

## **PMOC MONTHLY REPORT**

**Honolulu Rail Transit Project**  
City and County of Honolulu  
Honolulu Authority for Rapid Transportation (HART)  
Honolulu, HI

December 2013 (FINAL)

PMOC Contract Number: DTFT60-09-D-00012  
Task Order No. 2: Honolulu Rail Transit Project  
Project No: DC-27-5140  
Work Order No. 1  
OPs Referenced: OP 1 and 25

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Length of Time Assigned: Five Years (November 18, 2009 through November 17, 2014)

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## 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. 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)
- **Length:** 20 miles
- **No. of Stations:** 21
- **Additional Facilities:** Maintenance and Storage Facility and parking facilities
- **Vehicles:** 80 vehicles
- **Ridership Forecast:** Weekday boardings – 99,800 (2020); 114,300 (2030)

### 1.2 Project Status

*(Note: Status of all contracts is provided in Appendix B.)*

- HART issued a suspension of construction work on August 24, 2012 for all ground-disturbing activities after a ruling by the Hawaii State Supreme Court requiring completion of the Archaeological Inventory Survey (AIS). All requirements of the lawsuit have been satisfied to allow construction to resume. City Council approved the SMA permit on September 11, 2013. HART resumed construction on September 16, 2013. Primary construction activities planned for the next 60 days include:
  - WOFH DB Contract – Utility relocations; construction of drilled shafts and columns; grading of precast facility
  - KHG DB Contract – Utility relocations; method and test shafts
  - MSF DB Contract – Clearing and grubbing; mass grading of site; and installation of foundations.
- The HART Board has approved a change order with AHJV to install Platform Screen Gates (PSG) at all stations. The PSGs, which will be furnished by Stanley, will cost approximately \$27 million. The majority of the funds will come from project contingency.
- The following table presents the status of the current design and construction contracts:

Contract	Contractor	Contract Value	Expended	Status
West Oahu /Farrington Highway (WOFH) Design-Build (DB) Contract	Kiewit	\$552.3M	\$193.4M	Utility relocations; construction of drilled shafts and columns; preparation of precast facility; design activities ongoing
Kamehameha Highway (KH) Guideway DB Contract	Kiewit	\$378.8M	\$85.7M	Utility relocations; method and test shafts; design activities ongoing
Maintenance and Storage (MSF) DB Contract	Kiewit/Kobayashi Joint Venture	\$221.2M	\$54.5M	Clearing and grubbing; mass grading of site; design activities ongoing
Core Systems Contract	Ansaldo Honolulu Joint Venture (AHJV)	\$575.9M	\$47.5M	Interim design activities ongoing.
Airport Guideway and Utilities Design	AECOM	\$39.6M	\$26.8M	Pre-final design activities ongoing
City Center Guideway and Utilities Design	AECOM	\$44.4M	\$13.5M	Pre-final design activities ongoing
Farrington Station Group Design 1 & 2	HDR/HPE, Inc. URS	\$12.2M	\$8.4M	HDR submitted final plans; URS is currently working on FD to combine station design packages into one construction contract.
West Oahu Station Group	URS	\$7.8M	\$5.1M	Pre-final design activities ongoing
Kamehameha Station Group Design	Anil Verma Associates, Inc.	\$8.7M	\$6.4M	Pre-final design activities ongoing
Airport Station Group Design	AECOM	\$10.1M	\$6.5M	Pre-final design activities ongoing
Dillingham and Kaka'ako Station Group design	Perkins & Will	\$18.3	\$0M	PE activities ongoing
Elevators and Escalators	Schindler Elevator Corp	\$50.9	\$0M	PE activities started for West Loch and Waipahu stations

HART has established design review milestones according to the following stages of design development:

- (1) Definitive Design (or Preliminary Engineering) – Intended to verify that the concepts proposed meet HART Concept Documents (or provide substantiated reason for change), and to verify that design complies with the Contract requirements.
- (2) Interim Designs – Intended to resolve conflicts and unresolved comments from the Definitive Design and prior to Final Design. Workshops, meetings and “over-the-shoulder” reviews facilitate interim design reviews by HART.
- (3) Pre-Final Design (90% design)
- (4) Final Design (100% design)

The following table provides a summary of Design Percent Complete on all contracts provided for the project:

Item	Contract Number	Final Design Contracts	Contractor/ Consultant	Percent Complete
1	DB-120	West Oahu Farrington Highway Guideway Project (WOFH)	Kiewit	96%
2	DB-320	Kamehameha Highway Guideway Project (KHG)	Kiewit	94%
3	DB-200	Maintenance and Storage Facility (MSF)	Kiewit/Kobayashi JV	98%
4	DBOM-920	Core Systems Contract (CSC)	Ansaldo Honolulu JV	22%
5	FD-430	Airport Segment Guideway and Utilities Final Design	AECOM	70%
6	FD-530	City Center Segment and Utilities Final Design	AECOM	42%
7	FD-140	West Oahu Station Group (WOSG)	URS	85%
8	FD-240	Farrington Highway Station Group (FHSG) 1 & 2	HDR/URS	77%
9	FD-340	Kamehameha Highway Station Group (KHSG)	Anil Verma	80%
10	FD-245	Pearl Highlands Parking Structure/Bus Transit Center	Pending	10%
11	FD-440	Airport Station Group Design	AECOM	70%
12	FD-600	UH West Oahu Park and Ride/Ho'opili Station Design	To Be Determined	10%
13	FD-550	Dillingham & Kaka'ako Station Group Design	Perkins & Will	10%
14	MI-930	Elevators and Escalators	Schindler	10%

The Total Design Percent Complete is approximately 57.0% as of October 2013. Final Design work and engineering activities are still proceeding on all other contracts that have been awarded to date.

