformance with safety and security requirements during testing, inspection and start up phases?	N	Will be done during Rail Activation phase
Does the grantee evaluate change orders, design waivers, or test variances for potential hazards and/or vulnerabilities?	N	Will be done during FD/Construction
Has the grantee ensured the performance of safety and security analyses for proposed work-arounds?	N	Will be done during Rail Activation phase
Has the grantee demonstrated through meetings or other methods, the integration of safety and security in the following: <ul style="list-style-type: none"> <li>• Activation Plan and Procedures</li> <li>• Integrated Test Plan and Procedures</li> <li>• Operations and Maintenance Plan</li> <li>• Emergency Operations Plan</li> </ul>	N	Will be done during Rail Activation phase
Has the grantee issued final safety and security certification?	N	Will be done after completion of Rail Activation phase
Has the grantee issued the final safety and security verification report?	N	Will be done during Rail Activation phase
<b>Construction Safety</b>		
Does the grantee have a documented/implementation Contractor Safety Program with which it expects contractors to comply?	Y	CSP development is included in construction contracts
Does the grantee's contractor(s) have a documented company-wide safety and security program plan?	TBD	Is a requirement of CSSP
Does the grantee's contractor(s) have a site-specific safety and security program plan?	TBD	Is a requirement of CSSP
Provide the grantee's OSHA statistics compared to the national average for the same type of work?	TBD	None developed yet
If the comparison is not favorable, what actions are being taken by the grantee to improve its safety record?	TBD	None developed yet
Does the grantee conduct site audits of the contractor's performance versus required safety/security procedures?	Y	Audit required in CSSP

<b>Federal Railroad Administration</b>		
If the shared track: has the grantee submitted its waiver request application to FRA? (Please identify any specific regulations for which waivers are being requested)	NA	
If the shared corridor: has grantee specified specific measures to address shared corridor safety concerns?	NA	
Is the Collision Hazard Analysis underway?	NA	
Other FRA required Hazard Analysis – fencing, etc?	NA	
Does the project have Quiet Zones?	NA	
Does FRA attend Quarterly Review Meetings?	NA	

# Honolulu Rail Transit Project Map



## Honolulu Authority for Rapid Transportation

### RESOLUTION NO. 2015-33

#### RELATING TO THE HONOLULU AUTHORITY FOR RAPID TRANSPORATION'S COMMITMENT TO MEET REGULARLY WITH CITY AND STATE LEADERS TO PROVIDE UPDATES

WHEREAS, the Honolulu Authority for Rapid Transportation (HART) has been established pursuant to Article XVII of the Revised Charter of the City and County of Honolulu 1973, as amended; and

WHEREAS, HART acknowledges that as the largest public capital works project in Hawaii's history, successful execution of the Honolulu Rail Transit Project requires the cooperation and collaboration of many partners; and

WHEREAS, HART recognizes the importance of open and transparent communication with its State and City partners, particularly with regard to its financial status; and

WHEREAS, HART has striven to cultivate collaborative working relationships with its partners at the City, including, but not limited to, the Honolulu City Council, the Mayor, and the Director of Budget and Fiscal Services; as well as its State partners, including, but not limited to, the Senate and House of Representatives, the Governor, and the State Director of Budget and Finance; and

WHEREAS, these relationships have been maintained through regular meetings and reports with these partners regarding HART's financial status; and

WHEREAS, the Honolulu City Council passed Resolution No. 15-79, CD1, which encourages HART to continue to meet and report regularly with its partners;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of HART as follows:

1. That HART staff will regularly meet with City and State partners to provide construction, financial, revenue and budgetary updates; and
2. That HART will meet with City and State partners at important financial junctures including, but not limited to, prior to making amendments to the Full Funding Grant Agreement Financial Plan and cash flow projections; and
3. That HART will report annually to the State Legislature no later than twenty days prior to the start of the legislative session; and

4. That a copy of this resolution shall be transmitted to the Governor, the Mayor, the Senate President, the Speaker of the House of Representatives, the Chair of the Senate Ways and Means Committee, the Chair of the House Finance Committee, the State Director of Budget and Finance, and the Director of Budget and Fiscal Services; and
5. That this Resolution shall take effect immediately upon its adoption.

ADOPTED by the Board of the Honolulu Authority for Rapid Transportation on

\_\_\_\_\_.

\_\_\_\_\_  
Board Chair

ATTEST:

\_\_\_\_\_  
Board Administrator

**Honolulu Authority for Rapid Transportation  
STAFF SUMMARY**

<b>TITLE:</b> <b>RESOLUTION 2015-33</b> RELATING TO THE HONOLULU AUTHORITY FOR RAPID TRANSPORTATION'S COMMITMENT TO MEET REGULARLY WITH CITY AND STATE LEADERS TO PROVIDE UPDATES	<b>STAFF CONTACT:</b> Cindy Matsushita	<b>DATE:</b> June 25, 2015
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Type:	Goal	Focus Area	Reference Notes
<input checked="" type="checkbox"/> <b>Action/Approval</b>	<input checked="" type="checkbox"/> <b>Project Delivery</b>	<input type="checkbox"/> <b>Livability/Land Use</b>	
<input type="checkbox"/> <b>Information</b>	<input type="checkbox"/> <b>Service Delivery</b>	<input checked="" type="checkbox"/> <b>Partnerships</b>	
<input type="checkbox"/> <b>Follow-up</b>	<input type="checkbox"/> <b>Resource Stewardship</b>	<input type="checkbox"/> <b>Agency Admin.</b>	

**1. Purpose:**  
To direct the continuation of HART's communication with its State and City partners on the construction and financial status of the project.

**2. Background/Justification**  
Recently, HART's State and City partners have placed a greater degree of focus on the project's finances in light of the discussions surrounding the General Excise Tax extension. Additionally, City Council Resolution No. 15-79, CD1 was recently passed.

**3. Procurement Background**  
N/A

**4. Financial/Budget Impact**  
N/A

**5. Policy Impact**  
This resolution is consistent with the HART Board of Director's Resolution 2011-5, as well as the authority's overall commitment to openness and transparency.

**6. Public Involvement**  
N/A

**7. Alternatives**  
N/A

**8. Exhibits**  
none

**Certified and Recommended by:**

  
 \_\_\_\_\_  
**Executive Director and CEO**

6/19/15  
 \_\_\_\_\_  
**Date**

# **HART**

HONOLULU AUTHORITY for RAPID TRANSPORTATION

**DRAFT**

**BUSINESS PLAN**  
for  
**FY2016**

May 2015

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TVM Ticket Vending Machine  
VE Value Engineering  
YOE Year of Expenditure

# **HART FY2016 Business Plan**

## **Introduction and Executive Summary**

This document constitutes the fifth annual Business Plan for the Honolulu Authority for Rapid Transportation (HART) covering fiscal year 2016 (July 1, 2015, through June 30, 2016). The Business Plan describes HART's business strategies, planned work activities and resource allocations during fiscal year 2016 in accordance with the agency's responsibility for building and ultimately operating the Honolulu Rail Transit Project (HRTTP), from East Kapolei in West Oahu to Ala Moana Center scheduled to begin in calendar year 2020.

The FY2016 HART Business Plan describes why HART exists as an organization; the goals and performance measures the agency has established; what it will seek to accomplish during its fifth year; and how it will go about performing its responsibilities. The HART Board of Directors (BOD) will review and approve the FY2016 Business Plan in conjunction with its final approval of an FY2016 Budget. The annual Business Plan provides historical information and a projection of key operating and financial information for the fiscal year which is the focal point of the Plan. When HART completes the HRTTP and becomes an operating agency, future business plans will provide not only historical information but also include look-ahead projections of operating and financial information two years beyond the fiscal year which is the focus of the Business Plan.

### **FY2016 Executive Summary**

FY2016 will be another critical year for HART coming on the heels of what turned out to be a very challenging FY2015. Events during FY2015 caused HART to take affirmative steps to reset the HRTTP budget and schedule and to seek additional funding to complete the project in light of the new financial realities the agency faces. Despite these difficulties, as the agency enters the new fiscal year, there are many reasons to be positive about where things are at. Sixty percent of the construction contracts for the project have been awarded and construction work is proceeding in an effort to catch-up with delays caused by past litigation. No new litigation has been initiated on the project. Federal support for the project is strong and running close to plan. There remains a high level of interest in creating transit-oriented development (TOD) around rail stations with several projects in the works. And at the end of FY2015, the agency's financial situation has improved with passage by the Legislature of an extension of the GET surcharge that will help cover increased construction costs and an expected shortfall in the project's revenue sources.

Despite these positives, HART will face very big challenges in FY2016 and over the next several years. Major construction contracts will be bid and awarded during the year totaling nearly \$1.8 billion in contract value. The agency will need the City and County of Honolulu to approve the extension of the GET surcharge and issue short term debt to help deal with cashflow needs for the increasing level of expenditure that will occur as a result of all the construction activity on the project. The agency's Financial Plan will need to be updated to reflect the revised project budget and changed revenue picture. Finally, and of critical importance, will be HART's efforts to manage the ongoing construction against the reset

schedule and budget for the project while mitigating traffic impacts and maintaining communications with businesses and residents along the route under construction.

During FY2016, several major policy and project decisions must be made by HART. These include:

- Updating the agency's Financial Plan to reflect the extension of the GET surcharge and the results of solicitations for the remaining \$1.8 billion in construction contracts
- A decision in the third quarter of FY2016 on how to proceed with the Pearl Highlands Parking Garage and whether to seek creation of a public-private partnership (P3) for TOD at the Station that would include parking for the rail line
- A decision on whether to initiate planning for future extensions of the rail line during FY2016 or delay any such effort until a future time
- Various Fare Policy decisions to guide design of the rail and bus fare collection system need to be made by the middle of FY2016
- Various decisions that concern the future operations and maintenance of the integrated rail and bus system including: the integration of administrative functions between HART and the City and County's bus operation to save money and provide good customer service; how the rail line will be policed by law enforcement; and how HART will execute its oversight of its operating contractor and carry out the functions it will be responsible for such as inspections and repairs of stations and the aerial guideway structure
- Progress on determining how the operations and maintenance of the combined rail and bus public transportation system will be funded by the City and County of Honolulu in the future.

Under the work program planned for FY2016, by the end of the fiscal year, HART will have achieved several milestones for the project. Approximately 45% of the rail guideway will have been completed. Construction of the Rail Operations Center (ROC) will be complete and the first railcars will be on site. Construction will be underway on all of the 9 stations on the western portion of the alignment. Contracts for construction of the remaining sections of guideway and the remaining 11 stations will have been awarded. Property acquisitions, third party agreements and any needed permitting are targeted for completion by the end of FY2016 in time for work on the Airport and City Center sections to begin during FY2017.

However, during the year, the agency will continue to face a number of risk factors that could further impact the schedule and budget for the project and the assumptions that have been made on both aspects. This includes the following:

- The high level of construction on Oahu has and will continue to result in greater competition for resources in a confined, remote marketplace and result in higher costs for materials, labor and construction equipment
- Timely availability of construction sites for contractors to avoid costly delays
- Timely relocation of utilities along the alignment
- Interest rate increases driven by marketplace dynamics, world events and federal policy actions
- Actual vs. planned General Excise Tax (GET) surcharge growth in the future.

HART experienced the impacts of some of these risks in FY2015. The agency took steps to address the impacts by re-setting the project's budget and schedule and will do so again if circumstances require action to be taken. HART will continue to take steps to minimize or protect against potential impacts to the maximum extent possible while carrying out the implementation of the H RTP. Specific actions include at least the following:

- Monitoring and controlling the pace of construction and carefully evaluating change orders that arise
- Taking steps to foster greater competition for the upcoming construction contracts
- Timely award of these construction contracts
- Completing permitting, utility relocations and property acquisitions in a timely manner to avoid construction delays
- Managing the project scope and budget carefully to maintain a cost cushion against exceptional cost increases and/or underperforming revenue receipts while still delivering a quality product for the public to use and one that is consistent with the commitments HART has made and with the project's Final Environmental Impact Statement (FEIS)
- Making needed policy decisions in a timely fashion
- Maintaining the organization's technical capability and financial capacity to successfully carry out implementation of the project as well as preparations for the start of passenger service.

## Agency Progress: FY2015 Highlights

FY2015 was HART's fourth year of existence. During the year, the agency continued to make progress toward achieving the vision of bringing rapid transportation to Oahu despite the challenges created by the super-heated level of construction underway on the island and past litigation-related delays to the project schedule. Shown below is a brief summary of major events, challenges and accomplishments that occurred during HART's fourth year:

### **Litigation Matters:**

No new litigation concerning the project was initiated in FY2015. Successful resolution of both the State and Federal court cases in FY2014 ended all outstanding litigation that had delayed the project's implementation. However, the 13 month project schedule delay caused by that previous litigation continued to bedevil the project in FY2015. This delay contributed to the approximately \$170 million in delay claims the project has incurred.

### **Project Delivery:**

- Significant construction progress was made in FY2015. As of the third quarter, the following construction had been completed:
  - 145 guideway support columns in place
  - 210 column foundations completed
  - 2,400 guideway segments had been cast
  - 100 spans erected or more than 2.5 miles of guideway structure
  - First rail installed on the guideway and at the ROC
  - 65% of the ROC completed

While the construction of the guideway is behind schedule, the ROC is on schedule to be completed by spring 2016 in time for delivery of the first railcars to Oahu. The Core Systems contractor Ansalod Honolulu Joint Venture (AHJV) is on schedule with the design and manufacture of the project's railcars for the start of delivery of the first railcars in 2016.

- With this construction and equipment progress, as of the third quarter, the overall project status can be quantified approximately as follows:
  - Percentage of overall project completed = 32.0%
  - Percentage of design completed = 83.4%
  - Percentage of construction completed = 21.1%
  - Percentage of utility work completed = 14.8%
- While progress was made in FY2015 under previously awarded construction and systems contracts, the letting of new construction contracts programmed for FY2015 ran into major problems. Bids received for the 9 station Westside Station Group greatly exceeded budget estimates. This occurrence resulted in the cancellation of the solicitation and the suspension of the procurement for the Pearl Highlands Garage. A major effort was then undertaken to review the project including an analysis of the new circumstances now facing HART with the high level of construction underway on Oahu. This effort considered ways to reduce costs and maintain the 2020 opening date for the project and included extensive contractor interviews. Updated cost estimates were developed for the Westside stations and the remaining portions of the rail alignment.

The result of these efforts was a new plan for how construction of the remaining project elements should be carried out. This revised plan includes a re-packaging of contracts and a change in the delivery method for the eastern 10 mile section of the rail alignment with the following specific elements:

- Construction of the nine Westside stations was broken up into three packages of three stations each to increase competition.
- The schedule for the start of interim service on the Westside was pushed back from 2017 to 2018 to ease schedule pressure on prospective contractors.
- The construction of the eastern portion of the rail alignment, including both the guideway and the stations, will be broken into two sections both of which will be procured using the design – build (DB) project delivery method.
- A separate contract will be let for utility relocation and miscellaneous civil work in the City Center area.
- Implementation of the above described plan will be as follows:
  - Construction of the first three Westside station on Farrington Highway was advertised and five bidders responded with the low bid being close to the revised cost estimate for the group
  - Solicitations for the remaining construction contracts will be issued by the end of 2015 and are expected to be executed by the end of FY2016. These includes:
    - Airport Guideway and Stations
    - City Center Guideway and Stations
    - City Center Utilities and Civil Work
    - West Oahu Station Group
    - Kamehameha Highway Station Group
    - H2R2 Ramp
  - The Pearl Highlands Garage project will remain on hold until bids or proposals are received on the construction contracts listed above. A decision on how to proceed with this element of the project’s scope will be made the third quarter of FY2016.
- Land Acquisition: HART has obtained construction access to approximately 90% of the land area required for the project. To date, the real estate expenses are running \$10.4 million under budget. Out of 234 property acquisitions identified as needed for the H RTP, to date, HART has acquired title to 81 properties at a cost of \$70.8 million. Out of 124 identified relocations, HART has completed 83 relocations, and 41 are in progress. Of the remaining relocations, 4 are residential, 37 are business. In addition, one non-profit organization has already been re-located.
- Utility Relocation: During FY2015, work was underway across the length of the first 10 miles and in the section between Aloha Stadium and the Middle St. Transit Center past the Honolulu Airport. HART staff worked to resolve issues with HECO on their work progress; the power supply needs of the ROC; and on future relocation issues especially along Dillingham Blvd. with its high voltage line.
- Procurement Activities: During FY2015, the following procurement results occurred:
  - Bids for the nine stations on the Westside portion of the alignment were advertised and bids received. As previously noted, the bids came in significantly over budget which resulted in a major effort to re-look at the project’s cost estimate, schedule and contracting approach.

- Contracts awarded included: On-Call Construction Contractor I and II; Airport Section Guideway Seven (7) Pier Construction Contract; Airport Section Utilities Construction Contract; Farrington Highway Station Group; and the H2R2 Ramp.
  - Contract awards pending at the end of FY2015 include: Fare Collection Technical Support and an additional CE&I contract.
- Planning: Activities completed in FY2015 included:
  - Acceptance of the burial treatment plan by the Oahu Island Burial Council (OIBC)
  - Acceptance by the State Historical Preservation Division of the Archaeological Inventory Survey(AIS) plan for the City Center
  - Completion of key environmental post-ROD documents for the Federal Transit Administration (FTA) refining certain project elements with the conclusion of no material effects to the ROD.
- Construction Outreach: During FY2015, HART held its third “Industry Day” event to educate local construction businesses and Disadvantaged Business Enterprise (DBE) firms on the opportunities for work on the project and to facilitate connections between prime contractors and subcontractors. These events are expected to increase competition for future construction contracts which will help keep construction costs as low as possible and should also increase participation by local firms and DBE’s in the project.
- Job Creation: In FY2015, the number direct jobs working on the project increased to 1,400 of which about 63% are local jobs. This level of job creation is on a pace consistent with the project’s status toward achieving 4,000 direct jobs created in the 2016-18 construction period.
- Art-In-Transit (AIT) Program: The Transit Art Committee (TAC) composed of art and design professionals and HART staff evaluated over 400 “Call for Artists” applications to select artists for the 21 stations and the Operations and Service Building at the Rail Operations Center. The “Call for Artists” and evaluation process took longer than expected, which delayed expending the budgeted funds. The AIT is currently in the confidential procurement process.
- TOD: In FY2015, HART continued to devote staff time to land use planning and coordination with partner agencies and surrounding landowners. HART staff participated in the City and County of Honolulu Mayor’s Subcabinet on TOD. This Subcabinet brings together the directors and deputy directors of every city agency to identify ways to work together to enhance TOD facilities and break down silos that could exist between different municipal agencies. During the year, the TOD Stakeholders Advisory Group composed of representatives from HART, the City, the State and private development interests and various other organizations and groups, held its first meeting. In February, HART also submitted comments on the Hawaii Community Development Authority (HCDA) Draft Environmental Impact Survey (EIS) for the Kakaako Community Development District TOD Overlay.
- Construction and Traffic Impact Mitigation: HART continued to take a multi-pronged approach in FY2015 to keeping the public informed about construction and traffic impacts to communities and businesses along the alignment. Numerous community, town hall, and business meetings were held to address community and business concerns. HART staff also canvassed affected areas in advance of construction work, as well as disseminating traffic information to news media outlets and staffing a 24/7 project hotline.