### 1.3 PMOC Issues or Concerns

The following key issues or concerns have been identified:

- Project Controls
  - Budget – HART is updating their project estimate. They will submit components to the PMOC for review as they are available. The final component of the estimate will be the Airport and City Center Guideway and Utility Relocations, which should be available in January 2014.
  - Schedule – HART anticipates submitting an updated MPS by December 2013 for PMOC review.
  - Contingency – HART's current assessment indicates a balance of uncommitted contingency of \$610 million. This is based on the outcome of negotiations with Kiewit related to the Notice to Proceed and AIS Delays. The PMOC will review the summary of settlement and other known changes yet to be finalized when it is made available to confirm that it includes all potential HART exposure.
  - The PMOC has emphasized the need for HART to revisit both its primary and secondary mitigation measures. It is anticipated that a risk refresh workshop would be held in early 2014, once a review of the updated MPS and project estimate is completed.
  
- The grantee must execute a license agreement with the Department of Hawaiian Home Lands (DHHL) for the MSF on the Navy Drum Site. A Consent to Construct is in place. The license agreement was approved by City Council in August 2013 and is awaiting final execution. HART is awaiting confirmation from DHHL that license agreement has been executed.

- An interim HDOT State Oversight Agency (SOA) Project Manager has been working part-time since April 2011. Given the status of this Project, it is critical that the permanent SOA Project Manager be identified as soon as possible. HDOT revised the job posting to eliminate the Professional Engineer license requirement to broaden the pool of applicants. As of November 2013, HDOT has filled the SOA Project Manager position.
- The PMOC had recommended that HART engage a consultant to perform independent cost estimates for the remaining contract packages, including any repackaging efforts. HART indicated that they had enlisted a subconsultant under the Program Management Consultant contract to provide these services.
- HART intends to build an interim park-n-ride facility at the University of Hawaii West Oahu Station. This facility will 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. The PMOC has cautioned HART in use of federal funds to build an interim facility that will be replaced by a permanent facility that will be constructed using federal funds. It is not known how long the interim facility will be in use before the permanent facility can be constructed. UH-Oahu intends to use the interim facility for campus parking after HART no longer has need for the facility.
- The Navy and HART continue to meet to discuss the Pearl Harbor Station. The Navy has agreed not to pursue shifting the station ewa. However, the Navy has requested that HART construct a pedestrian overpass from the station to the Makalapa Gate. This would require encroachment of the historic site boundary, which would result in the need for an SEIS. FTA has requested that HART revisit their assessment of at-grade pedestrian access across Kamehameha Highway before discussions continue. New Navy Policy requires monetary compensation for property acquisitions, easements and administrative costs. The Navy is looking for fair market value for all property acquisitions. These additional costs were not anticipated by HART. HART is evaluating potential cost and time impacts. HART indicated that Navy staff is agreeable to considering a waiver regarding the new Navy Policy requiring monetary compensation for property acquisitions, easements and administrative costs. HART is preparing backup for the Navy to consider a waiver.
- City Center Segment – The PMOC recommended that HART hold an interactive planning workshop to determine the impacts from the federal court case on the MPS as it relates to activities in the City Center Segment. The PMOC expressed concern that HART has not fully assessed the impacts from delayed activities such as real estate acquisition and final design. HART has reported that such workshops are now being held on a regular basis to aid in the update and management of the MPS.
- HART submitted a White Paper on the possibility of starting revenue service with 4-car trains in place of the initial plan of 2-car trains. The PMOC provided initial review comments to HART. On September 4, 2013, HART provided an updated White Paper to address the PMOC comments and to include additional information that had been requested by FTA. Prior to completion of this update, HART commissioned their GEC

to prepare a separate White Paper on anticipated impacts to ridership as a result of starting service with 4-car trains. The PMOC submitted a DRAFT Spot Report to FTA on September 19, 2013. HART and the FTA have agreed on the use of 4-car trains at the start of revenue service. HART inquired whether formal documentation is required to memorialize this agreement prior to a FFGA Amendment that would be executed. HART indicated that there is disagreement at staff level with AHJV on the magnitude of the cost savings associated with this change. HART executive management stated that they are confident that they will be able to maximize savings based on high-level discussions with AHJV management. The PMOC emphasized the importance of realizing the estimated savings presented in support of the change to 4-car trains.

- HART and Kiewit have completed workshops to address settlement of NTP Delays and AIS Delays. HART reported that most issues have been resolved, and bi-lateral change orders would be executed. HART provided the PMOC with a summary of all issues that have been resolved, including cost and time impacts. The PMOC will review the proposed change order(s) and provide the FTA with an assessment. HART has indicated that they would like to execute the change order(s) in December 2013. One issue that was not included in the settlement agreement is escalation.
- The Federal District Court held a status conference in the *Honolulutraffic.com v. FTA* case on December 11, 2013. The court has scheduled a final hearing on the Supplemental EIS/Amended ROD issues for February 6, 2014. The primary issue is the injunction on the City Center Segment of the Project. HART is not able to acquire real estate in this segment or execute third party agreements associated with this segment. They intend to issue an Invitation to Bid for the Airport/City Center Segments and Utility Relocations in June 2014. If this injunction continues, there could be significant impacts to this construction contract.

## 1.4 Core Accountability Items

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	\$101,900,000
	Total Contingency (Allocated plus Unallocated)	\$643,600,000	\$610,000,000
<b>Schedule</b>	Revenue Service Date	1/31/2020	1/31/2020
<b>Total Project Percent Complete</b>	Based on Expenditures	36.6%	
	Based on Earned Value	18.4% (October 2013)*	
Major Issues	Status	Comments/Planned Action	
Technical Capacity and Capability (TCC) Issues	<p>PMOC had recommended that HART engage a consultant to perform independent cost estimates for the remaining contract packages, including any repackaging efforts.</p> <p>The PMOC is concerned with the recent loss of staff due to retirement or turnover:</p> <ul style="list-style-type: none"> <li>• Grant Administrator</li> <li>• Deputy Director of Planning and Environmental</li> <li>• Deputy Director of Construction</li> <li>• Deputy Director of ROW</li> <li>• Vehicle Engineer</li> </ul>	<p>HART has enlisted a subconsultant under the Program Management Consultant contract to provide these services. It is anticipated that this work will begin in September 2013.</p> <p>HART is in the process of hiring an executive recruitment company to fill some of the vacant positions</p>	

<p>Potential Cost &amp; Schedule Delays</p>	<p>HART has experienced delays and has incurred costs as a result of both the state and federal lawsuits.</p>	<p>HART continues to analyze the cost and schedule ramifications resulting from the Hawaii Supreme Court AIS ruling. HART resumed construction on September 16, 2013.</p> <ul style="list-style-type: none"> <li>• Budget – HART is updating their project estimate. They will submit components to the PMOC for review as they are available. The final component of the estimate will be the Airport and City Center Guideway and Utility Relocations, which should be available in January 2014.</li> <li>• Schedule – HART anticipates submitting an updated MPS by December 2013 for PMOC review.</li> <li>• Contingency – HART’s current assessment indicates a balance of uncommitted contingency of \$610 million. This does not include amounts for known changes yet to be finalized at the time of the Bottom-Up Estimate. The cost contingency drawdown forecast is approximately \$460 million based on the outcome of negotiations with Kiewit related to the Notice to Proceed and AIS Delays. The PMOC will review the summary of settlement and other known changes yet to be finalized when it is made available to confirm that it includes all potential HART exposure.</li> </ul>
<p>Remaining Construction Contracts</p>	<p>HART is in the process of revising the Contract Packaging Plan. Several contract packages are being combined to maximize economies of scale and reduce interface needs between design and construction contractors to achieve both cost and schedule benefits.</p>	<p>HART/PMOC continues to hold monthly breakout sessions to review changes being considered for each contract. Discussions focus on opportunities to reduce costs and accelerate contract-scheduled activities to attain key milestones earlier than targeted.</p>

General Excise Tax (GET)	GET receipts continue to be an issue.	HART has requested monthly updates from the state on the GET revenues. GET surcharge revenue received on October 31, 2013 for the quarter ending in September 2013 marks the highest quarterly surcharge amount received by HART to date.
Post-Rod Changes	HART is considering several proposed design changes that may require additional environmental review.	HART intends to submit information on each proposed change for FTA to determine the level of documentation required to assess impacts and subsequent mitigation measures.  FTA has approved the documentation related to the relocation of the Ho'opili Station. FTA has requested that HART provide an updated matrix of all proposed Post-ROD changes, including submittal dates and requested dates for FTA responses. HART submitted the documentation for the proposed Airport Guideway and Station on November 8, 2013. HART anticipates submitting documentation on Middle Street changes in March 2014.
Safety and Security Certification Manager for Core Systems Contract	Ansaldo Honolulu Joint Venture (AHJV) must provide a full-time, on site Safety and Security Certification Manager for the CSC.	HART approved AHJV's candidate for this position in November 2013.
Safety and Security Support Request for Proposal (RFP)	HART to issue RFP	HART re-issued the RFP in December 2013 due to less than 2 bidders. Hawaii law requires at least 3 bidders to award a contract. HART performed an outreach and feels that they will have enough companies to submit proposals.
<b>Date of Next Quarterly Meeting:</b>	TBD	

\*Percent Complete Based on Earned Value is less than Percent Complete Based on Expenditures primarily due to suspension of construction activities. It is anticipated that this variance can be mitigated once construction activity resumes.

## **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 reviewing their numerous plans and procedures to determine whether updates are required 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.

Following are some key positions that are vacant and must be filled by HART or through their PMC:

- Independent cost estimator – This position has been filled through PMC in October 2013.
- Configuration Manager – Newly identified position; HART started the recruitment process in July 2013. The independent cost estimator is temporarily serving in this role until a candidate is hired by HART.
- Grants Administrator – HART is in the process of hiring an executive recruitment company to assist with filling this position
- Deputy Director of Planning and Environmental – HART is in the process of hiring an executive recruitment company to assist with filling this position
- Deputy Director of Construction – HART is in the process of interviewing potential candidates
- Deputy Director of Right of Way – Morris Atta will handle all coordination associated with right-of-way for the Project.
- Vehicle Engineer – HART is in the recruitment process.

HART has issued Request for Proposals in July 2013 for a new GEC contract, a Construction Engineering and Inspection (CE&I) West Contract, and a CE&I East Contract. HART issued NTP for the new GEC contract in December 2013 and anticipates having the CE&I consultants on board by January 2014. The scope of work for the new GEC is modified significantly from that for the current GEC contract and was developed to fit within the project budget more effectively.