## **Finances:**

- Events in FY2015 produced a significant change in HART's financial picture. The significantly over budget bids for the Westside Station Group and feedback received from the construction community caused a re-setting of the project's budget and schedule. A new estimate of the cost to complete the project was prepared which added \$594 million to the cost of the project. In addition, continued shortfalls in actual GET receipts during the year indicated that this critical funding source could come in \$100 million less than what had been assumed in HART's Financial Plan. Finally, concerns were raised about the Financial Plan assuming the use of \$210 million in federal Section 5307 formula funds that in the past had gone to support Oahu's extensive bus system. These three events combined to produce roughly a \$910 million shortfall in the Financial Plan for completing the H RTP.
- To address this problem, HART staff worked with the HART Board of Directors and with the Mayor and City Council to develop a plan for covering the \$910 million. This effort determined that the best course of action was to approach the State Legislature to seek an extension of the GET surcharge beyond its scheduled sunset date of December 31, 2022 to cover the increased cost of the project and the shortfall in revenue available to the project. As of the writing of this Business Plan, the State Legislature had approved a five year extension of the GET which has been sent to the Governor for signature.
- HART expects to receive \$171.4 million in FY2015 from the FTA bringing total federal funding actually received to date for the H RTP to \$426 million. Congressional appropriations for the project are \$1.056 billion which is approximately two-thirds of the \$1.55 billion committed to the project in the Full Funding Grant Agreement (FFGA). The President's 2016 budget includes another \$250 million for the project, again the largest amount for any New Starts project in the Country.
- Continued to work on improving HART's financial reporting to the HART Board, the City Council and the State Legislature and to the community through the HART website. The monthly reports and the agency's quarterly Balanced Scorecard are distributed widely and regularly.
- Completed the agency's third annual financial audit cycle, which yielded overall favorable conclusions and no findings. Issued the third annual financial statement for HART since becoming a semi-autonomous unit.
- GET collections in FY2015 are expected to total \$227.2 million bringing the total collected to date to \$1.53 billion which is \$30.5 million less than forecast in the June 2012 Financial Plan. Recent receipts came in better than expected but the projected \$100 million GET shortfall remains an issue.
- Satisfactorily resolved outstanding construction delay claims at a cost of \$170 million. The project Contingency is projected to have a balance of \$451 million at the end of FY2015.
- During FY2015, HART implemented an Owners Controlled Insurance Program (OCIP) which provides coverage for Workers Compensation, General Liability and Excess Liability for Construction Contractors performing work within the physical geographical limits of the project. It also includes such coverage for designated sites not within the physical limits of the project such as the casting yard and storage facilities. HART also provides Builders Risk coverage for Construction Contractors while performing construction work on the project within the project limits, including designated sites not within the physical limits of the project. The On-Call Construction Contracts are not

covered by the OCIP and are not covered by Builders Risk. Marsh is the HART OCIP consultant and Aon Hawaii is providing brokerage services.

### **Organizational Development:**

- In FY2015, HART made significant progress on developing the organization to meet the challenges the project faces:
  - Progress was made in building staff capacity and technical capability in the Design and Construction Management Department to handle change management and oversee construction management activities during the coming years. In this regard, a decision was made to separate the procurement and contract administration functions and hire experienced individuals to head-up both functions. Several key positions were filled including:
    - Project Director
    - Deputy Director of Construction
    - Assistant Deputy Director of Construction
    - Deputy Director of Planning
    - Director of Procurement
    - Two Procurement Specialists
    - Transit Contracts Manager
  - In addition, key positions were filled in other HART departments including:
    - Fare System Project Manager
    - Director of Special Projects
    - Transit Grants Manager

These efforts are mindful of the need for HART to continue to have the technical capacity needed to carry out the largest public works project in Hawaii's history and to meet FTA requirements in accordance with the FFGA. All of the above positions were filled with people that have substantial experience in dealing with the type of construction and technology that are inherent in the HRTTP. In addition, HART continued the transition of consultant provided embedded staff in several positions to positions held by HART employees.

- Training activities for HART staff continued in FY2105 covering a wide variety of areas including ethics awareness; safety awareness; the Contract Management System and various other computer systems; procurement; quality assurance; civil rights; and environmental related areas.
- On Fare Policy, major progress was made in FY2015. The Board's Permitted Interaction Group (PIG) continued to work on developing a Fare Policy and made several decisions that were presented to the full HART Board. These decisions, which were reached in partnership with the Department of Transportation Services (DTS) and its Transit Management Services Contractor (TMSC), included changing to a barrier fare collection system versus the originally planned proof-of-payment system; pursuing procurement of a joint rail and bus fare collection system with costs split between HART and DTS; using account-based smart card technology; and preliminary decisions on how the fare revenue system will be operated and maintained in the future. With these key decisions made, steps were taken to procure the joint rail – bus system. An effort was started to craft a Memorandum of Understanding (MOU) between HART and DTS for the joint fare system and is expected to be finalized by the end of FY2015. A Request for

Qualifications (RFQ) was issued to solicit technical support for procuring the fare collection system. A Request for Information (RFI) was issued to fare system suppliers and 13 responses were received. Preparation of a Request for Proposal (RFP) to procure the system is in development and is expected to be issued in the first quarter of FY2016. There are still several Fare Policy decisions that need to be made, which will require collaboration amongst HART, DTS, its TMSC, and the Honolulu City Council. A new PIG was approved by the HART Board to begin the work needed to finalize the complete Fare Policy in FY2016 in conjunction with the procurement of a vendor to supply the new fare collection system.

- Preparing for future operations:
  - Agency Staffing - A draft staffing plan was submitted to the HART Board and will be refined over the next two years as the date for initial service operations approaches.
  - Service Scheduling - A final decision was made to operate four-car train consists and negotiations are underway with the Core Systems contractor AHJV on how this change will be handled.
  - Bus – Rail Integration: The working group established with DTS and its transit management contractor OTS continued its work on exploring how best to integrate bus and rail services, as well as opportunities for consolidating administrative and other functions between HART and DTS/OTS to improve cost efficiency and customer service.
  - Maintenance Management Information System (MMIS) – The Core Systems contractor AHJV has retained a subcontractor and has begun work on developing the MMIS system. This system will be used by them, HART Operations, and other vendor contractors as an integrated maintenance tracking and scheduling system.
  - Policing – A “white paper” describing an approach, resource requirements and the laws and rules that will be needed was drafted and is under review.
- On Safety and Security, several things were achieved or done in FY2015 including:
  - Achieved an on-the-job injury rate of 0.6 injuries per 100,000 work hours, well below the 3.8 injuries per 100,000 work hours typically experienced by projects of a similar size and complexity.
  - Various HART committees continued to meet regularly including the Fire-Life-Safety Working Committee; the Safety and Security Review Committee for design reviews; and the System Safety Executive Committee made of senior HART staff.
  - Activities related to Safety Certification of the entire rail line are underway, specifically the process of verifying (thousands) line items in the Design and Construction phase to ensure compliance with Federal, State, City, local laws and regulations, and that best practice codes and guidelines are followed and hazards are mitigated to ensure the safest transit system possible.
  - An initial training of first responders was held during FY2015. There were no formal emergency drills or table top exercises held during the year.
  - In the area of Federal Rail Safety Oversight requirements, HART staff met regularly with the State Department of Transportation (HDOT) and quarterly with FTA representatives to review a wide range of matters associated with project design, construction and future operations.

- Staff held regular meetings with the Core Systems contractor AHJV and began preparations for the initial safety certification of the ROC in anticipation of initial occupancy of the facility occurring in early 2016 when the first railcars are scheduled to arrive.
- Completed a four Threat & Vulnerability Analyses including ones involving U.S. Navy facilities.
- On Equal Employment Opportunity (EEO/DBE) matters, HART achieved the following:
  - DBE participation on the project to date totals 5.7% of FTA funding drawdowns against the approved project goal of 13%. This is slightly less than the FY2014 level of 6.3%. Participation results are expected to improve as additional construction contracts are let in FY2016 and beyond.
  - Staff undertook efforts to work with contractors whose DBE performance was lacking making use of specific DBE participation requirements incorporated in newer contracts let by HART.
  - The third HART Industry Day event mentioned earlier had significant DBE firm participation which is expected to result in greater DBE involvement in the remaining contracts to be let.
  - The agency's workforce utilization profile remains very close to matching the service area's population make-up with underutilization existing in only four areas which will continue to be a focus in future staff recruitments.
  - Staff worked with DTS representatives to update the combined EEO Program in accordance with FTA requirements and expectations.

## HART Business Strategy

Public transportation is a service business that utilizes both human and physical assets to deliver its product in the marketplace. A transit agency is in competition with the automobile to increase its share of the travel market. Success in achieving a greater market share requires that a transit agency have a clear strategy for how it will go about delivering its product to prospective consumers. As a public agency, HART's business strategy must not only be easily understandable to the agency's employees and contractors but must also be understandable to the general public.

This section of the FY2015 Business Plan describes the basic elements of the HART business strategy. The elements include statements on why the agency exists and what it is trying to achieve, as well as a framework for how HART will go about accomplishing what the public has asked it to do. This framework includes Goals and a "Balanced Scorecard" (BSC) for measuring and tracking over time how well HART is doing its job. A later section of the FY2016 Business Plan describes the organizational development strategy HART is utilizing to achieve its Mission and Vision and accomplish the Goals the BOD has established.

### **Mission Statement** (*why the agency exists*)

HART's Mission is to plan, design, construct, operate and maintain Honolulu's high-capacity, fixed guideway rapid transit system.

### **Vision Statement** (*what HART is trying to achieve*)

In accomplishing its Mission, HART will contribute to the quality of life on Oahu by:

- **Mobility**: Improving mobility for all residents, visitors, and businesses on Oahu particularly in the densely populated and congested corridor along the urbanized southern shore of the island.
- **Reliability**: Improving the reliability of travel in the corridor by offering a travel choice that will not be subject to at-grade level traffic congestion.
- **Land Use**: Supporting the City's land development policy by providing access to an area targeted for development of a new urban center and helping create TOD along the rail line.
- **Equity**: Providing people who are dependent on public transportation with an improved means of accessing economic and social opportunities and activities.
- **Sustainability**: Protecting the environment and lessening dependence on non-renewable fossil fuels.

Note: This **Vision Statement** is based in part on the EIS prepared for the H RTP.

### **Goals** (*how HART will go about accomplishing the Vision and fulfilling its Mission*)

In order to accomplish its Mission and realize the benefits described in the Vision, HART must accomplish the following goals:

1. Project Delivery: Complete the project on time and within budget while:
  - Ensuring the safety and security of the public, HART employees, and construction workers;
  - Minimizing the impacts on adjacent natural, cultural, and built environments and communities; and
  - Fulfilling environmental mitigation commitments.
2. Service Delivery: Ensure that the design and actual construction of the project will facilitate the delivery of safe, high quality, and cost-efficient service in the future.
3. Stewardship of Resources: Maintain public trust through the prudent and transparent use of financial, human, and environmental resources.
4. Livability: Support the creation of mixed use, pedestrian-friendly, compact development along the rail line.
5. Partnerships: Pursue partnerships with the private sector to create economic opportunities and generate income and cost savings for the rail transit system.
6. Agency Culture: Foster an organization that is open, accountable, inclusive, and delivers better than promised results.

### **Performance Metrics**

Performance expectations and metrics flow out of the Vision and Goals for the agency and are intended to help an organization measure its progress toward achieving the Vision and Goals. Performance metrics for HART will help the BOD and agency management, as well as the Authority's stakeholders and the general public, measure and evaluate the agency's progress and will aid in maintaining transparency on what HART is doing with taxpayer money. Management staff will compile and provide periodic reports to the BOD on the performance metrics. The information will also be reported to the City Council and the community in an annual report.

Performance metrics for HART have been incorporated into a BSC for the agency. The BSC establishes and will track over time metrics that measure performance in achieving the Goals which the BOD has established for the agency. The proposed HART BSC is shown in **Appendix A** of the Business Plan.

As shown in Appendix A, the HART BSC is structured to provide performance measures and metrics encompassing the six Goals the BOD has approved. The BSC establishes the fiscal year objectives for each measure. Space is provided for HART management to provide information on actual results or status for each of the performance measures and metrics delineated in the BSC during quarterly reports to the HART BOD. These reports will include

a summary of any material changes in the status of performance measures to enhance the transparency of the progress being made on implementing the H RTP.

In FY2016 and for the next several years HART will be engaged in completing the design and construction of the H RTP. The earliest that actual operation of rail service will begin is calendar year 2018 with the start of interim operations on the western section of the rail line. As such, the BSC shown in Appendix A is heavily oriented toward project implementation. The BSC does include some measures dealing with Service Delivery as it relates to the current project implementation stage of the project. Additional metrics will become meaningful when actual revenue service begins. Illustrative examples of such metrics include:

- Ridership level.
- Reliability measures including:
  - On-time departures/arrivals.
  - Miles between mechanical failures.
  - Elevator and escalator availability (% of time available during operating hours).
  - Fare collection equipment availability (% of time available during operating hours).
- Safety and Security measures including:
  - Accidents per 100,000 passengers.
  - Security incidents per 100,000 passengers.
  - Employee on-the-job injuries.
- Financial measures including:
  - Operating Ratio.
  - Cost per vehicle hour and vehicle mile.
  - Cost per passenger.
  - Accident Claims received/closed/outstanding.

Given the current project implementation focus of HART's business activities, it is envisioned that HART management will provide quarterly updates of the HART BSC in reports to the BOD and the public. When actual revenue service begins on the rail line, monthly BSC reports will become relevant.

Using a BSC which ties to the Goals that HART has established will enable the agency to evaluate its progress on achieving the agency's Mission and Vision and to report to its stakeholders and to the community.

## **FY2016 Work Program**

### **Agency Business Operations**

HART functions as a semi-autonomous agency of the City & County of Honolulu government. During FY2016, HART will continue to use various City business systems and administrative practices as appropriate when conducting the agency's business activities. On an ongoing basis, HART will evaluate the extent to which it should develop its own business systems to improve efficiency and delivery of needed business services consistent with the agency's Mission as described in the previous section.

During FY2016, HART will continue to take steps to further develop the organizational capacity and capability to fulfill its Mission. Several of the actions that will be taken are designed to ensure that HART will maintain eligibility to receive Federal funding for the H RTP. A preliminary listing of the priorities and tasks that will be pursued in FY2016 is as follows:

- Recruit and hire key management, technical, and support staff to fill key vacancies as they occur or needs arise. Recruitments for a new Director of Design and Construction and a Deputy Director of Procurement are underway.
- Address any new requirements stemming from the State Legislature's action to extend the GET surcharge for an additional period of time in response to the financial problems HART has encountered.
- Update the project's Financial Plan during the first quarter of FY2016 to reflect:
  - Extension of the GET surcharge to address the project's \$910 million projected project shortfall.
  - Final actions to issue short term debt to meet the project's cashflow needs as construction proceeds over the next five years or so.
- Update the agency's Human Resources Staffing Plan.
- Continue the creation of an organizational structure and agency culture that will enable the fulfillment of the agency's Mission and Vision. This includes:
  - Provide ongoing staff training, employee develop and succession planning
  - Ensure that effective cost control measures are in place
  - Ensure that processes, policies and work practices are interpreted and applied consistently and effectively
  - Encourage internal communication, teamwork and collaboration across all functions and activities
- Continue to add and/or modify administrative procedures and practices that are specific to a transit agency in areas such as procurement and contract administration, safety and security, employee relations and development, management reporting and those needed in preparation for HART to become an operating agency.

- Maintain a management reporting system on key performance metrics and financial information including:
  - Continue to develop internal processes that will enhance the control over fiscal processes while increasing processing efficiencies.
  - Achieve zero findings in the Authority's annual audit, specifically addressing any deficiencies identified in previous audit reports.
  - Continue to build finance, accounting and internal controls capability.
- Continue development of a brand identity for HART. Take steps to address and dispel misinformation and myths about the project and HART.
- Continue emphasis on safety and security as top priorities during construction and ultimately during future operations.
- Regularly update and communicate with stakeholders, including the Mayor and City Council, state and federal officials, the Oahu Metropolitan Planning Organization Policy Committee and the general public to ensure transparency by providing a flow of information regarding the progress of the HRTP through electronic means, printed materials and the availability of HART staff.
- Continue efforts to increase local business and DBE participation in the project.

### **HRTP Project Implementation**

#### **Project Description:**

The scope of the HRTP has remained unchanged despite the increased cost to complete and the revenue shortfalls that came to light in FY2015. **Appendix C** hereto provides a summary description of the project along with background on the planning for the project.

#### **FY2016 Project Implementation Work Activity:**

- Overall, during FY2016, HART will advance construction work on the western 10 miles of the rail alignment and the ROC working toward a 2018 start of interim rail operations and will take the steps needed to initiate construction work on the remaining eastern 10 miles of the project working toward the start of full operations of the rail line scheduled for 2020.
- Consulting contracts will be continuing for a Program Management Support Consultant (PMSC); for various design, engineering, construction management and inspection services; and for support in various areas including real estate, cultural resource monitoring, safety and security and oversight of the core systems and equipment contract.
- The HART Operating Budget provides funding for the equivalent of 139 full-time positions for the project including positions provided by the PMSC. The staffing plan for the year as reflected in the organizational charts shown in **Appendix B** includes a

beefing up of staff in the Design and Construction Department to provide the additional capacity needed to tackle the increasing level of contracting and construction activity HART will experience in FY2016 and beyond to the start of full system operations scheduled for 2020.

- Planning & Permitting- During FY2016, activities will include:
  - Monitoring of construction to identify the presence of *iwi kupuna*.
  - Continued coordination and consultations with stakeholders and project partners on AIS and Programmatic Agreement matters.
  - Obtaining all needed permits for the Airport and City Center sections.
  - Monitoring for permit compliance and any renewals required.
  - Subject to policy direction from the HART Board, take steps to initiate planning for future extensions of the rail line.
  
- Property Acquisition and Third Party Agreements – The objective for FY2016 is to obtain 100 percent site access for contractor while any final property acquisitions transactions or agreements are being completed. Obtaining the services of a second real estate firm to assist in gaining the needed property acquisitions and access agreements is in process. For third party agreements, there are several key transactions that will be completed including construction rights of entry from the US Navy, University of Hawaii and Aloha Stadium. HART right of way staff will continue to work to complete all remaining acquisition transactions in FY2016.
  
- Design Work – The only design work that will occur in FY2016 will be as part of the two DB contracts for the eastern sections of the project guideway.
  
- Construction – During FY2016, HART will have major construction work underway including continuing construction of the first 10 miles of guideway and the start of construction on all 9 stations in the initial operating section. By the end of FY2016, the following work is expected to be completed:
  - During FY2016, plans are to complete 234 columns and 5.8 miles of the guideway. By the end of the fiscal year, 424 columns and 9.1 miles of the guideway will have been constructed. This equates to 45% of the 20 mile alignment for the project being in place.
  - The ROC is will be substantially complete by April 2016 with punchlist items remaining. The facility will be complete enough in early 2016 to take delivery of the first railcars.
  - All utilities in the first 10 miles and in the Airport section are expected to be relocated by the end of the fiscal year.