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

##### Project Controls for Scope

- As a result of project delays, HART is in the process of revising the Contract Packaging Plan (CPP). Several contract packages are being combined to maximize economies of scale and reduce interface needs between design and construction contractors to achieve both cost and schedule benefits.
- Despite the AIS delay, HART is implementing measures to maintain the March 30, 2019 full revenue service date (RSD), 10 months ahead of the January 31, 2020 FFGA target. This RSD is the milestone date reflected in the FFGA Master Project Schedule (MPS) and is consistent with all FFGA request submittals. The latest update of the MPS does

not indicate any delays to the Interim Opening or RSD at this time if construction were to resume in September 2013. The PMOC had expressed concern that HART has not fully assessed the impacts from delayed activities such as real estate acquisition and final design. HART has reported that such workshops are now being held on a regular basis to aid in the update and management of the MPS.

### 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:** March 2019
- **FFGA Revenue Service Date (RSD):** January 31, 2020

### Cost

- HART and the PMOC continue to hold monthly breakout sessions to review changes being considered for each contract. Breakout session discussions focus on opportunities to reduce costs and accelerate contract-scheduled activities to attain key milestones earlier than targeted.

### Quality

Following is a summary of HART Quality Management staff activities:

- Performed QA surveillance of MSF processes (Procurement, Product ID and Traceability, Inspection & Testing)
- Reviewed Inspection Test Plan (ITP) for WOFH, KHG, and MSF
- Completed the following audits:
  - Closed Combined QA and SS Audit of AUG/CCUG/ASG (AECOM)
  - Closed Combined QA and SS Audit of KHSG (AVA)
  - Combined QA and SS Audit of WOFH & KHG (KIWC)
  - Environmental Audit of AUG/CCUG/ASG (AECOM)
  - QA Audit of MSF (KKJV)
  - QA Audit of AHJV Siemens Industry, Inc
- HART intends to perform an Interim Buy America Audit of the rail vehicles by the end of the year, after AHJV has secured purchase orders with the majority of their suppliers. The PMOC informed HART that Virginkar and Associates, a subconsultant to the PMOC, is available if needed to assist them with the planning of the review given their experience in performing similar audits.

### System Safety and Security

- HART submitted a revised update to the SSMP on July 1, 2013 and the revised SSCP on August 13, 2013. The PMOC conducted a Safety and Security Management Plan (SSMP) Adherence Review from September 10-12, 2013.
- Ansaldo Honolulu Joint Venture (AHJV) provided an interim part-time, on site Safety and Security Certification Manager (SSCM) for the CSC in April 2013 with as needed support from Italy. AHJV submitted a replacement SSCM to HART for approval in June

2013. HART did not approve the replacement SSCM, but allowed him to work until an acceptable SSCM is approved by HART. HART approved a SSCM for AHJV in November 2013.

- An interim HDOT State Oversight Agency (SOA) Project Manager has been working part-time since April 2011. HDOT had difficulty finding a full-time SOA Project Manager. As of November 2013, HDOT has filled the SSOA Project Manager position.

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

#### National Environmental Policy Act (NEPA)

- The ROD was issued on January 18, 2011.
- Attachment A to ROD, dated January 2011, listed 197 mitigations to which the Project is committed. These mitigations deal with subjects such as real estate acquisitions, easements, relocations, landscaping, design details, protection of historic and environmentally-sensitive resources, noise abatement, lighting, safety, security, public health, and the treatment of Hawaiian iwi. The grantee is committed to implementing all mitigation measures specified by the ROD and all terms of the Project's Programmatic Agreement (PA), also instituted in January 2011. The grantee has hired a Kako'o Consultant to ensure compliance with the PA. While the actual implementation of many of the detailed mitigations will occur during Final Design and construction, the grantee has included requirements for their design in RFPs that have already been issued. Thus, the grantee has contractual assurances that the ROD's requirements will be met.
- Construction and Environmental Work – HART issued a suspension of construction work on August 24, 2012 for all ground-disturbing activities after a ruling by the Hawaii State Supreme Court requiring completion of the Archaeological Inventory Survey (AIS). All requirements of the lawsuit have been satisfied to allow construction to resume. City Council approved the SMA permit on September 11, 2013. HART resumed construction on September 16, 2013.
- Proposed Design Changes – HART is considering several proposed design changes that may require additional environmental review. HART intends to submit information on each proposed change for FTA to determine the level of documentation required to assess impacts and subsequent mitigation measures.

FTA has approved the documentation related to the relocation of the Ho'opili Station. FTA has requested that HART provide an updated matrix of all proposed Post-ROD changes, including submittal dates and requested dates for FTA responses. HART submitted the documentation for the proposed Airport Guideway and Airport Station on November 8, 2013. HART intends to submit Middle Street Station changes in March 2014.

## 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 99,800 weekday boardings at the Revenue Service Date in the year 2020 and 114,300 weekday boardings in the year 2030. It will provide two significant areas with potential for Transit-Oriented Development, one near the Airport and one in the surrounding industrial areas. The initial fleet will include 80 “light metro” rail vehicles.

### 2.2.1 Status of Design/Construction Documents

The status of all contracts is provided in Appendix B. The Total Design Percent Complete is approximately 52% as of August 2013. Final Design work and engineering activities are still proceeding on all contracts that have been awarded to date. The table in Section 1.2 provides a summary of Design Percent Complete on all contracts provided for the project.

The following table provides a summary of VE results provided for the project:

Source	No. of Proposals Received	Estimated Value (M)	No. of Proposals Accepted	Estimated Value (M)
VE Workshop for Stations	30	\$318.5	26	\$104.1
ATC Proposals – WOFH DB Contract	29	\$85.4	13	\$60.5
ATC Proposals – KH DB Contract	16	\$29.0	7	\$18.3
ATC Proposals – MSF DB Contract	11	\$16.1	5	\$2.7
ATC Proposals – CSC	41	\$35.6	15	\$15.5
VE Workshop for Airport & City Ctr.	27	\$225.6	13	\$109.2
<b>TOTAL</b>	<b>154</b>	<b>\$710.2</b>	<b>79</b>	<b>\$310.3</b>

\*Total includes “conditionally accepted” Alternate Technical Concept (ATC) proposals

The PMOC continues to monitor the project to confirm that all VE recommendations are reviewed by the grantee and that those that are accepted are implemented accordingly. There are currently 79 VE proposals that have been accepted by HART. These proposals have been incorporated in whole or in part where applicable to the current level of design.

### 2.2.2 Status of Third-Party Agreements

The following table provides the status of Third Party Agreements for the project:

<b>Agreement</b>	<b>Completion</b>	<b>Target</b>	<b>Section</b>	<b>Status</b>
University of Hawaii (UH) Master Agreement	Pending	January 2014	WOFH, KHG, City Center	Final negotiations are underway; right-of-entry to be granted
Leeward Community College (LCC) Consent to Construct	Pending	December 2013	WOFH	In negotiations. Secured design right of entry
UH West O'ahu (UHWO) Consent to Construct	Pending	December 2013	WOFH	In negotiations. Secured design right of entry
UH West O'ahu (UHWO) Sub-agreement	Pending	January 2014	WOFH	In negotiations. Secured design right of entry
Leeward Community College Sub-agreement	Pending	January 2014	WOFH	In negotiations. Secured design right of entry
Department of Land and Natural Resources (DLNR) Right of Entry	September 13, 2013		WOFH	Executed
Department of Land and Natural Resources (DLNR) Easement	Pending		WOFH	Easement documents in process
Department of Education Master Agreement and Consent to Construct	Feb 8, 2011		WOFH	Executed
DOE/DLNR Easement	Pending		WOFH	Easement request in process
DR Horton Agreement for Construction	Mar 7, 2012		WOFH	Executed
DR Horton Final Agreement	Pending		WOFH	Document in process
DHHL Master Agreement	Mar 10, 2010		WOFH, MSF	Executed
DHHL Consent to Construct	Dec 1, 2011		WOFH, MSF	Consent to construct in place.
DHHL License	Pending	November 2013	WOFH, MSF	License agreement approved by City Council. Awaiting final execution
HDOT Master Agreement	Oct 31, 2011		WOFH	Executed
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Apr 5, 2012		WOFH	Executed
UH Urban Garden Consent to Construct	Pending	December 2013	KHG	In negotiations. Secured design right of entry
UH Urban Garden Sub-agreement	Pending	December 2013	KHG	In negotiations. Secured design right of entry
HDOT Master Agreement for KHG, Airport and City Center	October 11, 2013		KHG, Airport, City Center	Executed
HDOT JU&O Sub-agreement	October 11, 2013		KHG Airport, City Center	Executed
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry	September 13, 2013		KHG	Executed
Aloha Stadium / Department of Accounting & General Services (DAGS) Easement	Pending		KHG	Easement in process

Agreement	Completion	Target	Section	Status
U.S. Navy / General Services Administration (GSA)	Pending	N/A	Airport	Easements and fee taking are being processed by the Navy. Under new directive Navy will charge for all licenses and easements
U.S. Post Office Honolulu Processing Center	Pending	April 2014	Airport	Finalized design. Title Search and mapping have been initiated
Federal Aviation Administration (FAA) Master Agreement	Pending	Feb 2014	Airport	As design progresses a determination will be made if an agreement is required.
HDOT JU&O Sub-agreement	Pending	March 2014	Airport	Will complete after Master Agreement is completed.
HDOT JU&O Sub-agreement	Pending	July 2014	City Center	Will complete after Master Agreement is completed.
Honolulu Community College (HCC) Consent to Construct	Pending	July 2014	City Center	In negotiations. Secured design right of entry
Honolulu Community College (HCC) Sub-agreement	Pending	July 2014	City Center	In negotiations. Secured design right of entry
OCC/Hawaii Department of Public Safety Agreement Dillingham Blvd	Pending	July 2014	City Center	Required due to parking space reduction at OCC for roadway widening. Finalizing requirements
Federal Court House/GSA	Pending	Oct 2014	City Center	Awaiting final design requirements for the guideway. On hold due to federal order.
HI Community Development Agreement (HCDA)	Pending	Oct 2014	City Center	Awaiting final design requirements for the guideway. On hold due to federal order.
DAGS	Pending	Oct 2014	City Center	Awaiting final design requirements for the guideway. On hold due to federal order.

The PMOC has monthly “break out” sessions with HART to discuss the status of Third Party Agreements. Pending Third Party Agreements are not currently having an effect on the MPS.

### 2.2.3 Delivery Method

As noted above, HART is in the process of revising the Contract Packaging Plan (CPP). Several contract packages are being combined to maximize economies of scale and reduce interface needs between design and construction contractors to achieve both cost and schedule benefits.

Construction of the project guideway is to be implemented in four segments. The method of delivery for the four guideway segments is as follows:

- Segment I – East Kapolei to Pearl Highlands – DB
- Segment II – Pearl Highlands to Aloha Stadium – DB
- Segment III – Aloha Stadium to Middle Street Station – DBB
- Segment IV – Middle Street Station to Ala Moana Center – DBB

HART is combining Segments III and IV into a single guideway construction contract.