Risks to advancing the planned construction work include any delays in utility relocations; delays in acquisition of needed parcels of property; contractor difficulty in obtaining needed materials, labor and other resources needed for their particular contract; and challenges in resolving interface issues between contractors.

- Contracting – Procurement and contract administration activities planned for FY2016 are described in the Procurement section found later in this chapter.

- Pearl Highlands Parking Garage – A determination on how to proceed with this project element will be made in the third quarter of the fiscal year following the results of the solicitations for the major construction contracts for the remaining eastern half of the rail alignment. This review will explore whether the garage could be built as part of a P3 to create a TOD at the Pearl Highlands Station to both save HART money and achieve the level of customer parking envisioned for the rail line.
- Project Labor Agreements (PLAs) – HART and its PLA contractor Solis Group will work with both labor and contractor interests to ensure that the HARTP retains labor stability in the years ahead as the project moves toward completion.
- Safety and Security - Planned activities include:
  - Continued design reviews and pre-safety certification activities.
  - Temporary safety certification of the ROC and the issuance of occupancy permits in time for the delivery of the first railcars.
  - Beginning safety certifications and the issuance of occupancy permits for completed portions of the guideway and other related facilities.
  - Conduct of additional TVA's for the project.
  - Conduct of the first formal emergency preparedness drills using both table top exercises and field drills at the sections of the guideway in place on the western end of the alignment.
  - Making a final decision on how the rail system will be policed and what the role of private security firms might be.
- During FY2016, planning and decision-making for the start of rail operations in 2018 will continue. Specific activities planned include:
  - Assisting policy makers with final adoption by the mid-year of a Fare Policy for the rail system including farebox recovery requirements; fare structure elements including types of fare media and rail – bus transfer arrangements; and revenue collection functions
  - Selection of a vendor in the first quarter of FY2016 to provide the components of the fare collection system including station gates, TVM's, support systems and back office operations support
  - Continued work on bus – rail service plans in conjunction with DTS and its transit management contractor OTS for coordinated bus services in anticipation of the start of rail operations
  - Plans for how various ongoing operating functions will be handled including: an integrated customer service function for both bus and rail services; fare collection system operations and maintenance; facilities maintenance including station maintenance and repairs; and guideway structural inspections and repairs
  - Progress on developing the Maintenance Management Information System (MMIS) for the rail operation and how it will interface with other rail-related systems
  - Finalization of plans to combine or integrate administrative and other functions between HART and DTS/OTS to improve cost efficiency and effectiveness in delivering quality public transportation services.
- Activity planned on the Art-In-Transit Program in FY2016 includes:

- Negotiating and contracting with the selected artists.
- During the year, contracted artists will conduct cultural and historic research and work with community advisors to develop artwork concepts and themes that reflect the surrounding station community and develop designs and sketches for their artwork working with HART’s designers and staff.

**Land Use Connection: TOD**

The Revised Charter of Honolulu (Charter or RCH) authorizes HART “to promote, create and assist TOD projects near fixed guideway system stations that promote transit ridership, and are consistent with the intent of the adopted community plans and zoning.” RCH 17-103.2(n). Likewise, the Charter requires that the HART Executive Director “administer programs promoting appropriate developments near transit stations, including compilation of city incentive programs,” and “review development projects having significant impact on the operation of the fixed guideway system.” RCH 17-104(m) and (n).

Federal, State, and City policy direction to concentrate growth around transit stations is designed to achieve several public policy goals and support greater utilization of the public transit system. It will also enhance the value of real property adjacent to transit stations and create attractive investment opportunities for the private sector while facilitating local economic development goals and redevelopment efforts.

The State and City along with the federal government control the planning and permitting authority for all of the land along the 20-mile corridor. Coordination of these activities between the respective agencies is necessary to successfully leverage public and private investment in the corridor. In coordination with HART, both the State and City are preparing neighborhood TOD plans for the 21 transit station areas and investigating revisions to the land use regulatory requirements, which will provide the policy framework for private development. The responsibilities for station area TOD planning is as follows:

- The Civic Center and Kakaako Stations are within a state-designated Community Development District which is under the jurisdiction of the HCDA. The HCDA has developed an EIS and TOD plan for this area. The EIS is currently under review.
- The City and County of Honolulu Department of Planning and Permitting (DPP) is responsible for TOD plans for 19 of the 21 stations. The status of these plans is shown in **Appendix D** hereto.

In FY2016, HART TOD and land use planning staff will continue to provide technical support to DPP in its planning efforts on areas such as system description, modal connectivity, station access, parking and safety and security. These efforts include coordination with other City and State agencies, special interest groups (e.g. disabled and the elderly), private developers and landowners, and the general public at community meetings to develop TOD plans for the areas surrounding the transit stations.

Also during FY2016, HART staff will actively pursue, develop, and execute MOUs and Memoranda of Agreement (MOA) with public and/or private owners of land within close proximity of each planned transit station to directly access the station from their proposed development.

In addition, HART staff will continue to work with the TOD Stakeholders Advisory Group created in FY2015 and which is composed of representatives from HART, the City, the State and private development interests and various other organizations and groups.

**Procurement and Contract Administration Plans**

Procurement:

The Procurement section plans to update the agency’s procurement policies and procedures during FY2016. In addition, Procurement will conduct routine operating budget procurements for needed services, equipment, and supplies to support the conduct of agency business operations. Procurement staff will also work with the City’s BFS Department to address the findings from the FTA’s Triennial Review.

On project implementation, Procurement will again face major challenges in soliciting several high-risk, construction packages, both design – build and design-bid-build contracts, representing approximately \$1.8B worth of work. The upcoming construction contracts represent high risks because of the continued high level of construction on Oahu. The challenge will be to maintain a high level of inter-disciplinary engagement between Procurement, Design and Construction and Project Control to ensure the quality and integrity of the solicitation packages while balancing the very real cost and schedule drivers facing the project. In addition, ensuring that the bids and proposals received are accurate, complete and devoid of unwarranted risk costs will be of paramount importance. Design and construction contracts to be advertised and awarded in FY2016 are shown in the following table.

FY2016 Quarter	Contracting Action	Contract Name
<b>First</b>	Award	<ul style="list-style-type: none"> <li>Farrington Highway Station Group Construction</li> <li>West Oahu Station Group Construction</li> <li>CE&amp;I Consultant II</li> <li>Real Estate Consultant II</li> <li>Kako’o II Consultant</li> <li>Fare Collection System Technical Support Consultant</li> </ul>
	Advertise	<ul style="list-style-type: none"> <li>City Center Utilities Construction</li> <li>Fare Collection System Vendor</li> <li>Kamehameha Highway Stations Group Construction</li> <li>City Center Guideway and Stations DB</li> </ul>
<b>Second</b>	Award	<ul style="list-style-type: none"> <li>City Center Utilities Construction</li> <li>Fare Collection System Vendor</li> <li>Kamehameha Stations Group Construction</li> </ul>
	Advertise	None
<b>Third</b>	Award	<ul style="list-style-type: none"> <li>Airport Guideway and Stations DB</li> </ul>
	Advertise	<ul style="list-style-type: none"> <li>Core Systems Backup Generators</li> </ul>
<b>Fourth</b>	Award	<ul style="list-style-type: none"> <li>City Center Guideway and Stations DB</li> <li>Core Systems Backup Generators</li> </ul>

### Contract Administration:

As the procurement activities scheduled for late FY2015 and in FY2016 are completed, the new Contract Administration section's post-award contract administration work load will increase substantially. Effective contract administration and change management will be critical to ensure the project stays on time and on budget. During FY2016, Contract Administration plans to revamp the process for handling change orders. In addition, section staff will receive specialized training in cost/price analyses to bolster HART's ability to deal with change orders that materialize in the future.

### EEO and DBE Programs:

In accordance with federal and state laws and requirements, HART maintains active programs to ensure equal employment opportunities and to foster the involvement of disadvantaged and small businesses in HART's business activities. The EEO Program is coordinated with DTS. DTS as the area's bus operator maintains its own FTA approved EEO Program. HART staff works with DTS to prepare a combined report for both the rail and DTS programs which DTS submits to the FTA for review and approval. The FTA had approved the combined EEO program for HART/DTS for a three year period which is ending. During FY2016, HART will continue to work with DTS to address FTA requirements for updating the combined EEO Program for submission to the FTA for approval.

HART manages its own DBE Program utilizing the State of Hawaii's Unified Certification Program to identify DBE firms and works with HDOT to reach out to these firms. HART has an FTA authorized 13% goal for DBE participation in the overall HRTP and does not set annual goals. Contract specific goals are established when or if appropriate. Program staff will be working with contractors who have not met their contract goals and will continue to work on gaining increased DBE participation in the upcoming construction contracts whenever possible.

# **HART Organizational Development Strategy**

## **History and Background**

The initial planning and development of the HRTP was done by the City and County's Department of Transportation Services (DTS) through its Rapid Transit Division (RTD). DTS/RTD managed the completion of the required planning, economic, engineering, and environmental studies needed to advance the project through the stages of the FTA's New Starts project development process including: analysis of alternatives; technology and alignment selection; conceptual and preliminary engineering (PE) work; the preparation of a FEIS; the development of a contracting strategy for actually constructing the project; and the procurement of the initial construction contracts for the Project.

The initial organizational strategy DTS/RTD employed was to maintain a relatively small staff and hire consultants to provide the expertise necessary to perform various aspects of the required work. The City project staff was supplemented by a PMSC that has provided experienced and technically proficient personnel to fill key positions and roles in the project organization including professional, technical, managerial and other support services to initiate and complete the PE/EIS phase of the project and initiation of final design and construction. PMSC personnel essentially functioned as embedded staff assisting City employees in managing and overseeing the work.

DTS/RTD also retained the services of a GEC to undertake the planning, economic, engineering, and environmental work that was required to advance the project through FTA's New Starts process. The GEC assisted DTS/RTD by preparing competitive procurement documents for the initial Design-Build (DB) contracts and the Core Systems Design-Build-Operate-Maintain (DBOM) contract.

With this organizational strategy, the Project passed the critical milestone of completing the FEIS and obtained a Record of Decision (ROD) issued by the U.S. Department of Transportation in accordance with the National Environmental Policy Act (NEPA) and Hawaii State law. The issuance of the ROD resulted in FTA authority to begin property acquisition and undertake utility relocation work. DB contracts for initial phases of the project were awarded and construction work started on the initial phases.

In 2010, the voters of the City and County of Honolulu approved a Charter amendment that provided for the creation of HART to assume responsibility for implementing the HRTP and ultimately operating the rail line. HART came into existence on July 1, 2011. At that time, RTD ceased to exist and the RTD staff and the embedded PMSC staff were transitioned to become the core staff of the new agency. HART has utilized the basic components of the original DTS/RTD organizational strategy during its first years of existence. However, the agency's organizational strategy will be evolving as described in a later section of this chapter.

## **FTA Requirements**

Because the HRTP is funded in part with federal dollars through the FTA, HART must demonstrate that it meets FTA requirements for grantees pursuing a major investment project

like the HRTP. Principal among these requirements is that the grantee must exhibit the “technical capacity and capability to efficiently and effectively” carry out the project. The FTA conducts an ongoing assessment of a grantee’s technical and financial capacity and capability by looking at a number of things including the following:

- Organizational structure.
- Staff qualifications and experience.
- Roles, responsibilities, and interfaces among key project team members laid out in a responsibility matrix.
- Staffing plan showing labor distribution over the life of a project.
- Copies of various key procurement documents.
- Description of management processes and procedures including the division of decision-making authority between the BOD and management staff; financial and procurement policies and procedures; and community outreach and relations efforts.
- Resumes of senior project team members.

The above information is embodied in a Project Management Plan (PMP). The PMP is periodically updated as a project moves through the various stages of project development. With each successive update of the PMP, the expectations for the technical capacity and capability of the grantee increases. In other words, the grantee must demonstrate a growing capacity and capability to match the increasing scope, complexity, and magnitude of the work to be performed in the next project phase in order to receive FTA approval to proceed. Ensuring that HART will meet the FTA’s technical capacity and capability requirements is a major factor in the formulation of the organizational development strategy embodied in the PMP and described herein.

The FTA employs the services of a Project Management Oversight Contractor (PMOC) to monitor HART’s activities and progress on implementing the HRTP. The PMOC also conducts an ongoing assessment of HART’s technical capacity and capabilities. These ongoing monitoring and assessment activities include monthly reports issued by HART and monthly meetings between HART staff and PMOC representatives. In addition, quarterly meetings between representatives of the FTA’s regional office in San Francisco and HART management and technical staff are held to report on Project progress and challenges and to address any issues that develop as the Project moves toward completion. These ongoing activities amount to a significant level of independent oversight of HART and its work implementing the HRTP.

### **HART Organization**

Work on the Project is now in the final phases of FTA’s New Starts process. Work continues on property acquisitions and owner/tenant relocations, utility relocation and any remaining final design work. Construction work on the western section of the Project alignment has been underway for some time.

The organizational approach embodied in the PMP for the current phase of the Project requires a staff of 139 positions and continues the role of the PMSC but with a diminished number of positions serving as embedded staff for HART. **Appendix B** contains a series of organizational charts that depict the Authority’s functional structure and show the placement

of the positions that make up the proposed FY2016 HART staff. Of these positions, 16 or roughly 12% of them are expected to be PMSC provided staff.

#### Consultant Roles:

The GEC's role has evolved to reflect the evolution status of final design and construction work. The GEC will oversee final design efforts and continue to provide technical studies and management support for implementation of the Section 106 Programmatic Agreement Mitigation Support for the ROD. Construction management services and oversight will be provided by two separate consultants. Two contractors will provide CE&I services for roughly one half of the alignment each and a separate contractor will provide oversight of the Core Systems Contract. These three contractors will perform quality assurance inspections of all contractor activities; reviews of contract document submittals including shop drawings and specifications; reviews of contractor invoices; reviews of requests for information; reviews of requests for changes and change order estimates; conduct inspections; and do value engineering.

The PMP calls for retaining the services of engineering design consultants (EDCs) to develop final detailed designs of the certain project elements that will be procured through open competitive bidding. This does not include several DB contracts or the Core Systems and vehicles contract since final design is a function within the scope of those contracts. This does include the 9 stations on the western section of the alignment and various fixed facilities. Fixed facilities design includes the design of certain civil and structural facilities; trackwork; utilities; the Pearl Highlands parking structure and access ramps; the West Oahu/UH and Ho'opli park and ride lots; landscaping; and some systemwide elements.

#### Future Organizational Development

At present and for the next five years, HART will be a project development agency with no daily operating or service delivery responsibilities. This, of course, will change as the rail transit project gets completed and actual passenger service begins operating initially in 2018 with full service along the entire alignment starting in 2020. The staffing needs and business systems needs of the agency will evolve over time as the change from project development to operations and service delivery occurs. How well this transformation is accomplished will be important to the success HART has on accomplishing its Mission and Vision. The strategy for managing this evolution is outlined below:

- Phase out use of PMSC and build HART staff capability.
  - Identify those positions that HART will need long term for operations and the planning of extensions and seek to fill these positions with direct hires.
    - Examples: Chief Operating Officer, Chief Engineer, Internal Audit, Marketing, Planning, Property Management.
    - Use PMSC to temporarily fill such roles when recruitment for a City employee is unsuccessful or cannot be completed in a timely fashion.
    - PMSC employees will mentor and help train HART staff and new hires; this may require some overlapping of positions.
  - Utilize the services of the City's Department of Human Resources for assistance on organizational development including a classification and compensation structure, and recruitment and employee development strategies.

- Current PMSC contract expires in 2016 with an option for a one year extension; the contract may need to be extended for an additional period depending on HART's success in staff recruitment.
- GEC, CE&I consultants and EDCs will continue their roles/scope until the project construction, system integration and testing, and start-up work is completed.
- Develop internal business processes and systems that fit the needs of the transit system. Move away from using City processes and systems wherever it makes the most sense for HART to achieve its Mission, Vision, and Goals.
- Develop a seamless, integrated multi-modal (bus and rail) transit system.
  - Engage in joint planning with DTS and its Transit management contractor OTS for reconfiguration of the bus system to complement rail.
  - Implement a joint bus-rail fare collection system (hardware, software and support systems) along with plans for system maintenance and a revenue processing set-up to reduce interface problems and achieve economy of scale cost savings.
  - Establish plans for how marketing, customer information and relations activities will be handled for the expanded bus and rail transit system.
- Future issues that will need to be addressed:
  - Fare policy details for the integrated rail and bus system including fare levels and discounts, fare media, transfers between bus and rail services and farebox recovery requirements.
  - The process for setting fare levels between the HART BOD and City Council will need to be addressed.
  - The sources of ongoing funding for operating and maintenance expenses of the transit system not covered by fare revenues.
  - Identify opportunities for advertising, concessions, leases and rents, and possible joint use of transit facilities and assets to generate additional streams of operating income.
  - Development of operating policies and rules and the identification of any implications for project design and the operating and capital improvement budget.
  - Plans for how HART will maintain elements of the rail line that are not covered by the Core Systems contract operating component.
  - HART staffing and management information systems needed to oversee the operational, safety, maintenance and customer service performance of the rail line by the Core Systems contractor AHJV.
  - Plans for providing security on the rail line and the costs thereof.

# **HART Financial Strategy, Plans and Budgets**

## **Financial Overview**

HART maintains a detailed 20-year financial plan in accordance with the requirements of the FTA to receive federal funding for the HRTP. The HART Financial Plan provides a summary of the capital costs and funding sources associated with both the HRTP and for the City's ongoing operating and capital needs for the existing public transportation system. It also includes a preliminary plan to fund the future operations and maintenance (O&M) costs associated with the rail line, TheBus, and TheHandi-Van services. The current HART Financial Plan was prepared in June 2012 in preparation for receiving the FFGA from the FTA that was executed in December 2012. **Appendix E** contains a summary of revenues and expenses as shown in the approved HART Financial Plan for completing the HRTP and for operating the City's integrated bus – rail public transportation system over the period covered by the Plan (FY2010 – FY2030).

The financial strategy reflected in the approved HART Financial Plan can be summarized as follows:

- Implementation of the HRTP will be funded primarily by revenues from a one-half percent (0.5%) surcharge on the State's GET and grants from the federal government provided by the FTA. The 0.5% GET tax is currently set to expire on December 31, 2022.
- Short and medium term debt financing will be used to help manage cash flows during construction of the HRTP. However, the Financial Plan assumes that all debt will be retired by the time the GET tax expires.
- Ongoing funding for operation of the integrated bus and rail public transportation will be provided through a combination of fare revenues from passengers and other operating income, City and County general funds, and some FTA grant programs.