### 2.2.4 Core Systems and Vehicle Status

Ansaldo Honolulu Joint Venture (AHJV) will design, furnish, install, test, and commission passenger vehicles, operating systems, auxiliary vehicles and equipment, and appurtenances, 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:

<b>Core System Description</b>	<b>Status</b>
<b>Core System - General</b>	
Notice to Proceed (NTP) Delay Claim	AHJV has asserted they have a 9-month delay in starting work due to CSC protest. HART has denied this delay. This issue is in dispute.
Hawaiian Electric Company (HECO) Estimated Traction Power Demand	HART to provide Hawaiian Electric Company (HECO) with AHJV simulations to estimate power demand based on actual operation scenarios. AHJV finalized consumption estimate. AHJV submitted revised simulations for fail over criteria and discussions with HECO are ongoing.
Fare Collection System	HART is reviewing possibility of installing fare gates
System Performance Design	There are some concerns with AHJV's method for calculating headways, round trip times, fleet size and system capacity. HART received updated System Performance Documents.
<b>Core System Train Control/SCADA Subsystem</b>	
Mixed Fleet Operation	<p>AHJV has issues with installing redundant systems for future 4-car train consist operation. HART is considering start of revenue service with 4-car trains that would mitigate this issue.</p> <p>HART submitted a White Paper on the possibility of starting revenue service with 4-car trains in place of the initial plan of 2-car trains. The PMOC provided initial review comments to HART. On September 4, 2013, HART provided an updated White Paper to address the PMOC comments and to include additional information that had been requested by FTA. Prior to completion of this update, HART commissioned their GEC to prepare a separate White Paper on anticipated impacts to ridership as a result of starting service with 4-car trains. The PMOC submitted a DRAFT Spot Report to FTA in September 2013.</p>
Maintenance Of Way (MOW) Vehicle Automatic Train Control (ATC) Capabilities	HART considering Automatic Vehicle Indication (AVI)/Automatic Vehicle Location (AVL)
<b>Core System Traction Electrification</b>	
Train Evacuation – Wayside Energy Storage	HART is now considering only one type of Wayside Energy Storage scenarios: Emergency Generators (Diesel).
<b>Core System Communication Subsystems</b>	
Guideway Walkway/Cableway	AHJV is proposing to install cable trough on the emergency walkway for the entire guideway due to concerns with smaller trapezoidal cavity in concrete guideway AHJV is coordinating with Kiewit.
<b>Core System O&amp;M Subsystem</b>	
Guideway Track Parameters	AHJV to provide HART with its assessment of gain/loss in trip time due to H1 changes.
<b>Core System Vehicle Subsystem</b>	

<b>Core System Description</b>	<b>Status</b>
Long gaps in contact rail for diamond crossovers	AHJV proposes smaller diamond crossovers to eliminate long gaps. This issue would also be resolved with the implementation of 4-car trains.
Vehicle/Platform Interface Tolerances	HART and AHJV are evaluating the gap tolerances between the vehicle and station platform
Derailment Mitigation	AHJV claims no responsibility for installing guard rails to prevent derailments. HART to provide AHJV with contract details.
Vehicle Schedule	AHJV is restructuring baseline schedule to include vehicle related activities.
<b>Core System Safety, Security &amp; RAM</b>	
AHJV Safety and Security Certification Manager	HART approved AHJV's Safety and Security Certification Manager in November 2013

## 2.3 Project Management Plan and Sub-Plans

The following table presents the status of each of the grantee's management deliverables.

<b>Sub-Plan</b>	<b>Revision No.</b>	<b>Date</b>	<b>Notes</b>
Quality Management Plan (QMP)	1	15-Feb-12	Accepted
Real Estate Acquisition and Management Plan (RAMP)	5	01-Jun-12	Accepted
Bus Fleet Management Plan (BFMP)	3	Mar-12	Accepted
Rail Fleet Management Plan (RFMP)	0.1	Mar-12	Accepted
Safety and Security Management Plan (SSMP)	4	05-Jun-13	Accepted
Safety and Security Certification Plan (SSCP)	3	28-Jun-13	Accepted
Configuration Management Plan	0.2	07-Feb-12	Accepted
Staffing and Succession Plan	5	25-May-12	Accepted
Risk and Contingency Management Plan (RCMP)	0	29-Jun-12	Accepted; has been routed for signature by HART
Operating Plan	0.2	29-Jun-12	Accepted
Force Account Plan	0.3	05-Jan-12	Accepted
Mitigation Monitoring Program	0	15-Mar-12	Accepted
Interface Management Plan	0.1	17-Jan-12	Accepted
Contract Packaging Plan	3.0	30-Mar-12	Accepted
Claims Avoidance Plan	0.1	24-Jan-12	Accepted
Construction Management Plan (CMP)	0.1	03-Feb-12	Accepted
Contract Resident Engineer Manuals (DB & DBOM)	0.1	Feb-12	Accepted
Contract Resident Engineer Manuals (DBB)	A	15-Mar-12	Accepted
Project Procedures			Accepted

HART is in the process of updating several of their procedures and management plans including the PMP, Contract Packaging Plan, Staffing and Succession Plan, and Construction Management Plan. These updates are necessary due to the organizational changes enacted by the Executive Director and the contract packaging changes that are being planned. HART submitted DRAFT updates of the SSMP, SSCP and one change order procedure in June 2013. Several other Drafts have not been re-submitted by HART to date. The PMOC is concerned that HART has several new consultants that have started or are about to start and their procedures and management plans are outdated. It is critical for HART to update these plans and procedures immediately.

## 2.4 Project Schedule Status

HART has consistently transmitted monthly updates of their Master Project Schedule (MPS) since January 2013. The MPS continues to improve as HART further evaluates the contract packaging plan and related schedule mitigation adjustments in response delays encountered from the construction suspension period due to the state and federal court case. HART resumed construction in September 2013 after satisfying all requirements stipulated by the Hawaii State Supreme Court regarding completion of the Archaeological Inventory Survey (AIS). FTA and HART have developed a proposed schedule for completion of the additional environmental evaluation required by the federal court ruling. As a result of an injunction by the federal court, HART cannot acquire real estate or perform any construction in the City Center Segment, which may have an effect on overall project schedule. A hearing was held August 15, 2013 in the appellate court, but no decision was made by the court at the time of the hearing. The federal district court has scheduled a final hearing on the Supplemental EIS/Amended ROD issues for February 6, 2014.

HART is using MPS progress updates to evaluate cause and effect of contract packaging consolidation, contract delivery methods and the construction suspension period impacts.

The Revenue Service Date (RSD) identified in the FFGA is January 30, 2020. HART's current MPS identifies the target date for the start of interim revenue service as June 2017 and revenue service as March 2019. The table below provides a comparison of key milestone dates at time of FFGA application and the current MPS.

Milestone Description	Activity ID	Finish Date		Variance (Days)
		FFGA Application Baseline	Current MPS	
Interim Revenue Service	MM-0100	29-Jun-16	20-Jun-17	(356)
Target for Full Revenue Service	DBOM-9270	12-Mar-19	30-Mar-19	(18)

The MPS update includes a construction suspension actual finish date of 16-Sep-13. The suspension period began August 2012 when the court halted all ground disturbing activities. The MPS update does not indicate any significant delays to the RSD although continuance of the federal court case will certainly adversely impact the RSD if not soon resolved. Since construction restarted on September 16, 2013 the PMOC will review the MPS update, which will include contractor schedule updates to ensure there are no impacts to the RSD.

Future MPS revisions include finalization of contract packaging and contract delivery method strategies, and revisions made by the construction contractor CPM schedules for each construction contract currently under suspension. HART stated they intend to use Design-Bid-Build for the Airport and City Center Utility and Guideway contracts.

The table below includes anticipated start dates for the remaining contracts yet to bid:

<b>Contract No.</b>	<b>Description</b>	<b>Anticipated Start Date</b> (October 2013 Update)
DBB505-45	Airport Utilities Relocation (Issue NTP)	05-Mar-14
DBB170-2020	West Oahu, Farrington Highway, Kamehameha Station Groups (NTP)	03-May-14
DBB510-85	City Center Segment Utilities (Construction NTP)	06-Jul-14
DBB520-2020gw	Airport and City Center Guideway (Construction NTP)	15-Dec-14
DBB470-2020	Airport Station Group (Construction NTP)	01-Mar-15
DBB570-2020	Dillingham Station Group	15-Dec-15
DBB575-2020	Kaka'ako Station Group	15-Dec-15
DBB275-2020	Pearl Highlands Parking Structure (Issue NTP)	30-Aug-13
DBB600-2620	UH West Oahu Park-n-Ride and Ho'opili Station Finishes (Issue NTP)	27-Feb-17

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

<b>Period: January 2014 – March 2014</b>		
<b>Activity</b>	<b>Responsibility</b>	<b>Date</b>
Monthly Progress Meeting	FTA, HART, PMC and PMOC	January 8, 2014
Risk Refresh Workshop	FTA, HART, PMC and PMOC	Pending HART submittal of updated MPS and project estimate.
Quarterly Progress Meeting	FTA, HART, PMC and PMOC	TBD
Monthly Progress Meeting	FTA, HART, PMC and PMOC	February 12, 2014
Monthly Progress Meeting	FTA, HART, PMC and PMOC	March 12, 2014

## 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:

<b>Source</b>	<b>Amount</b>
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 – \$0.789 billion (through October 2013)**

HART is updating their project estimate. They will submit components to the PMOC for review as they are available. The final component of the estimate will be the Airport and City Center Guideway and Utility Relocations, which should be available in January 2014.