Events during FY2015 did cause a reassessment of the above described financial strategy in light of the roughly \$600 million increase in the project's estimated cost to complete and the estimated \$310 million hole in project reviews. As noted earlier, this reassessment resulted in an effort to gain state approval to extend the GET surcharge beyond the 2022 termination date to cover any increase in costs and the revenue shortfall. As a result, staff will be updating the HART Financial Plan during the first quarter of FY2016 to reflect the state action to extend the GET surcharge. Given the FY2015 experience with over budget construction bids and the \$1.8 billion in construction contracts planned for award in FY2016, it may become necessary to update the Financial Plan a second time later in the fiscal year should construction costs for these contracts again come in higher than expected.

## **FY2016 Operating and Capital Expense Budgets**

HART staff prepared and submitted preliminary FY2016 Operating and Capital Budgets to the HART BOD in September 2014. On October 23, 2014, the HART Executive Director/Chief Executive Officer transmitted the proposed FY2016 Budgets to the Mayor and the City Council. This section of the FY2016 Business Plan describes in summary form the proposed Operating and Capital Budgets. City Council requested further detailed information of the HART proposed budget during the spring of 2015, and will ultimately include the

HART budgets in the City’s budget bills anticipated to be approved before June 30, 2015. The HART Board is scheduled to discuss and adopt the FY2016 Operating and Capital budgets by June 30, 2015. The final version of the FY2016 Business Plan will reflect the final FY2016 Operating and Capital Budgets adopted by the HART BOD. The total budget request for FY2016 was as follows:

Operating Budget	\$ 29,212,000
Capital Improvements	<u>422,249,700</u>
Total FY2015 Budget Request	\$ 451,461,700

**Appendix E** includes a summary table which provides actual operating and capital expense historical information for FY2013-14 budget, FY2015 budget and projected actual information, and the proposed FY2016 Operating and Capital Budgets described in the sections below.

**FY2016 Operating Budget**

The HART Operating Budget includes expenses for HART staff and administrative expenses (i.e. office and equipment rent and supplies, legal services, telecommunications and various administrative services). It also includes expenses related to the support HART receives from other City departments as well as a contribution to City overhead expenses. The FY2016 Operating Budget has four major expense categories as shown in the table below. The table provides a breakdown of these cost components for FY2016 and a comparison against the budget and projected actual amounts for FY2015. The FY2015 projected amounts shown in the table are preliminary; there will be adjustments made through August 2015 to record payable amounts.

Expense Category	FY2015 Budget	FY2015 Projected	FY2016 Proposed
<b>Personnel</b>	<b>\$13,843,425</b>	<b>\$10,935,670</b>	<b>\$14,519,000</b>
<b>Current Expenses</b>	<b>7,631,604</b>	<b>5,461,961</b>	<b>8,687,800</b>
<b>Equipment &amp; software</b>	<b>6,000</b>	<b>18,000</b>	<b>6,000</b>
<b>Subtotals</b>	<b>\$21,481,029</b>	<b>\$16,397,631</b>	<b>\$21,481,029</b>
<b>Interest Expense</b>	<b>0</b>	<b>0</b>	<b>8,000,000</b>
<b>TOTALS</b>	<b>\$21,481,029</b>	<b>\$16,397,631</b>	<b>\$29,212,800</b>

The Personnel category of the FY2016 Operating Budget includes funding for 139 full-time equivalent (FTE) positions, the same level since FY2013. This compares to 136 FTEs authorized in the FY2012 Budget and 110 FTEs in FY2011. As described in the Organizational Development Strategy section, the staffing level proposed is designed to ensure that HART has the technical capacity and capability to manage the implementation of the HRTP and meet the requirements of the FTA. The following chart provides a summary breakdown of the number of positions included in the FY2016 staffing plan by major functional category and includes PMSC provided positions funded by the Capital Budget at this time. See **Appendix B** for detailed organizational charts.

While the size of the HART staff has remained constant for several years now, there have been significant changes to how staff has been allocated to various functions, which is reflected in the following chart. Over the past two years staffing in the engineering, systems and construction management functions has been augmented. In FY2015, staffing in the Procurement and Contract Administration functions was augmented due to the growing level of construction activities and the impact on procurement related activities and the corresponding need to administer contracts and closely scrutinize any change orders that materialize. The chart also shows that the number of PMSC provided staff will decline by 8 positions in FY2016. This is consistent with the previously discussed Organizational Development Strategy.

Function	FY 2014 FTE Count	No. of PMC FTEs	2015 FTE Count	No. of PMC FTEs	Diff. in FTE Count	Diff. in PMC FTEs	2016 FTE Count	No. of PMC FTEs	Diff. in FTE Count	Diff. in PMC FTEs
Executive	8	1	10	4	2	3	10	2	2	-2
Project Control	15	3	13	2	-2	-1	13	2	-2	-1
Budget & Finance, Purchasing, Contracts	22.5	3.5	24	3	1.5	-0.5	24	1	1.5	-2
Planning, Utilities, ROW,	26	4	22.5	1	-3.5	-3	22.5	0	-3.5	-1
Engineering & Const. Mgmt.	37	8	40	9	3	1	40	9	3	1
Other Professional	22	4	18	5	-4	1	18	2	-4	-3
Admin. Svcs.	8.5	0	11.5	0	3	0	11.5	0	3	0
<b>Totals</b>	<b>139</b>	<b>23.5</b>	<b>139</b>	<b>24</b>	<b>0</b>	<b>0.5</b>	<b>139</b>	<b>16</b>	<b>0</b>	<b>-8</b>

The following table provides a breakdown of the reimbursements to other City departments included in the proposed FY2016 Budget:

City Department/Purpose	Amount
Corporation Counsel – Staff Salaries	\$612,000
Corporation Counsel – Current Expenses	40,300
Design & Construction – Staff Salaries	50,000
Budget & Financial Services – Staff Salaries	10,000
Fringe Benefits Associated with Above Salary Items	309,100
Adjustments	0
CASE – Central Administrative Services Expenditure	1,010,100
<b>TOTAL</b>	<b>\$ 2,031,500</b>

## **FY2016 Capital Budget**

Construction activities currently underway and most of the construction contracts currently planned to be let in FY2016 have been funded thru prior year HART Capital Budgets. Some of these funds must be re-appropriated for FY2016. The proposed FY2016 Capital Budget includes the additional funds required and is smaller than what was provided for in recent HART Capital Budget requests. The following table provides a summary of planned FY2016 capital appropriations by major project budget component. A more detailed line item breakdown of HRTTP capital program components, including the amount re-appropriated from FY2015, FY2016 can be found in the tables provided in **Appendix E**.

<b>Capital Budget Elements</b>	<b>Construction</b>	<b>Design</b>	<b>Planning</b>	<b>Totals</b>
<b>Construction</b>	<b>\$143,796,100</b>			<b>\$143,976,100</b>
<b>Consultants</b>	<b>26,132,600</b>	<b>1,400,000</b>	<b>421,000</b>	<b>27,953,600</b>
<b>Programmatic Agreements</b>	<b>200,000</b>		<b>100,000</b>	<b>300,000</b>
<b>Quality Audits</b>	<b>20,000</b>			<b>20,000</b>
<b>Contingency &amp; Recertifications</b>				<b>250,000,000</b>
<b>Totals</b>	<b>\$170,328,700</b>	<b>\$1,400,000</b>	<b>\$521,000</b>	<b>\$422,249,700</b>

## **Debt Financing**

Over the next several years HART's expenditure level on construction and other project implementation activities will ramp up significantly. Cash payouts to contractors will exceed available cash and new receipts from both the GET and FTA reimbursements under the FFGA. Consequently, it will be necessary for the City & County of Honolulu to issue short term debt to help meet the project's cashflow needs. This occurrence was anticipated in the HART Financial Plan and is consistent with the financial strategy described earlier in this section. HART expects to begin issuing this debt using short term commercial paper to take advantage of a favorable borrowing climate. During FY2015, HART staff worked with the City's Budget and Fiscal Services staff to develop a plan for issuing this debt. This plan was incorporated into a Memorandum of Understanding between HART and the City which has been approved by both the HART Board and the City Council. It is expected that the first issuance of debt will occur during the first quarter of FY2016. The Financial Plan will be updated to reflect other financial plan changes and the exact nature of the debt issuance plan during the first quarter of FY2016.

## **Project Risk Factors**

Any public works project is subject to a variety of risks that can impact its schedule and budget. The HRTTP is subject to such risks some of which are amplified because of Honolulu's geographic location far from the U.S. Mainland. Managing and protecting against risk factors is important to insure the successful completion of the HRTTP. The project has the following risks that are not within HART's direct control but could impact both the project schedule and budget performance. Several of these risk factors did impact the project during FY2015 and are likely to continue to be present in FY2016 and beyond:

- The significant level of construction currently on Oahu may continue to impact the availability of skilled labor and the pricing of materials such as steel, copper and concrete
- The current level of construction and Oahu's remoteness from the mainland may impact the amount of competition that HART for upcoming construction contracts
- Delays in utility relocations and/or property acquisitions that delay construction work and cause contractor delay claims
- Complications that might arise in completing construction work on the remaining portions of the project's alignment such as unforeseen site conditions and any extraordinary efforts required to mitigate construction impacts
- The possibility of interest rate increases that could impact any debt service payments
- GET surcharge revenue receipts continuing to come in below the assumed rate of growth

The important thing is to recognize the existence of these risks and to take steps to minimize or protect against potential impacts to the maximum extent possible while carrying out the implementation of the H RTP.

**Appendix A**  
**HART Balanced Scorecard**

						<b>Comments and Legend</b>	
Activity	Time Period	Actual	Plan	Variance	Status		
<p align="center"><b>For Project Finances, reporting will be based on Current Quarter, Fiscal Year, FFGA Financial Plan and Inception to Date data as appropriate.</b></p>							
<b>Project Finances</b>							
<b>Operating Budget [Negative = below Plan]</b>							
Operating Expenditures	Current Quarter (Q3 FY15) Jan., Feb., Mar. 2015	\$3.8	\$5.4	(\$1.6)	●	<p>For Current Quarter monitoring purposes: \$21.5M FY15 Total Budget/4 quarters = \$5.37M.                      The Plan number for Inception to Date = the FY12 to Q3 FY15 budgets + actual expenditures for fiscal years 2007 through 2011.                      The Plan number for the Financial Plan = the FY12 to Q3 FY15 budgets + actual expenditures for Oct. 16, 2009 through FY11.                      *Inception is from January 2007 when GET surcharge revenue, interest revenue and expenditures were first reported in the City's FY2007 Comprehensive Annual Financial Report (CAFR) in the Transit Fund which also includes expenditures for other City Departments (e.g., DPP for TOD expenditures, BFS and City Council which were paid with GET surcharge revenues).</p>	
	FY2015 Total July 2014 - March 2015	\$10.4	\$16.1	(\$5.7)	●		
	FFGA Financial Plan Oct. 16, 2009 - March 2015	\$71.2	\$91.7	(\$20.5)	●		
	Inception* to Date Jan. 2007 - March 2015	\$75.1	\$95.6	(\$20.5)	●		
<b>Capital Budget [Negative = below Plan]</b>							
Capital Expenditures	Current Quarter (Q3 FY15) Jan., Feb., Mar. 2015	\$79.9	\$204.6	(\$124.7)	●	<p>Plan amounts are per the Full Funding Grant Agreement Financial Plan.                      *Inception is from January 2007 when GET surcharge revenue, interest revenue and expenditures were first reported in the City's FY2007 Comprehensive Annual Financial Report (CAFR) in the Transit Fund.                      The Plan numbers for Inception to Date = the Plan amounts from 10/16/2009 to 03/31/2015 + actual expenditures for fiscal year 2007 through 10/15/2009.                      The expenditures for fiscal years 2007 to 2011 were reconciled to the expenditures reported in the Transit Fund included in the City's CAFR report.                      The "Current Quarter" and "FY15 Total" actual amounts are on a cash basis. All audit adjustments for the previous years are now reflected in the "FFGA Financial Plan" and "Inception to Date" actual amounts.                      Actual expenditure amounts continue to be below plan due to contractor work lagging and schedule of milestones billing. HART is working with contractors to ensure timely payment. The Master Project Schedule is being revised again. Due to unfavorable bids for the West Side Station package, HART has broken down the procurement to three bid packages of three stations each (FHSG, WOSG and KHSG) and is revising the schedule. In addition, the eastern guideway work has been broken into two bid packages: Airport Guideway and Stations and City Center Guideway and Stations. The procurement strategy has been modified to improve bid response and quality.</p>	
	FY2015 Total July 2014 - March 2015	\$355.1	\$664.2	(\$309.1)	●		
	FFGA Financial Plan Oct. 16, 2009 - March 2015	\$1,373.3	\$2,824.1	(\$1,450.7)	●		
	Inception* to Date Jan. 2007 - March 2015	\$1,456.9	\$2,907.6	(\$1,450.7)	●		
<b>Revenues [Negative = below Plan]</b>							
<b>GET Collections</b>							
Net GET Surcharge Receipts	Current Quarter (Q3 FY15) Jan., Feb., Mar. 2015	\$57.8	\$56.8	+\$1.0	●	<p>GET receipts are reported on a cash basis. The \$57.8M received in January 2015 is for the October-December 2014 quarter. The Current Quarter plan is based on annual reporting.                      \$3,291M = Total Net GET Surcharge revenue forecast for FYs 2010-2023. Actual amounts from inception are the collections from January 2007 to 01/31/2015. The \$1,443.9M Plan amount is equal to the Financial Plan amount of \$1,065.5M from the Project Start date of 10/16/2009 to 01/31/2015 plus \$378.4M collected prior to the Project Start Date.                      GET surcharge revenue collected prior to Oct. 16, 2009 is included in the Financial Plan as beginning cash balance of \$298M (actual GET collections of \$378M before Oct. 16, 2009, less expenditures of \$80M during that same period).                      *Inception is from January 2007 when GET surcharge revenue, interest revenue and expenditures were first reported in the City's FY2007 Comprehensive Annual Financial Report (CAFR) in the Transit Fund.                      Status for the Current Quarter has changed from yellow to green.</p>	
	FY2015 Total July 2014 - March 2015	\$155.8	\$168.4	(\$12.6)	●		
	FFGA Financial Plan Oct. 16, 2009 - March 2015	\$1,025.9	\$1,065.5	(\$39.6)	●		
	Inception* to Date Jan. 2007 - March 2015	\$1,404.3	\$1,443.9	(\$39.6)	●		
<b>Federal Grants</b>							
Federal Grant Funds New Starts \$5309 (Reimbursed)	Current Quarter (Q3 FY15) Jan., Feb., Mar. 2015	\$56.9	\$250	(\$193.1)	●	<p>Forecasted FTA Uses by fiscal years, per HART's 6/2012 Financial Plan, are FY2011 \$21M; FY2012 \$99M; FY2013 \$258M, FY2014 \$442M, and thru Q3 FY2015 \$250M: Total \$1,070M.                      The Q3 FY2015 New Starts \$250M award is expected in May 2015.                      The variance for FFGA Financial Plan indicates the prior fiscal years' appropriated amounts not yet used.</p>	
	FY2015 Total July 2014 - March 2015	\$113.2	\$250	(\$136.8)	●		
	FFGA Financial Plan Oct. 16, 2009 - March 2015	\$369.2	\$1,070.0	(\$700.8)	●		
Federal Grant Funds \$5307 (Reimbursed)	Current Quarter (Q3 FY15) Jan., Feb., Mar. 2015	---	---	N/A		<p>Total forecasted \$5307 funds per the plan is \$210M.</p>	
	FY2015 Total July 2014 - March 2015	---	---	N/A			
	FFGA Financial Plan Oct. 16, 2009 - March 2015	---	---	N/A			

Activity	Current Quarter (Q3 FY15)				Inception to Date				Comments and Legend	
	January, February, March 2015				January 2007 - March 2015					
	Actual	Plan	Variance	Status	Actual	Plan	Variance	Status		
<b>For the remainder of the Balanced Scorecard, reporting will be based on Current Quarter and Inception to Date data.</b>										
25	<b>Project Budget</b>									
26	FFGA Baseline Project Budget	N/A	N/A	N/A	○	\$5,122	\$5,122	N/A	●	SM FFGA Baseline Project Budget (including contingencies and FTA-eligible finance charges), in accordance with FTA New Starts project guidelines.
27	Committed (\$)	\$48	---	---	●	\$2,978	\$4,438	(\$1,460)	●	SM Total Committed (awarded Contract Values + approved Change Orders) this quarter and to date vs. the current Total FFGA Project Budget, excluding remaining contingencies and finance charges. Contract awards have been shifted to future years due to AIS delays and the repackaging of contracts. A new baseline budget is being created. HART is implementing mitigation measures to maintain a late 2019 full revenue service date.
28	Committed (%)	1.1%	---	---	●	67.1%	---	N/A	●	% SM Committed of the Inception to Date current Plan FFGA Project Budget, excluding contingencies and finance charges.
29	Incurred (\$M)	\$104	---	---	●	\$1,445	\$4,438	(\$2,993)	●	SM Incurred (Expenditures + approved Requests for Payment) this quarter and to date vs. the current Total FFGA Project Budget, excluding remaining contingencies and finance charges. The plan is based on the original program cost curve issued in 2009 and is projected to be rebaselined in mid-2015. HART is implementing mitigation measures to maintain a late 2019 full revenue service date. The amounts reflected are due in part to the construction delays.
30	Incurred (%)	2%	---	---	●	33%	---	---	●	% SM Incurred (Expenditures + approved Requests for Payment) of the Inception to Date current Plan FFGA Project Budget, excluding contingencies and finance charges.
31	Estimate at Completion (EAC)	N/A	N/A	N/A	●	\$5,715	\$5,122	N/A	●	SM current forecasted vs. original Estimate at Completion (EAC = contract values as budgeted or awarded + executed change orders + pending and potential changes). Forecast includes revised cost estimates for future construction contracts projecting higher than their respective FFGA Budget.
32	<b>Contingency</b>									
33	Allocated Cost Contingency	(\$8)	N/A	N/A	●	\$464	\$542	(\$78)	●	Current Quarter = Allocated Project Contingency debited or credited for the quarter, Inception to Date = Current Budget Allocated Project Contingency vs. the Baseline Budget Allocated Project Contingency. Revised cost estimates for future construction contracts includes additional contingency required for those contracts.
34	Unallocated Cost Contingency	(\$5)	N/A	N/A	●	\$47	\$102	(\$55)	●	Current Quarter = Unallocated Project Contingency debited or credited for the quarter, Inception to Date = Current Budget Unallocated Project Contingency vs. the Baseline Budget Unallocated Contingency. Revised cost estimates for future construction contracts includes additional contingency required for those contracts.
35	Total Project Cost Contingency = Allocated + Unallocated	(\$13)	N/A	N/A	●	\$511	\$644	(\$133)	●	See the HART Monthly Progress Report for more detailed information on contingency. Current Quarter = Total Project Contingency usage, Inception to Date = Current Budget Project Contingency value vs. Baseline Budget Project Contingency. Revised cost estimates for future construction contracts includes additional contingency required for those contracts.
36	Schedule Contingency	0	N/A	N/A	●	6	20	(14)	●	Schedule contingency has been depleted due to the postponement of guideway construction on the west caused by delays and due to the modification of the project delivery method on future construction contracts.
37	<b>PROJECT DELIVERY - OVERALL</b>									
38	<b>Overall Progress [Positive = ahead of Late Plan; Negative = behind Late Plan]</b>									
39	Overall Project Progress Completed	2.4%	5.8%	(3.4%)	●	33.4%	41.5%	(8.1%)	●	% Complete of Final Design and Construction contracts (FD, DBB-DBOM design levels-of-effort and DB, DBB, DBOM and E/E construction) actual vs. late plan. Revised project schedules for WOFH, MSF and KHG have been incorporated into the overall project progress curve and the interim opening will likely be 2018. HART has canceled the solicitation to build the first nine rail stations and HART has repackaged the original contract into three smaller contracts. HART has also canceled the solicitation for the Airport-City Center Guideway and Utilities Construction Contract and will repackage the Airport Section Guideway and Stations & City Center Guideway and Stations into Design-Build contracts and an advanced City Center Utility and Civil Work construction package.
40	Overall Design Progress Completed	2.7%	5.0%	(2.3%)	●	84.7%	91.2%	(6.5%)	●	% Complete of Final Design contracts & DB-DBOM design levels-of-effort actual vs. late plan. The design progress schedule has been rebaselined and the interim opening will likely be 2018. Due to bids coming in higher than HART had budgeted, HART has canceled the solicitation to build the first nine rail stations and repackaged that contract into three smaller contracts. Value Engineering and design modifications are being performed to improve on pricing.
41	Overall Construction Progress Completed	2.3%	5.7%	(3.4%)	●	25.3%	33.6%	(8.3%)	●	% Completion of Construction (DB, DBB, DBOM & E/E) contracts vs. planned. The construction progress schedule has been rebaselined and includes revised project schedules for WOFH, MSF and KHG DB contracts. HART has canceled the solicitation to build the first nine rail stations and HART has repackaged the original contract into three smaller contracts. The change will likely delay by one year the planned opening of the first ten miles of the rail system between Aloha Stadium and east Kapolei. HART has also canceled the solicitation for the Airport-City Center Guideway and Utilities Construction Contract and will repackage the Airport Section Guideway and Stations & City Center Guideway and Stations into Design-Build contracts and an advanced City Center Utility and Civil Work construction package.
42	Overall Utility Progress Completed	2.7%	12.3%	(9.6%)	●	14.8%	26.1%	(11.3%)	●	% Completion of Utilities progress based on the weighted average progress of the Design-Build and Design-Bid-Build utilities level of effort. Status for the Current Quarter and Inception to Date have changed from yellow to red as utility relocations are affecting construction progress. HART's CEO and staff are meeting with HECO's executive management on a bi-weekly basis to attempt to mitigate impacts to HART's construction efforts. Although the two agencies are working together, the impacts are now affecting both design and construction efforts.



**BALANCED SCORECARD**  
Project Implementation/Pre-Revenue Operation

APPENDIX A  
Q3 FY15  
Data Date: March 27, 2015

	Activity	Current Quarter (Q3 FY15)				Inception to Date				Comments and Legend
		January, February, March 2015				January 2007 - March 2015				
		Actual	Plan	Variance	Status	Actual	Plan	Variance	Status	
43	<b>Contracts Awarded</b>									
44	Total Number of Contracts Awarded	0	0	-0-	●	38	38	-0-	●	The plan numbers are based on the FTA Full Funding Grant Agreement Contract Packaging Plan (CPP) contracts. Contracts awarded: N/A. Status for the Current Quarter and Inception to Date have changed from yellow to green due to the revised Procurement Schedule to repackage the original Westside Stations Group into three contracts. HART also canceled the Airport and City Center DBB solicitation and under the new contract packaging plan, will issue two DB solicitations that also includes the associated stations.
45	Total Value of Contracts Awarded	\$0.00	\$0.00	\$0	●	\$3,173.77	\$3,240.17	(\$66.4)	●	SM Awarded. Variance includes contingency. For a full list of contracts awarded, please see the HART Monthly Progress Report. Status for the Current Quarter and Inception to Date have changed from yellow to green due to the revised Procurement Schedule to repackage the original Westside Stations Group into three contracts. HART also canceled the Airport and City Center DBB solicitation and under the new contract packaging plan, will issue two DB solicitations that also includes the associated stations.
46	<b>Change Orders</b>									
47	Change Orders (#)	30	N/A	N/A	●	201	N/A	N/A	●	# Change Orders executed this quarter (9 Final Design and 21 Construction).
48	Change Orders (\$)	\$21.3	N/A	N/A	●	\$369.9	N/A	N/A	●	SM Change Orders executed this quarter (\$3.2M Final Design and \$18.1M Construction). These change orders are reducing our allocated and unallocated contingency. The most significant changes during the third quarter were \$2.5M (CSC DBOM) for Test Track Changes at MSF and \$1.9M (WOFH DB) for Procurement & Delivery of LCC Modular Bldgs.
49	<b>Claims</b>									
50	Claims Filed	0	0	N/A	○	0	0	N/A	○	# Claims filed vs. anticipated.
51	Claims Resolved	0	0	N/A	○	0	0	N/A	○	# Claims resolved vs. filed.
52	<b>Agreements*</b>									
53	Utility Agreements - Engineering Services	0	0	-0-	●	28	28	0	●	Inception to Date Plan = total number of agreements planned for the project WOFH - all 9 agreements executed. KHG - all 10 agreements executed. KHG/Airport/City Center - 1 agreement executed. Airport/City Center - all 8 agreements executed.
54	Utility Agreements - Construction Agreement	0	4	(4)	●	15	23	(8)	●	Inception to Date Plan = total number of agreements planned for the project WOFH - all 7 agreements executed. KHG - all 6 agreements executed. Airport - 2 of the 4 planned are executed. City Center - 0 of the 6 planned are executed. Status for the Current Quarter and Inception to Date have changed from orange to yellow.
55	Total Utility Agreements	0	4	(4)	●	43	51	(8)	●	Inception to Date Plan = total number of agreements planned for the project WOFH - all 16 agreements executed. KHG - all 16 executed. KHG/Airport/City Center ESA - 1 agreement planned/executed. Airport/City Center ESA - all 8 agreements executed. Airport Construction - 2 agreements executed (4 agreements planned). City Center Construction - 0 agreements executed (6 agreements planned). The status is based on the potential for construction to be delayed.
56	HDOT Master Agreements/Joint Use & Occupancy	0	0	-0-	●	2	2	0	●	Inception to Date Plan = total number of agreements planned for the project WOFH and a combined Master Agreement for KHG, Airport and City Center sections are executed.

Project Progress (continued)

	Activity	Current Quarter (Q3 FY15)				Inception to Date				Comments and Legend
		January, February, March 2015				January 2007 - March 2015				
		Actual	Plan	Variance	Status	Actual	Plan	Variance	Status	
57	Third-Party Agreements	4	5	(1)	●	9	27	(18)	●	<p>Data is current as of March 20, 2015. Inception to Date Plan = total number of agreements planned for the project. Actual numbers are based on property available for construction. High priority agreements which could impact ongoing construction are in <b>bold and in red</b>. A master agreement and its ancillary agreements are counted as one entity.</p> <p><b>AGREEMENTS NEEDED FOR CONSTRUCTION – YET TO BE COMPLETED</b></p> <p><b>WOFH, KHG, Airport:</b></p> <ul style="list-style-type: none"> <li>-U.S. Navy Easement Agreements</li> <li><b>WOFH:</b></li> <li>-LCC (UH Leeward Community College)</li> <li>-UHWO (UH -West O'ahu)</li> <li><b>KHG:</b></li> <li>-Aloha Stadium - needs to be acquired for station construction</li> <li><b>Airport:</b></li> <li>-U.S. Post Office Honolulu Processing Center</li> <li>-DTS (City Dept. of Transportation Services) for Middle Street</li> <li><b>City Center:</b></li> <li>-HCC (UH Honolulu Community College)</li> <li>-OCCC (Dept. of Public Safety)</li> <li>-GSA/Federal Court House</li> <li>-HCDA (Hawaii Community Development Authority)</li> <li>-DAGS/DBEDT/HFDC</li> <li>-DFM (City Dept. of Facility Maintenance) for N. King Street</li> <li>-DFM (City Dept. of Facility Maintenance) for Kohou Street</li> <li>-DTS (City Dept. of Transportation Services) for Kamehameha Hwy.</li> <li><b>Additional agreements needed prior to construction:</b></li> <li>-Pacific Guardian Center</li> <li>-Howard Hughes Corporation</li> <li>-Sam House Development LLC</li> <li>-GGP Ala Moana LLC</li> </ul> <p><b>AGREEMENTS FOR CONSTRUCTION – COMPLETED</b></p> <p><b>WOFH:</b></p> <ul style="list-style-type: none"> <li>-D.R. Horton</li> <li>-DLNR (Dept. of Land &amp; Natural Resources) for Kapolei Park &amp; Ride</li> <li>-DOE (Dept. of Education)/DLNR for Waipahu High School</li> <li>-DHHL (Dept. of Hawaiian Home Lands) for MSF</li> <li>-DPP (City Dept. of Parks &amp; Recreation) for MSF drainage</li> </ul> <p><b>KHG:</b></p> <ul style="list-style-type: none"> <li>-UH Urban Gardens</li> <li>-Aloha Stadium - Guideway obtained by Kiewit</li> </ul> <p><b>AIRPORT:</b></p> <ul style="list-style-type: none"> <li>-DLNR (Dept. of Land &amp; Natural Resources) for Keehi Lagoon</li> <li>-DFM (City Dept. of Facility Maintenance) for Kamehameha Hwy/Makalapa Manor</li> </ul>
58	<b>Real Estate/Right-of-Way (ROW)</b>									
59	Acquisitions*									
60	WOFH Full Acquisitions	0	0	-0-	●	14	14	-0-	●	HART has acquired all full acquisitions for the WOFH section.
61	WOFH Partial Acquisitions	1	2	(1)	●	1	2	(1)	●	Finalizing agreements for remaining partial acquisition.
62	Summary WOFH Acquisitions (Full + Partial)	1	2	(1)	●	15	16	(1)	●	
63	KHG Full Acquisitions	0	0	-0-	●	3	3	-0-	●	HART has completed all full acquisitions for the KHG section.
64	KHG Partial Acquisitions	1	2	(1)	●	3	4	(1)	●	HART is working to complete negotiations. This remaining parcel does not impact the construction schedule. Status for the Current Quarter and Inception to Date has changed from red to orange.
65	Summary KHG Acquisitions (Full + Partial)	1	2	(1)	●	6	7	(1)	●	Status for the Current Quarter and Inception to Date has changed from red to orange.

	Activity	Current Quarter (Q3 FY15)				Inception to Date				Comments and Legend
		January, February, March 2015				January 2007 - March 2015				
		Actual	Plan	Variance	Status	Actual	Plan	Variance	Status	
										<p>● On track or ahead of plan. ● Immediate attention needed; Requires recovery/resolution.</p> <p>● Monitoring. ○ No current target/activity to date; Action pending.</p> <p>● Monitoring; Requires special attention. N/A Not Applicable. TBD To be determined.</p> <p>■ New Balanced Scorecard items are shaded in blue for ease of identification. ■ Status color changes are shaded in yellow.</p>
66	Airport Full Acquisitions	1	1	-0-	●	4	5	(1)	●	The remaining full acquisition is awaiting completion of relocation activities. Status for Inception to Date has changed from orange to red due to project schedule and completion of a relocation activity.
67	Airport Partial Acquisitions	0	3	(3)	●	0	3	(3)	●	HART has tendered offers on outstanding partial acquisitions and are in negotiations. HART will work to secure rights of entry, as appropriate, to ensure construction site access. Status for the Current Quarter and Inception to Date have changed from orange to red due to project schedule and extended negotiations.
68	Summary Airport Acquisitions (Full + Partial)	1	4	(3)	●	4	8	(4)	●	Status for the Current Quarter and Inception to Date have changed from orange to red.
69	City Center Full Acquisitions	1	11	(10)	●	9	20	(11)	●	Appraising properties and preparation of offers is ongoing. HART has also received approval from the FTA to utilize possession and use agreements in an effort to promptly obtain construction access to properties. Status for the Current Quarter and Inception to Date is orange because the deadline for completion of acquisitions has changed due to design and construction timeline adjustments.
70	City Center Partial Acquisitions	0	67	(67)	●	0	67	(67)	●	Appraising properties and preparation of offers is ongoing. HART has also received approval from the FTA to utilize possession and use agreements in an effort to promptly obtain construction access to properties. Status for the Current Quarter and Inception to Date is orange because the deadline for completion of acquisitions has changed due to design and construction timeline adjustments.
71	Summary City Center Acquisitions (Full + Partial)	1	78	(77)	●	9	87	(78)	●	Status for the Current Quarter and Inception to Date is orange because the deadline for completion of acquisitions has changed due to design and construction timeline adjustments.
72	Expenditures for Acquisitions	N/A	N/A	N/A	●	\$71.0	\$81.5	(\$10.5)	●	\$M in expenditures.
73	Easements*									*Data is current as of March 20, 2015. Inception to Date Plan numbers are the total number needed for the project and may vary each quarter due to advancement of design; Actual numbers are based on property availability for construction. Data is provided by the Real Estate Acquisition Database (READ)
74	WOFH Easements	0	2	(2)	●	1	3	(2)	●	Negotiations are ongoing on the remaining easements including requests for right of entry for necessary work in WOFH. Status for the Current Quarter and Inception to Date have changed from orange to red.
75	KHG Easements	0	0	-0-	●	0	0	-0-	●	There are no easements in this section.
76	Airport Easements	0	6	(6)	●	0	11	(11)	●	Appraising properties and preparation of offers is ongoing. HART has also received approval from the FTA to utilize possession and use agreements in an effort to promptly obtain construction access to properties. Status for the Current Quarter and Inception to Date have changed from orange to red due to U.S. Navy and U.S. Post Office concerns and document processing.
77	City Center Easements	0	15	(15)	●	0	29	(29)	●	Appraising properties and preparation of offers is ongoing. HART has also received approval from the FTA to utilize possession and use agreements in an effort to promptly obtain construction access to properties. Status for the Current Quarter and Inception to Date is orange because the deadline for completion of easements has changed due to design and construction timeline adjustments.
78	Summary Easements	0	23	(23)	●	1	43	(42)	●	Status for the Current Quarter and Inception to Date have changed from orange to red.
79	Safety									
80	HART OSHA Reportable Injuries	0	0	-0-	●	0	0	-0-	●	HART # Occupational Safety and Health Agency (OSHA) Reportable Injuries to date. Reportable incidents, requiring OSHA to be notified within 8 hours, include the death of an employee or hospitalization of three or more employees. For additional information on recordable incidents, please see the HART Monthly Progress Report.
81	Contractor OSHA Reportable Injuries	0	0	-0-	●	0	0	-0-	●	Contractor's # Occupational Safety and Health Agency (OSHA) Reportable Injuries to date. Reportable incidents, requiring OSHA to be notified within 8 hours, include the death of an employee or hospitalization of three or more employees. For additional information on recordable incidents, please see the HART Monthly Progress Report.
82	Quality Assurance (QA)									
83	Completion of QA Audits	10	6	+4	●	75	61	+14	●	# QA Audits of HART, consultants, contractors and suppliers completed vs. planned. Buy America Audits are included.
84	Successful Closure of Design NCRs	5	1	+4	●	31	32	(1)	●	# Design Non-Conformance Reports (NCRs) closed vs. issued. For more information on NCRs, please see the HART Monthly Progress Report.
85	Successful Closure of Construction NCRs	72	68	+4	●	304	389	(85)	●	# Construction NCRs closed vs. issued. For more information on NCRs, please see the HART Monthly Progress Report. Status for the Current Quarter has changed from yellow to green.
86	Economic Multipliers [Negative = below plan]									
87	DBE Participation (%)	0.05%	0.13%	(0.08%)	●	1.20%	13%	(11.80%)	●	% actual vs. target participation rate of Disadvantaged Business Enterprises (DBE) to date since Sept. 24, 2007. The planned DBE participation rate is an overall project goal.
88	DBE Participation (\$)	\$0.82	\$2.29	(\$1.47)	●	\$21.26	\$229	(\$207.74)	●	\$M actual vs. target participation of DBE to date since Sept. 24, 2007. The planned DBE participation rate is an overall project goal.
89	PERSONNEL									
90	HART Staffing Level	2	0	+2	●	128	139	(11)	●	# Current HART Full-Time Equivalents (FTEs) vs. planned positions in the FY15 Operating Budget. There are 128 FTEs onboard as of March 31, 2015. This includes 104 City employees and 24 Project Management Support Consultant (PMSC) employees. The actual number reported in "Current Quarter" reflects all new hires for the quarter. The "Inception to Date" numbers reflect the total number of employees onboard as of March 31, 2015.
91	Direct Project Jobs Created	---	---	---	○	1,377	---	---	○	# Direct project jobs created. Actual number reflects either input from contractors or agencies, or a calculated count based on invoices presented to HART.



**BALANCED SCORECARD**  
Project Implementation/Pre-Revenue Operation

APPENDIX A  
Q3 FY15  
Data Date: March 27, 2015

	Activity	Current Quarter (Q3 FY15)				Inception to Date				Comments and Legend
		January, February, March 2015				January 2007 - March 2015				
		Actual	Plan	Variance	Status	Actual	Plan	Variance	Status	
92	<b>Transit-Oriented Development (TOD) Planning*</b>									*TOD planning is being overseen by the city Department of Planning and Permitting and the HCDA
Partnerships	City Department of Planning and Permitting Draft TOD Plans	0	0	N/A	●	10	14	N/A	●	City Department of Planning and Permitting (DPP) is responsible for TOD plans for 19 of the 21 stations. A total of 10 stations have Draft TOD neighborhood plans at this time. DPP started developing Draft TOD plans for the remaining 4 stations: Pearl Harbor Naval Base, Airport, Lagoon Drive and Aloha Stadium. The Ala Moana TOD plan is currently under public review. The remaining Draft TOD plans will be sent to City Council for review and adoption during the third and fourth quarters of 2015. In the interim, the Legislature has adopted Bill 71 Land Use Ordinance (LUO) Amendment Relating to Interim Plan Development Permits for TOD, which will allow for negotiations on TOD projects as per the Draft TOD plans before zoning is in place.
	Hawai'i Community Development Authority Draft TOD Overlay Plan	0	0	N/A	●	2	2	N/A	●	HCDA developed a Draft TOD Overlay Plan for the areas around Kaka'ako and Civic Center Stations. It will be finalized in the Kaka'ako Environmental Impact Statement. HART submitted comments to the Draft EIS for TOD in the Kaka'ako Community District on Feb. 20, 2015.
	Stations with Final TOD Plans	0	0	N/A	●	5	5	N/A	●	The Waipahu Neighborhood TOD plan (Waipahu and West Loch Stations) and Aiea Pearl City TOD plan (LCC, Pearl Highlands and PearlrIDGE Stations) have been adopted.
	Total Stations with Draft or Final TOD Plans	0	0	N/A	●	17	21	N/A	●	TOD plans are being created for 21 stations.
	HART TOD Stakeholder Group	0	----	N/A	●	2	----	N/A	●	# of meetings held. Established in 2013, the TOD Stakeholder Group includes representatives from city, state, and private sector entities and organizations.
<b>PUBLIC OUTREACH</b>										
Customer Perspective	Build a Social Media Community	31	----	N/A	●	2,711	----	N/A	●	# of unique Facebook followers.
	Proactive Community Outreach: Neighborhood Board Meetings	26	----	N/A	●	968	----	N/A	●	# Neighborhood Board Meetings in which HART has participated to date since 2006.
	Proactive Community Outreach: Presentations/Events	33	----	N/A	●	1,777	----	N/A	●	# Events in which HART has participated to date since 2006.
<b>SERVICE DELIVERY</b>										
103	Fare Collection System				○				○	TBD in FY15.
104	Bus-Rail Integration Plan				○				○	In April 2014, Bus-Rail Integration Plans were issued. The plans are subject to change and do not reflect operating costs.
105	HART Operating Organization Plan				○				○	TBD
106	HART Service Policy/Standards				○				○	TBD
<b>LIVABILITY</b>										
108	HART Sustainability Policy				○				○	TBD

**Appendix B**  
**HART Organizational Charts**

Prepared by:

*[Signature]*  
Administrative Specialist      1/14/15  
Date

Concur:

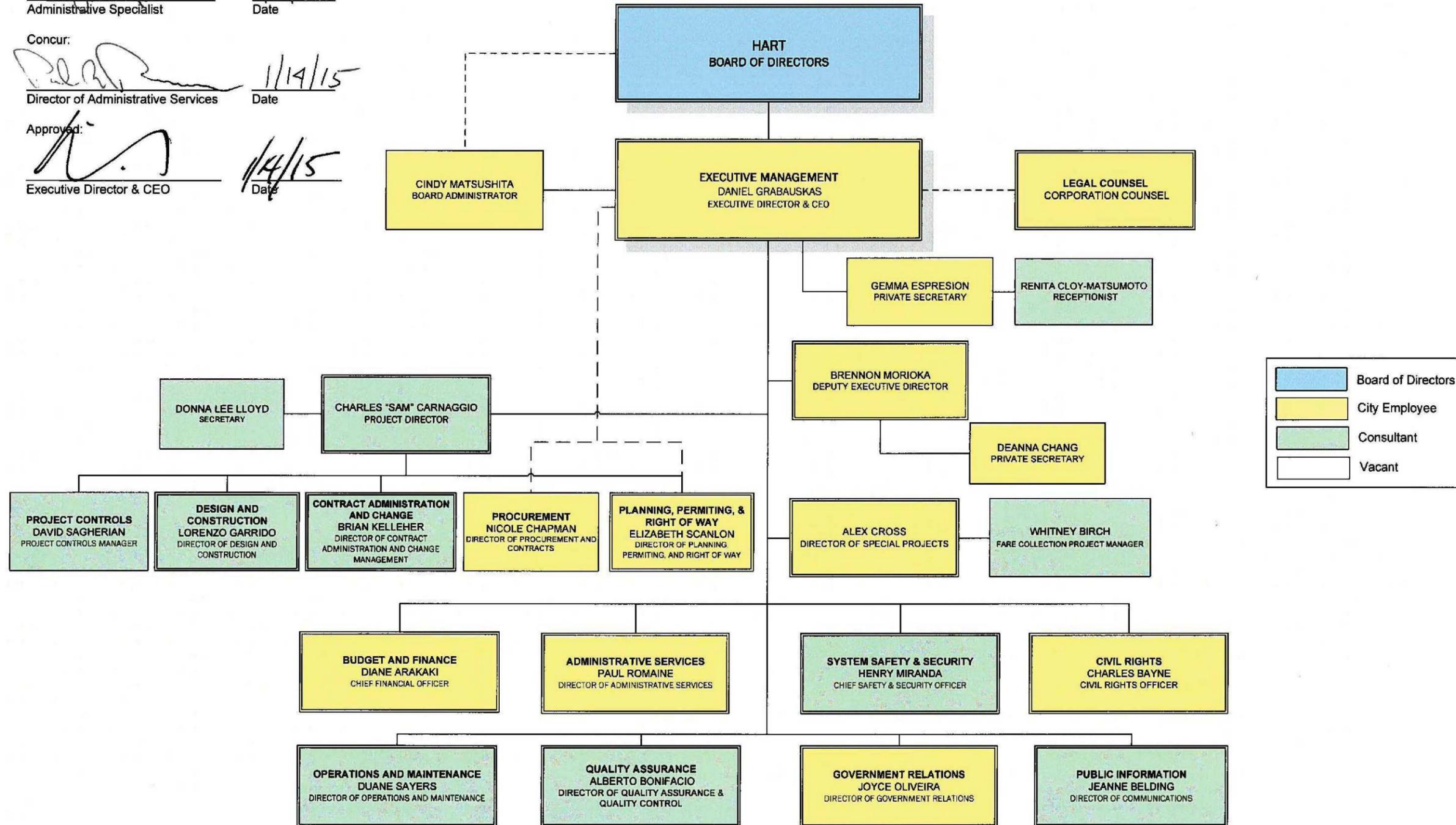
*[Signature]*  
Director of Administrative Services      1/14/15  
Date

Approved:

*[Signature]*  
Executive Director & CEO      1/14/15  
Date

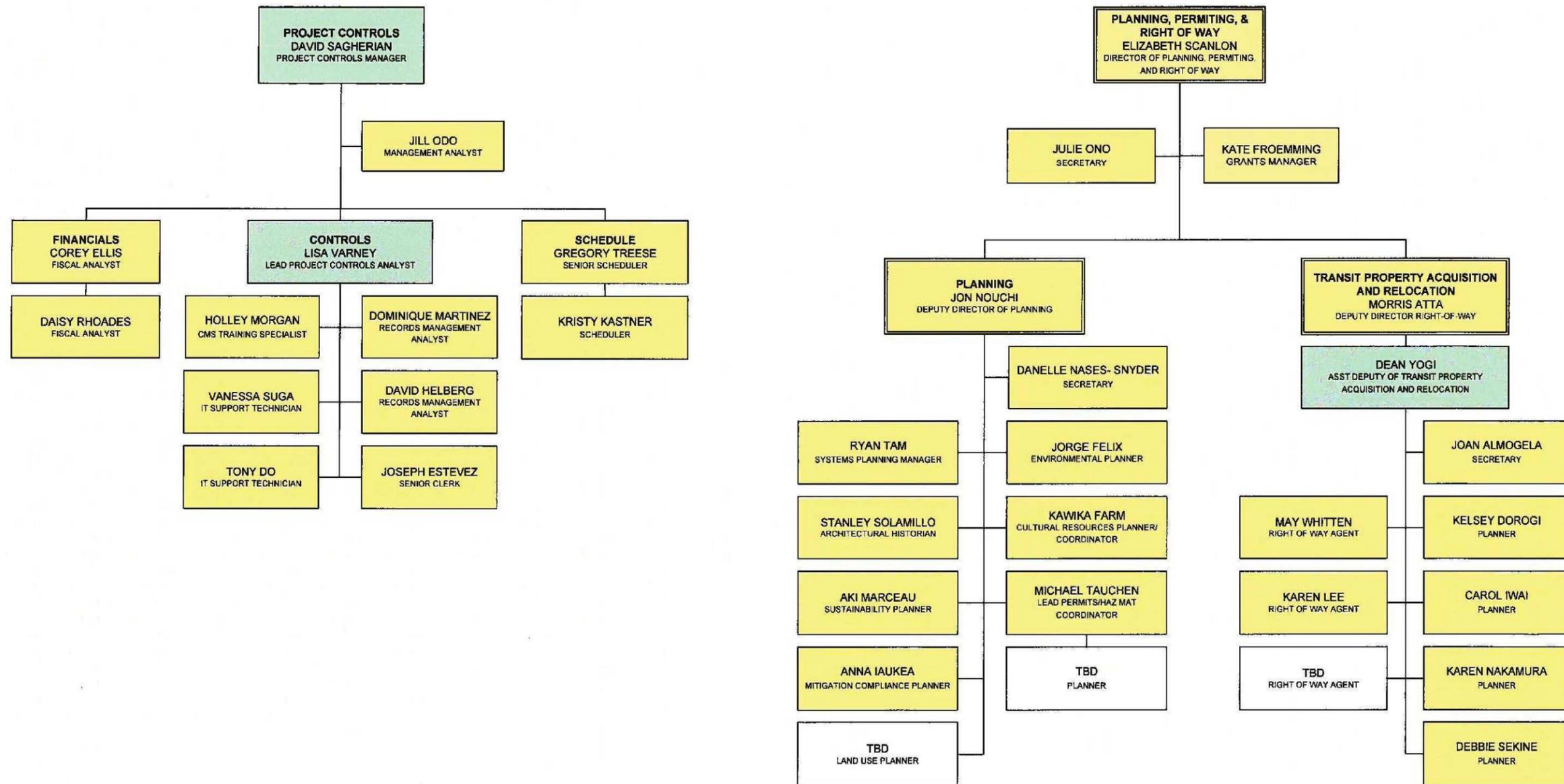
# HONOLULU AUTHORITY FOR RAPID TRANSPORTATION (HART)

January 14, 2015



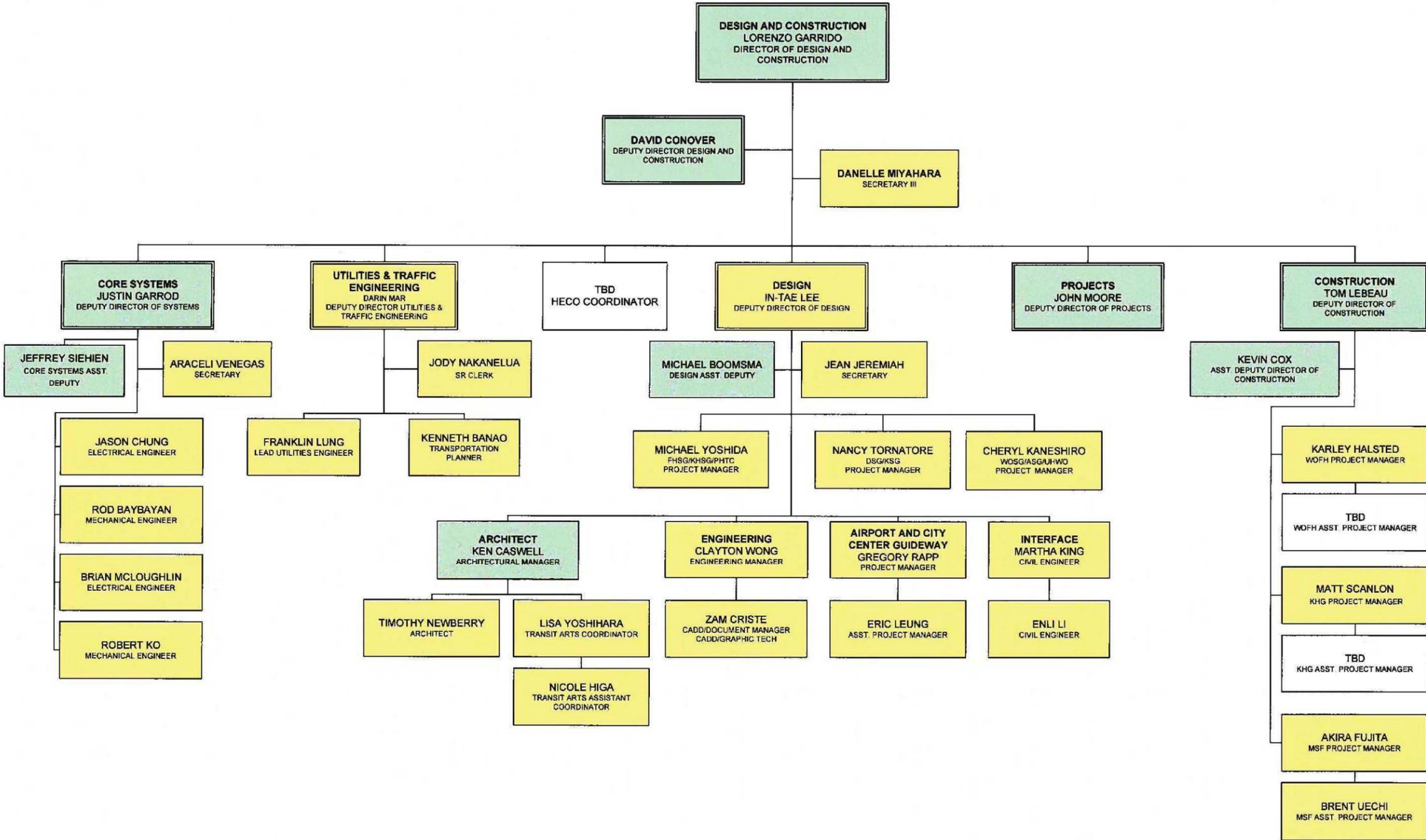
**HONOLULU AUTHORITY FOR RAPID TRANSPORTATION  
PROJECT CONTROLS AND PLANNING, PERMITTING AND RIGHT OF WAY**

January 14, 2015



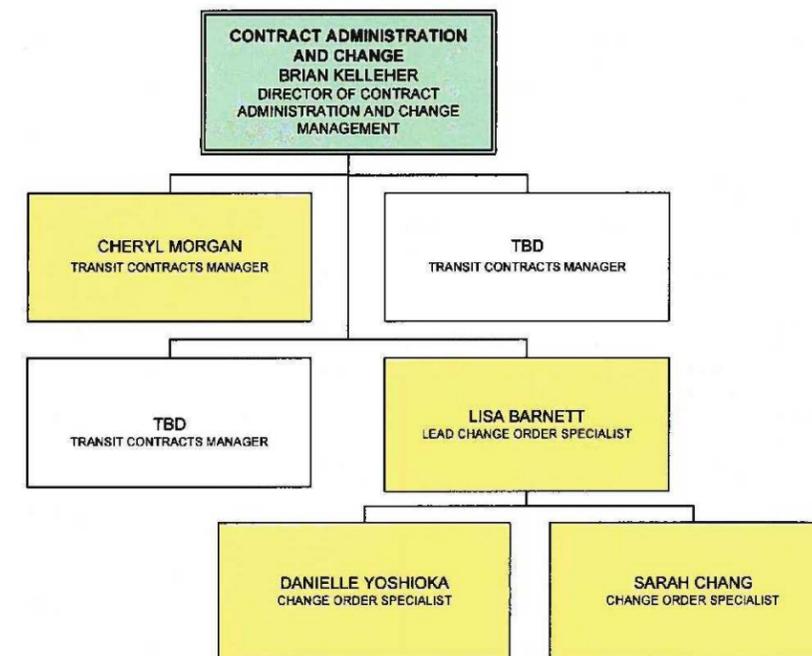
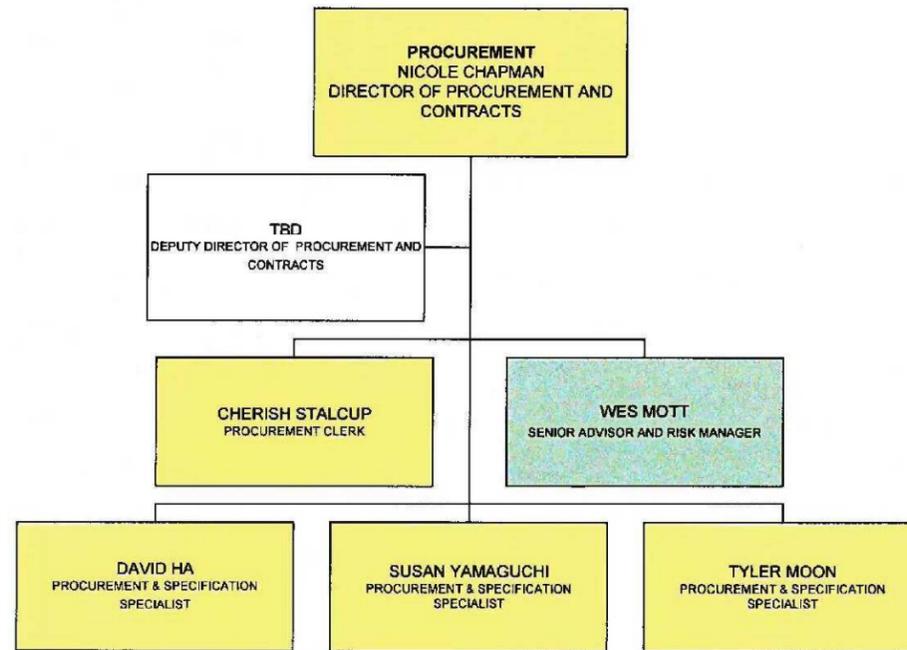
# HONOLULU AUTHORITY FOR RAPID TRANSPORTATION DESIGN AND CONSTRUCTION

January 14, 2015

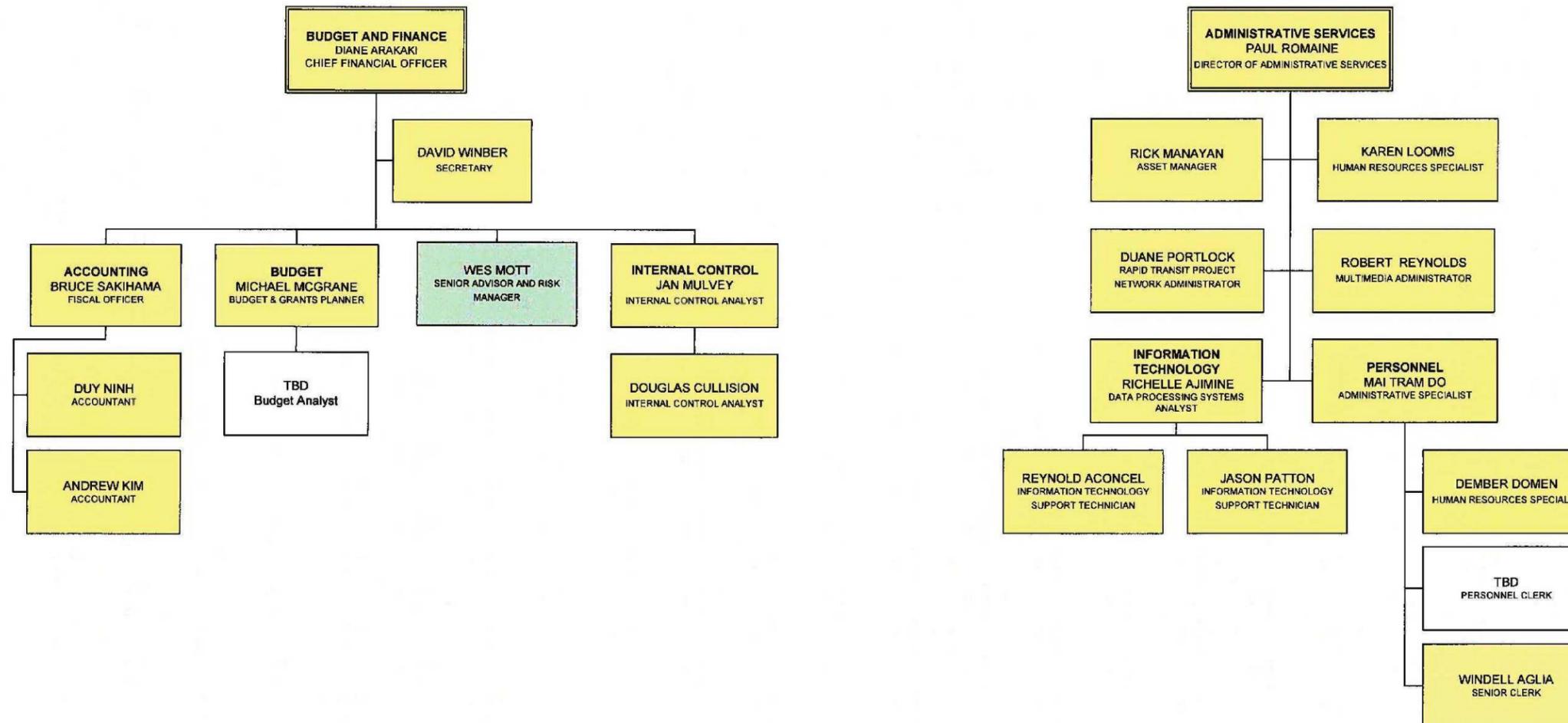


# HONOLULU AUTHORITY FOR RAPID TRANSPORTATION PROCUREMENT, CONTRACTS ADMINISTRATION AND CHANGE

January 14, 2015

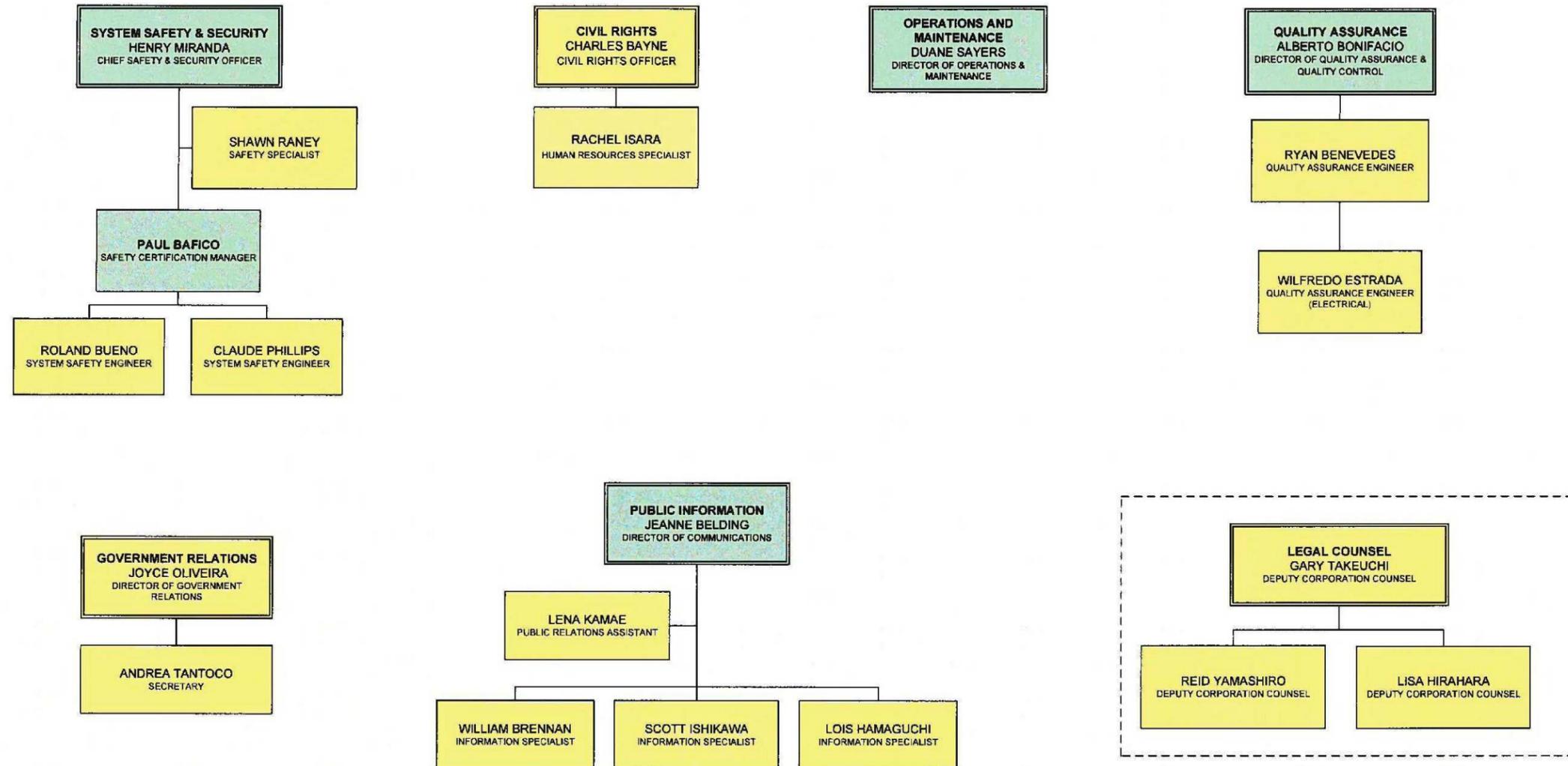


## HONOLULU AUTHORITY FOR RAPID TRANSPORTATION BUDGET AND FINANCE, AND ADMINISTRATIVE SERVICES



# HONOLULU AUTHORITY FOR RAPID TRANSPORTATION

## SYSTEM SAFETY & SECURITY, CIVIL RIGHTS, OPERATIONS AND MAINTENANCE, QUALITY ASSURANCE, GOVERNMENT RELATIONS, PUBLIC INFORMATION, LEGAL COUNSEL



## Appendix C Project Background and Description

The Alternatives Analysis (AA) for the project was initiated in August 2005 and the *Honolulu High-Capacity Transit Corridor Project Alternatives Analysis Report* was presented to the Honolulu City Council in November 2006. The purpose of the report was to provide the City Council with the information necessary to select a mode and general alignment for high-capacity transit service on Oahu. The report summarized the results of the AA that was conducted following the FTA's planning guidance. It also provided information on the costs, benefits, and impacts of four alternatives: No Build Alternative, Transportation System Management Alternative, Managed Lane Alternative, and Fixed Guideway Alternative.

During November and December 2006, public meetings were held on the AA. On December 22, 2006, the Honolulu City Council enacted Ordinance No. 07-001, which selected a fixed guideway alternative from Kapolei to the University of Hawaii at Manoa with a connection to Waikiki as the Locally Preferred Alternative (LPA) for the project. Ordinance 07-001 identified a specific alignment for the majority of the corridor but left options open in two locations. At the western end of the corridor, the LPA selection identified two alignments (described in the AA Report as Section I – Saratoga Avenue/North-South Road and Kamokila Boulevard/Farrington Highway), with the notation “*as determined by the city administration before or during preliminary engineering.*” In the center of the corridor, the LPA selection also identified two alignments (described in the AA Report as Section III – Salt Lake Boulevard and Aolele Street), also with the notation “*as determined by the city administration before or during preliminary engineering.*”

The LPA selection was made recognizing that the then-identified revenue sources, including revenues from the 0.5 percent county GET surcharge in place from January 1, 2007, through December 31, 2022, and a reasonable expectation of FTA New Starts funds, would not be sufficient to fund the capital cost of the LPA. Thus, a financially feasible project needed to be identified. On February 27, 2007, the Honolulu City Council initially selected a segment of the LPA from East Kapolei to Ala Moana Center, via Salt Lake Boulevard (Resolution 07-039, FD1(c)). However, on January 28, 2009, the Honolulu City Council, under Resolution 08-261, recommended replacing the Salt Lake portion of this initial alignment with a route that includes direct service to Pearl Harbor and the Airport. This section of the LPA, from East Kapolei to Ala Moana Center, which serves the Airport is referred to as “the project” and is shown in **Figure 1**. The LPA is now known as the Honolulu Rail Transit Project (H RTP) and described in Project Description found on the page which follows Figure 1.

Figure 1: The Project



## Project Description

The H RTP consists of the design and construction of a 20-mile, grade-separated, fully-automated fixed rail system following the alignment depicted in Figure 1. The rail line will operate in an exclusive right-of-way and be elevated except for a 0.6 mile at-grade section near Leeward Community College. The line will be powered with third rail electrification.

The project scope includes 80 light metro fully automated (driverless) rail vehicles and a Rail Operations Center (ROC) on a 44-acre parcel near Leeward Community College. The ROC will have four buildings that will house various maintenance facilities, a vehicle wash area and a system control center. The ROC site will also include a track storage area for the railcars and an employee parking area. The ROC buildings will be designed to meet Leadership in Energy and Environmental Design silver certification requirements.

The project includes 21 stations with passenger canopies, seating areas and art work. All stations, except for the one at Leeward Community College, will be elevated. There will be four park-n-ride facilities with a total of 4,100 spaces. The park-n-ride facility at Pearl Highlands Station will be a parking structure which will feature an access ramp from the H-2 freeway directly into the parking structure.

The target revenue service date for the project is January 31, 2020. Hours of operation in the opening year will be from 4 am to midnight on weekdays. On weekends and holidays service will run from 6 am to midnight. In the opening year, service will operate every 5 minutes during weekday peak periods, every 11 minutes during weekday off-peak periods, and every 18 minutes on weekday evenings. On weekends in the opening year, service will operate every 18 minutes all day. In the project forecast year of 2030, service will operate every 5 minutes during weekday peak periods, every 9 minutes during off-peak times and every 15 minutes during the evening. On weekends in the forecast year, service will operate every 15 minutes during the day and evening. Average weekday passenger boardings are projected to be 104,300 in the opening year and 119,500 in 2030.

### System-wide Elements

The selected transit technology is electrically powered, industry-standard steel wheel on steel rail powered from a third-rail system. The selected vehicle is to be capable of a top speed greater than 50 mph. The vehicles will be fully automated and driverless although train attendants are planned to be riding trains for customer relations and emergency situations. The driverless option is possible because the fixed guideway will operate in exclusive right-of-way with no vehicular or pedestrian crossings.

The traction power distribution system consists of about 14 substations and main line track power distribution facilities. The substations will be spaced at approximately one and one-half mile intervals along the alignment.

Train signaling will use automatic train control and automatic train operations technology. The communications and security systems include emergency phones, closed-circuit television, and public address and information display systems.

The railcars will have a length of roughly 60 feet and the capacity to carry upwards of 160 persons. Trains will consist of four railcars. Additional vehicles can be added to the fleet as passenger demand requires in the future. The ROC will have the capacity to maintain and store up to 150 railcars.

In FY2014, a decision was made to add platform screen barriers and doors to the project scope. As a result, the project will now utilize a Platform Screen Gate system that is more like a fence with automated openings at all rail stations. Safety is the principal benefit for passengers, as the installation of these gates will preclude accidental train track guideway incursion and reduce the risk of accidents, especially when trains are entering the station. Active barrier systems create a safety separation between the track area and the platform to protect people from falling off the platform thereby eliminating the potential hazard of being struck by a moving train or being shocked or electrocuted by the third power rail. This change will also serve to minimize the potential for service interruptions caused by incursions on the track guideway in station areas.

#### Fare Collection

A unified fare structure is planned, which will be integrated with the City's existing bus system, TheBus. The H RTP was originally contemplated to have a barrier-free, proof-of-payment fare collection system utilizing fare vending machines in all stations and fare inspectors riding the system to verify proof of fare payment. In FY2015, the decision was made to utilize a traditional barrier fare collection system with fare gates that require payment to enter the rail station. This type of system is feasible for the H RTP since nearly all rail stations will be elevated with controlled access. Fare gate systems cost more to initially install but are less expensive to operate long term. They also reduce the potential for fare evasion by train users and provide information on travel and usage patterns which will help with planning service levels and bus-rail connections.

The fare collection system currently planned will be a multi-modal, account-based smart card system using proven technology. Rail fare system components will include both standard and ADA gates with smart card readers and ticket vending machines (TVMs) at each station. Bus fare collection will utilize on-board smart card readers in addition to cash payment. The overall integrated system will include various back office systems with redundancy.

## Appendix D Status of DPP Station Area TOD Planning

Station Name	Neighborhood TOD Plan	Adopted	Draft Final	Public Review	Planning
East Kapolei	<b>East Kapolei</b> <a href="http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-east-kapolei.html">http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-east-kapolei.html</a>			<b>X</b>	
UH West Oahu					
Ho'opili					
West Loch	<b>Waipahu</b> <a href="http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-waipahu.html">http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-waipahu.html</a>	<b>X</b> (April 2014)			
Waipahu Transit Center					
Leeward Community College	<b>Aiea Pearl City</b> <a href="http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-aiea-pearlcity.html">http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-aiea-pearlcity.html</a>	<b>X</b> (September 2014)			
Pearl Highland Station					
Pearlridge Station					
Aloha Stadium	<b>Halawa Makai</b> <a href="http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-halawa-makai.html">http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-halawa-makai.html</a>				<b>X</b>
Pearl Harbor Naval Base Station	<b>Airport</b> <a href="http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-airport.html">http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-airport.html</a>				<b>X</b>
Honolulu International Airport					
Lagoon Drive					
Middle Street Transit Center	<b>Kalihi</b> <a href="http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-kalihi.html">http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-kalihi.html</a>		<b>X</b>		
Kalihi					
Kapalama					
Iwilei	<b>Downtown</b> <a href="http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-downtown.html">http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-downtown.html</a>			<b>X</b>	
Chinatown					
Downtown					
Ala Moana Center	<b>Ala Moana Center</b> <a href="http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-alamoana.html">http://www.honolulu.gov/tod/neighborhood-tod-plans/dpp-tod-alamoana.html</a>			<b>X</b>	

**Appendix E**  
**Financial Charts and Tables**

Project and Systemwide Sources and Uses of Funds,  
FY2010 - FY2030, YOE \$millions

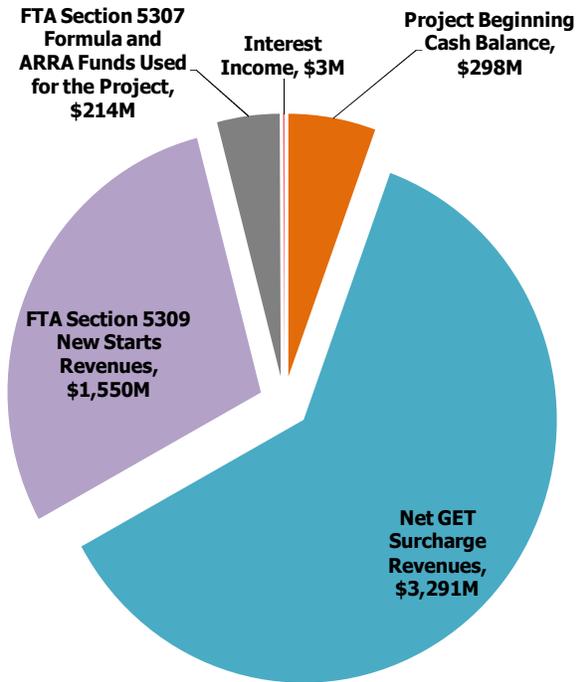
SOURCES OF FUNDS	YOE \$M	USES OF FUNDS	YOE \$M
<b>Project Capital Sources of Funds</b>		<b>Project Capital Uses of Funds</b>	
Project Beginning Cash Balance	298	Project Capital Cost	4,949
Net GET Surcharge Revenues	3,291	<b>Subtotal Project Capital Cost</b>	<b>\$4,949</b>
FTA Section 5309 New Starts Revenues	1,550	<b>Finance Charges</b>	
FTA Section 5307 Formula and ARRA Funds Used for the Project 1/	214	Interest Payment on GO Bonds Issued for the Project	191
Interest Income	3	Interest Payment on Tax-Exempt Commercial Paper	10
Transfer from Project Cash Balance to Ongoing Rail Capital and O&M Cost	(193)	GO Bond Issuance Cost	13
		<b>Subtotal Finance Charges</b>	<b>\$215</b>
<b>Subtotal Project Capital Sources of Funds</b>	<b>\$5,163</b>	<b>Subtotal Project Capital Uses of Funds</b>	<b>\$5,163</b>
<b>Ongoing Capital Sources of Funds</b>		<b>Ongoing Capital Uses of Funds</b>	
FTA Section 5309 Fixed Guideway Modernization	80	Additional Railcar Acquisitions	35
FTA Section 5309 Bus Discretionary	116	Project Capital Asset Replacement Program	150
FTA Section 5307 Formula Funds Used for Ongoing Capital Cost	499	TheBus Vehicle Acquisitions	667
FTA Section 5307 and 5309 Grants Carryover from Prior Years	50	Other Capital Cost	235
American Recovery and Reinvestment Act	26	TheHandi-Van Vehicle Acquisitions	138
FTA Section 5316 (JARC) and 5317 (New Freedom)	0		
Transfers to the State's Vanpool Program	(3)		
Transfer from Project Cash Balance to Ongoing Rail Capital Cost	54		
City General Obligation Bond Proceeds	404		
<b>Subtotal Ongoing Capital Sources of Funds</b>	<b>\$1,225</b>	<b>Subtotal Ongoing Capital Uses of Funds</b>	<b>\$1,225</b>
<b>TOTAL CAPITAL SOURCES OF FUNDS</b>	<b>\$6,388</b>	<b>TOTAL CAPITAL USES OF FUNDS</b>	<b>\$6,388</b>
<b>Operating Sources of Funds</b>		<b>Operating Uses of Funds</b>	
Fare Revenues (TheBus and Rail)	2,098	TheBus O&M Costs	5,459
Fare Revenues (TheHandi-Van)	60	Rail O&M Costs	1,613
<b>Subtotal Fare Revenues</b>	<b>\$2,158</b>	TheHandi-Van O&M Costs	1,310
FTA Section 5307 Formula Funds Used for Preventative Maintenance	247	Other O&M Costs	55
FTA Section 5316 (JARC) and 5317 (New Freedom)	20		
Transfer from Project Cash Balance to Rail O&M Cost	140		
City Operating Subsidy	5,871		
<b>TOTAL OPERATING SOURCES OF FUNDS</b>	<b>\$8,436</b>	<b>TOTAL OPERATING USES OF FUNDS</b>	<b>\$8,436</b>

1/ Includes \$4M from American Recovery & Reinvestment Act of 2009  
Note: totals may not add due to rounding

Source: 2012 Financial Plan

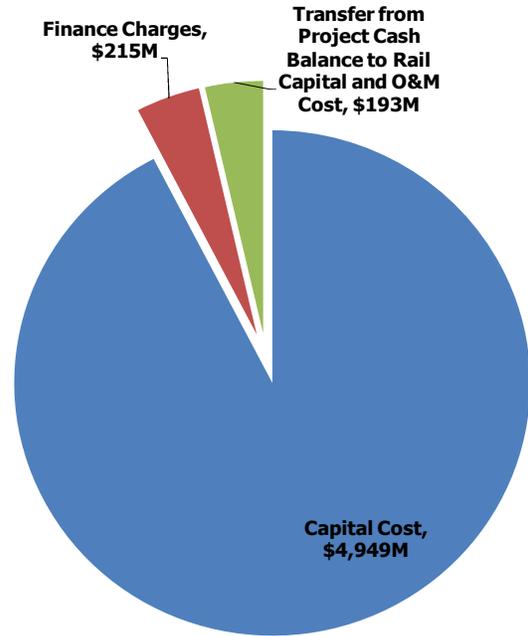
## Project Sources and Uses of Funds, YOE \$millions

**Where the Dollars Come From:**



Note: Totals may not add due to rounding  
ARRA = American Recovery and Reinvestment Act

**Where the Dollars Go:**



Source: Financial Plan, June 2012

Source: 2012 Financial Plan

## SUMMARY OF HART FINANCIAL INFORMATION - FY2013 to FY2016

	FY2013 Actual	FY2014 Actual	FY2015 Budget	FY2015 Projection	FY2016 Budget
<b>Total Budget</b>					
Operating Budget	15,424,332	19,416,780	21,481,029	16,397,631	29,212,800
Capital Budget	309,364,744	326,672,087	1,560,404,400	632,580,000	1,477,058,200
<b>Total Budget Request</b>	324,789,076	346,088,867	1,581,885,429	648,977,631	1,506,271,000
<b>Operating Expenses</b>					
Personnel	9,927,964	11,268,354	13,843,425	10,935,670	14,019,000
Current expenses	5,477,839	8,148,426	7,631,604	5,461,961	7,187,800
Equipment & Software/Depreciation	18,529	36,622	6,000	18,000	6,000
Interest Expense	0	0	0	0	8,000,000
<b>HART Operating Expense Total</b>	15,424,332	19,453,402	21,481,029	16,415,631	29,212,800
<b>Reimbursements to Other City Depts.</b>					
Personnel & Current Expenses	636,541	403,155	1,021,401	437,410	1,021,400
City Overhead Contribution (CASE)	1,065,418	923,621	1,022,906	650,995	1,010,100
<b>City Depts. Reimbursements Total</b>	1,701,959	1,326,775	2,044,307	1,088,405	2,031,500
<b>H RTP Capital Expenses</b>					
Consultant Services	88,583,364	54,250,912	26,989,500	58,000,000	26,653,600
Design Services	17,470,560	51,940,414	20,382,000	56,000,000	1,400,000
Programmatic Agreement	223,999	42,247	1,100,000	60,000	200,000
Utility Relocation	2,281,120	3,318,174	95,000,000	37,000,000	0
Construction, Const. Mgmt. & Inspections	157,894,967	203,858,305	1,017,676,300	406,000,000	143,976,100
Core Systems & Equipment	24,675,357	0	0	0	0
Land Acquisitions	17,346,427	12,840,014	126,700,000	75,500,000	0
Relocation	888,950	385,435	11,500,000	0	0
Public Art	0	0	0	0	0
Quality Audits	0	36,586	56,600	20,000	20,000
Contingency & Recertification & others	0	0	261,000,000	0	250,000,000
Re-Appropriations From FY 2015	0	0	0	0	1,054,808,500
<b>HART Capital Program Total</b>	309,364,744	326,672,087	1,560,404,400	632,580,000	1,477,058,200

## Honolulu Authority for Rapid Transportation

### RESOLUTION NO. 2015 – 34

#### APPROVING OPERATING AND CAPITAL BUDGETS FOR THE FISCAL YEAR 2016 ENDING JUNE 30, 2016

WHEREAS, the Honolulu Authority for Rapid Transportation (HART) has been established pursuant to Article XVII of the Revised Charter of the City and County of Honolulu 1973, as amended (Charter); and

WHEREAS, the Charter empowers the Authority to prepare annual operating and capital budgets for the fixed guideway transit project and for the Authority's operations; and

WHEREAS, it is in the public interest that the Authority have spending plans for both operating and capital expenses to ensure that expenditures are properly controlled and accounted for in fiscal year 2016; and

WHEREAS, HART prepared both Operating and Capital Budgets for fiscal year 2016; and

WHEREAS, the Finance Committee of the Board of Directors (Board) has reviewed the line item details of the Operating and Capital Budgets, made recommendations, and approved said Operating and Capital Budgets; and

WHEREAS, the Board has reviewed said Operating and Capital Budgets for the Authority; and

WHEREAS, the Operating and Capital Budgets are fully funded by the Transit Fund; and

WHEREAS, the Charter empowers the Board to review, modify as necessary, and adopt annual operating and capital budgets for the Authority;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of HART as follows:

1. Estimated revenues in the amount of \$29,212,800 are hereby appropriated from the Transit Fund for the Operating Budget for the fiscal year July 1, 2015 to June 30, 2016 for the following purposes:
  - \$ 14,019,000 Personnel
  - \$ 7,187,800 Current Expenses
  - \$ 6,000 Equipment
  - \$ 8,000,000 Interest Expense
2. Estimated revenues in the amount of \$1,783,506,585 from are hereby appropriated from the Transit Fund for the Capital Budget for the fiscal year July 1, 2015 to June 30, 2016; and
3. The Executive Director is hereby authorized to manage the revenues and expenditures of the Transit Fund's subsidiary fund accounts to ensure proper accounting of the monies pursuant to the standards for financial administration requirements of Title 49, Code of Federal Regulations Part 18; and

4. The Executive Director is hereby authorized to conduct the administrative affairs of the Authority in accordance with the Authority's Financial Policies utilizing the Operating and Capital Budgets established herein; and
5. This Resolution shall take effect on July 1, 2015.

ADOPTED by the Board of the Honolulu Authority for Rapid Transportation on

\_\_\_\_\_.

\_\_\_\_\_  
Board Chair

Attest:

\_\_\_\_\_  
Board Administrator

DRAFT

## EXHIBIT A

<u>Budget Description</u>	<u>2015 Budget</u>	<u>2016 Budget</u>
<b><u>Personnel</u></b>		
Regular Pay	\$9,414,755	\$9,401,600
Overtime, Night Shift, Temp Assign Pay	95,000	95,000
Fringe Benefits	4,332,670	4,326,400
OPEB Mandatory Payment	0	195,000
Service or Merit Awards	1,000	1,000
<b>Personnel Expense Subtotal</b>	<b>13,843,425</b>	<b>14,019,000</b>
<b><u>Current Expenses</u></b>		
Office & Computer Supplies	147,000	147,000
Meals & Foods	6,500	6,500
Safety & Misc Supplies	9,300	9,300
Parts / Equip	210,000	210,000
Legal Services	1,202,354	1,000,000
Professional Svcs. Direct Reimb	2,044,307	2,031,500
Professional Svcs. Other	250,000	250,000
Postage & Shipping	9,000	9,000
Telephone	40,000	40,000
Communication Svcs	170,000	128,000
Relocation - New hires	30,000	30,000
Travel Expense - Out-of-State	95,000	95,000
Advertising, Publication of Notices	45,000	45,000
Insurance on Equip. & Gen. Liab.	18,000	18,000
Liability Insurance (Dir. & Off)	55,000	55,000
Printing & Binding	1,500	1,500
Other Repairs to Bldgs & structures	300,000	5,000
R&M - office furniture & equip	12,000	12,000
Rentals	2,378,643	2,445,000
Fees (memberships, registration & parking)	50,000	50,000
Computer Software maintenance agreements	58,000	100,000
Other Fixed Charges (Stipend)	500,000	500,000
<b>Current Expenses Subtotal</b>	<b>7,631,604</b>	<b>7,187,800</b>
<b><u>Equipment &amp; Software</u></b>		
	6,000	6,000
<b>Total Before Debt Service</b>	<b>21,481,029</b>	<b>21,212,800</b>
Interest Expense	0	8,000,000
<b>Total Budget</b>	<b>\$21,481,029</b>	<b>\$29,212,800</b>
<b>Total Full-time Equivalent Positions</b>	<b>139</b>	<b>139</b>

<b>Honolulu Authority for Rapid Transportation</b>	
<b>Capital Appropriations for FY 2016</b>	
	<b>Total</b>
<b>FY 2016 Original Proposed:</b>	
Dillingham SG, Kaka'ako SG Construction	\$122,502,100
HART ODC	\$20,000
Elevators and Escalators	\$16,474,000
Gen Engineering Consultant FD-Construction	\$8,233,500
HDOT Coordination Consultant - West Oahu/Farrington	\$5,613,000
HDOT Coordination Consultant – Kamehameha Section	\$2,600,000
Owner-Controlled Insurance Program (OCIP) Consultant	\$208,100
Owner-Controlled Insurance Program (OCIP)	\$5,000,000
Core Systems Support	\$8,078,000
Safety and Security	\$1,400,000
Programmatic Agreement– Historic Preservation Com.	\$200,000
HDOT Coordination Consultant - Airport Section	\$1,400,000
HDOT State Safety Oversight Agency (SOA) Manager	\$421,000
Kako'o Consultant	\$100,000
Contingency	\$200,000,000
Recertifications	\$50,000,000
<b>Subtotal FY 2016 Proposed</b>	<b>\$422,249,700</b>
<b>FY 2015 Re-Appropriation:</b>	
Pearl Highlands Parking Structure/Bus Transit Center	\$173,507,400
Airport Station Group Construction	\$63,346,900
City Center Section Utilities Construction	\$63,025,100
Airport and City Center Sections Guideway	\$682,463,200
UH West Oahu Park-and-Ride and Ho'opili Station	\$2,465,900
Right of Way	\$20,000,000
Utilities	\$50,000,000
<b>Subtotal FY 2015 Reappropriations</b>	<b>\$1,054,808,500</b>
<b>Total Original Proposed Budget</b>	<b>\$1,477,058,200</b>
<b>Re-Appropriations of Previously Approved Funds:</b>	
West Side SG - West Oahu / Kam Hwy (Base); Design Portion of Pearl Highlands Garage (now a DB contract); and transfer of currently encumbered funds for the Fare Collection System	\$168,748,385
Right of Way net, Utility Relocation net, and Art in Transit	\$137,700,000
<b>Total Re-Appropriation Carry Forward</b>	<b>\$306,448,385</b>
<b>Total Requested Including Re-Appropriations</b>	<b>\$1,783,506,585</b>

# Honolulu Authority for Rapid Transportation

## STAFF SUMMARY

**TITLE:**  
**RESOLUTION NO. 2015-34 APPROVING OPERATING AND CAPITAL BUDGETS FOR FISCAL YEAR 2016 ENDING JUNE 30, 2016**

**STAFF CONTACT:**  
 Diane Arakaki

**DATE:**  
 June 25, 2015

Type:	Goal	Focus Area	Reference Notes
<input checked="" type="checkbox"/> Action/Approval	<input checked="" type="checkbox"/> Project Delivery	<input type="checkbox"/> Livability/Land Use	
<input type="checkbox"/> Information	<input type="checkbox"/> Service Delivery	<input type="checkbox"/> Partnerships	
<input type="checkbox"/> Follow-up	<input type="checkbox"/> Resource Stewardship	<input checked="" type="checkbox"/> Agency Admin.	

**1. Purpose:**

Approval of the Fiscal Year 2016 Operating and Capital Budgets

**2. Background/Justification**

The FY2016 Operating and Capital Budgets were approved by the HART Finance Committee and transmitted to the Mayor and City Council on October 23, 2014.

**3. Procurement Background**

N/A

**4. Financial/Budget Impact**

Appropriates funds to ensure that both operating and capital expenditures are properly controlled and accounted for in FY2016.

**5. Policy Impact**

N/A

**6. Public Involvement**

There were opportunities for public input and testimony at the following Board or Finance Committee meetings on:

October 9, 2014

October 23, 2014

March 12, 2015

April 23, 2015

May 21, 2015

and now June 25, 2015 on the HART Operating and Capital budgets.

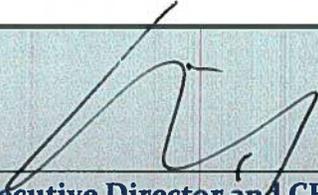
**7. Alternatives**

N/A

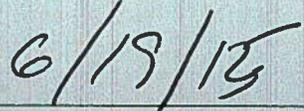
**8. Exhibits**

None

**Certified and Recommended by:**



Executive Director and CEO



Date

**Honolulu Authority for Rapid Transportation**

**RESOLUTION NO. 2015 - 35**

**ADOPTING A SIX-YEAR CAPITAL PROGRAM FOR FY 2016-2021**

WHEREAS, the Honolulu Authority for Rapid Transportation (HART) has been established pursuant to Article XVII of the Revised Charter of the City and County of Honolulu 1973, as amended (Charter); and

WHEREAS, Section 17-104(i) of the Charter directs the Executive Director to prepare and maintain a six-year capital program for the Authority; and

WHEREAS, Section 17-103(3)(e) of the Charter directs the HART Board of Directors (Board) to review, modify as necessary, and adopt a six-year capital program within six months of the creation of the Authority and annually update the six-year capital program, provided that such capital programs shall be submitted by the Executive Director; and

WHEREAS, a six-year capital program has been submitted by the Executive Director to the Board; and

WHEREAS, the Finance Committee and the Board have reviewed said six-year capital program for the Authority;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of HART as follows:

1. That the six-year capital program, shown in Exhibit A attached hereto and made a part hereof by reference, be and hereby is, adopted as the six-year capital program of HART for FY 2016-2021; and
2. That this Resolution shall take effect immediately upon its adoption.

ADOPTED BY THE Board of the Honolulu Authority for Rapid Transportation on

\_\_\_\_\_.

Exhibit A – SIX-YEAR CAPITAL PROGRAM FY 2016-2021

\_\_\_\_\_  
Board Chair

ATTEST:

\_\_\_\_\_  
Board Administrator

**EXHIBIT A**

**Honolulu Authority for Rapid Transportation  
Requested Six-Year Capital Program  
FY 2016 - FY 2021**

	Proposed FY 2016	Proposed FY 2017	Proposed FY 2018	Proposed FY 2019	Proposed FY 2020	Proposed FY 2021	Total 6 Year CIP
<b>Construction</b>	<b>\$143,976,100</b>	<b>\$27,380,200</b>	<b>\$8,598,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$179,954,300</b>
Dillingham SG, Kaka'ako SG Construction	\$122,502,100	\$0	\$0	\$0	\$0	\$0	\$122,502,100
UH West Oahu Park-and-Ride and Ho'opili Station	\$0	\$13,059,200	\$0	\$0	\$0	\$0	\$13,059,200
Elevators and Escalators	\$16,474,000	\$14,321,000	\$8,598,000	\$0	\$0	\$0	\$39,393,000
Owner-Controlled Insurance Program (OCIP)	\$5,000,000	\$0	\$0	\$0	\$0	\$0	\$5,000,000
<b>Consultants</b>	<b>\$27,953,600</b>	<b>\$17,011,000</b>	<b>\$16,311,000</b>	<b>\$16,310,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$77,585,600</b>
Gen Engineering Consultant FD-Construction	\$8,233,500	\$8,233,000	\$8,233,000	\$8,233,000	\$0	\$0	\$32,932,500
HDOT Coordination Consultant - West Oahu/Farrington	\$5,613,000	\$0	\$0	\$0	\$0	\$0	\$5,613,000
HDOT Coordination Consultant – Kamehameha Section	\$2,600,000	\$0	\$0	\$0	\$0	\$0	\$2,600,000
HDOT Coordination Consultant - Airport Section	\$1,400,000	\$0	\$0	\$0	\$0	\$0	\$1,400,000
HDOT State Safety Oversight Agency (SOA) Manager	\$421,000	\$0	\$0	\$0	\$0	\$0	\$421,000
Owner-Controlled Insurance Program (OCIP) Consultant	\$208,100	\$0	\$0	\$0	\$0	\$0	\$208,100
Core Systems Support	\$8,078,000	\$8,078,000	\$8,078,000	\$8,077,000	\$0	\$0	\$32,311,000
Safety and Security	\$1,400,000	\$700,000	\$0	\$0	\$0	\$0	\$2,100,000
<b>Programmatic Agreements</b>	<b>\$300,000</b>	<b>\$100,000</b>	<b>\$100,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$500,000</b>
Kako'o Consultant	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0	\$300,000
Programmatic Agreement– Historic Preservation Com.	\$200,000	\$0	\$0	\$0	\$0	\$0	\$200,000
<b>Quality Audits</b>	<b>\$20,000</b>	<b>\$20,000</b>	<b>\$20,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$60,000</b>
<b>Subtotal</b>	<b>\$172,249,700</b>	<b>\$44,511,200</b>	<b>\$25,029,000</b>	<b>\$16,310,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$258,099,900</b>
<b>Contingency</b>	<b>\$200,000,000</b>	<b>\$53,000,000</b>	<b>\$36,000,000</b>	<b>\$86,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$375,000,000</b>
<b>Recertifications</b>	<b>\$50,000,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$50,000,000</b>
<b>Total FY 2016</b>	<b>\$422,249,700</b>	<b>\$97,511,200</b>	<b>\$61,029,000</b>	<b>\$102,310,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$683,099,900</b>
Re-Appropriations FY 2015	\$1,361,256,885	\$0	\$0	\$0	\$0	\$0	\$1,361,256,885
<b>Grand Total</b>	<b>\$1,783,506,585</b>	<b>\$97,511,200</b>	<b>\$61,029,000</b>	<b>\$102,310,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,044,356,785</b>

# Honolulu Authority for Rapid Transportation

## STAFF SUMMARY

<b>TITLE:</b> RESOLUTION NO. 2015-35 ADOPTING A SIX-YEAR CAPITAL PROGRAM FOR FY 2016-2021		<b>STAFF CONTACT:</b> Diane Arakaki	<b>DATE:</b> June 25, 2015
<b>Type:</b>	<b>Goal</b>	<b>Focus Area</b>	<b>Reference Notes</b>
<input checked="" type="checkbox"/> Action/Approval	<input checked="" type="checkbox"/> Project Delivery	<input type="checkbox"/> Livability/Land Use	
<input type="checkbox"/> Information	<input type="checkbox"/> Service Delivery	<input type="checkbox"/> Partnerships	
<input type="checkbox"/> Follow-up	<input type="checkbox"/> Resource Stewardship	<input checked="" type="checkbox"/> Agency Admin.	

**1. Purpose:**  
Adoption of the Fiscal Year 2016-2021 Six-Year Capital Program

**2. Background/Justification**  
The Fiscal Year 2016-2021 Six-Year Capital Program was approved by the HART Finance Committee on October 9, 2014 and referred to the full Board of Directors for adoption.

**3. Procurement Background**  
N/A

**4. Financial/Budget Impact**  
Forecasts capital budget for the upcoming six fiscal years.

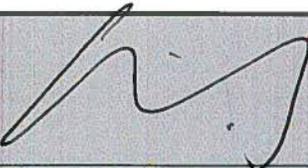
**5. Policy Impact**  
N/A

**6. Public Involvement:**  
Opportunities on 10/9/14 and 6/25/15 specifically.

**7. Alternatives**  
N/A

**8. Exhibits**  
N/A

**Certified and Recommended by:**


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**Executive Director and CEO**

6/19/15

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**Date**