### **2.5.1 Standard Cost Category (SCC)**

The most recent 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	EAC
<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>28,542,146</b>	<b>1,134,792,296</b>
10.04	Guideway: Aerial structure	1,175,328,184	1,022,380,670	152,947,514	8,015,046	1,039,563,896
10.08	Guideway: Retained cut or fill	8,077,393	7,492,943	584,450	0	6,436,256
10.09	Track: Direct fixation	86,332,027	79,437,204	6,894,823	20,527,100	82,862,790
10.11	Track: Ballasted	3,550,634	3,293,724	256,910	0	2,697,875
10.12	Track: Special (switches, turnouts)	2,040,724	1,700,603	340,121	0	3,231,479
<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>0</b>	<b>396,666,268</b>
20.01	At-grade station, stop, shelter, mall, terminal, platform	7,333,599	6,111,333	1,222,266	0	6,111,332
20.02	Aerial station, stop, shelter, mall, terminal, platform	353,476,148	294,563,457	58,912,691	0	273,163,457
20.06	Automobile parking multi-story structure	79,690,518	66,408,765	13,281,753	0	66,408,765
20.07	Elevators, escalators	65,665,424	54,721,187	10,944,237	0	50,982,714
<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>5,490,378</b>	<b>102,922,690</b>
30.02	Light Maintenance Facility	8,161,279	7,591,887	569,392	175,000	7,586,793
30.03	Heavy Maintenance Facility	40,906,889	38,099,138	2,807,751	2,657,874	37,857,030
30.04	Storage or Maintenance of Way Building	8,382,270	7,797,460	584,810	123,606	7,735,910
30.05	Yard and Yard Track	41,975,018	39,046,528	2,928,490	2,533,898	49,742,957
<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>246,419,339</b>	<b>956,870,031</b>
40.01	Demolition, Clearing, Earthwork	34,695,802	29,980,157	4,715,645	241,537	27,672,011
40.02	Site Utilities, Utility Relocation	350,694,801	299,449,755	51,245,046	9,346,181	303,893,943
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	7,228,935	6,590,542	638,393	554,431	3,777,603
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks	30,841,906	26,979,122	3,862,784	3,430,633	31,955,923
40.05	Site structures including retaining walls, sound walls	8,637,582	7,998,960	638,622	575,338	9,061,374
40.06	Pedestrian / bike access and accommodation, landscaping	48,262,816	41,073,897	7,188,919	0	41,873,040
40.07	Automobile, bus, van accessways including roads, parking lots	212,536,181	181,979,369	30,556,812	1,254,888	170,399,360
40.08	Temporary Facilities and other indirect costs during construction	410,969,241	386,517,624	24,451,617	231,016,331	368,236,777
<b>50</b>	<b>SYSTEMS</b>	<b>247,460,781</b>	<b>221,284,483</b>	<b>26,176,298</b>	<b>0</b>	<b>243,531,123</b>
50.01	Train control and signals	91,492,532	81,982,556	9,509,976	0	105,218,696
50.02	Traffic signals and crossing protection	12,524,011	10,458,227	2,065,784	0	10,251,336
50.03	Traction power supply: substations	32,873,934	29,500,927	3,373,007	0	31,027,311
50.04	Traction power distribution: catenary and third rail	36,426,286	32,878,150	3,548,136	0	29,996,873
50.05	Communications	59,889,234	53,691,339	6,197,895	0	54,365,017
50.06	Fare collection system and equipment	10,221,753	9,159,277	1,062,476	0	9,218,099
50.07	Central Control	4,033,031	3,614,007	419,024	0	3,453,791
<b>Construction Subtotal (10 - 50)</b>		<b>3,232,248,152</b>	<b>2,830,498,808</b>	<b>401,749,344</b>	<b>280,451,863</b>	<b>2,834,782,408</b>

SCC	SCC Description	FFGA Budget	Base Cost	Allocated Cont.	Incurred	EAC
<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>45,982,209</b>	<b>197,675,747</b>
60.01	Purchase or lease of real estate	201,658,907	179,360,664	22,298,243	42,758,148	179,360,664
60.02	Relocation of existing households and businesses	20,529,479	18,037,283	2,492,196	3,224,061	18,315,083
<b>70</b>	<b>VEHICLES</b>	<b>208,501,186</b>	<b>186,829,020</b>	<b>21,672,166</b>	<b>212,900</b>	<b>191,543,017</b>
70.02	Heavy Rail	186,061,066	166,721,385	19,339,681	0	172,637,073
70.06	Non-revenue vehicles	16,011,166	14,346,923	1,664,243	212,900	13,026,548
70.07	Spare parts	6,428,954	5,760,712	668,242	0	5,879,396
<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>462,392,365</b>	<b>1,072,272,923</b>
80.01	Preliminary Engineering	95,120,484	94,055,262	1,065,222	95,506,879	118,258,758
80.02	Final Design	257,934,908	228,321,632	29,613,276	73,246,523	194,727,277
80.03	Project Management for Design and Construction	385,825,694	366,458,463	19,367,231	231,434,460	360,706,787
80.04	Construction Administration & Management	218,155,752	199,656,728	18,499,024	37,151,894	198,079,928
80.05	Professional Liability and other Non-Construction Insurance	52,138,030	46,549,724	5,588,306	2,106,756	39,039,316
80.06	Legal; Permits; Review Fees by other agencies, cities, etc.	76,135,125	67,641,006	8,494,119	9,711,132	67,673,782
80.07	Surveys, Testing, Investigation, Inspection	24,955,327	21,759,335	3,195,992	8,334,101	28,983,004
80.08	Start up	73,560,706	65,996,664	7,564,042	4,900,620	64,804,071
<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>789,039,337</b>	<b>4,296,274,095</b>
	<b>UNALLOCATED CONTINGENCY</b>	101,871,170	0	101,871,170	0	101,871,170
<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>789,039,337</b>	<b>4,398,145,265</b>
	<b>FINANCE CHARGES</b>	173,058,242			0	173,058,243
	<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>789,039,337</b>	<b>4,571,203,508</b>

## 2.5.2 Contingency

HART has developed a detailed methodology for capturing all potential costs. Any potential changes are entered into HART's online contract management system by the Contract Managers. Project Controls reviews this information and meets weekly with the Contract Managers to agree on a range of potential exposure for each issue. The PMOC is of the opinion that this approach is reasonable for determining a range of exposure.

HART's forecast indicates a balance of uncommitted contingency of \$460 million. This is based on the outcome of negotiations with Kiewit related to the NTP and AIS Delays and other known changes yet to be finalized. The PMOC will review the summary of settlement when it is made available to confirm that it includes all potential HART exposure.

## 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
ARRA	\$0.004 billion
<b>Total</b>	<b>\$5.122 billion</b>

The GET surcharge receipts received to date are approximately \$1.14 billion.

## 2.6 Project Risk

The following activities associated with risk management have occurred:

- Risk Workshop 1, held April 5-8, 2011 in Honolulu, addressed the following: Preliminary PMOC findings from a scope, schedule and cost review; Risk Register and Action Items; and Path Forward.
- Risk Workshop 2, held April 27, 2011 in San Francisco, addressed the following: Quantitative risk assessment process; Summary of key PMOC findings for the cost and schedule risk analyses; Risk Mitigation; and Path Forward. To condition the cost estimate for the cost risk analysis, the PMOC identified approximately \$52 million (Year of Expenditure) in net adjustments to the Base Cost Estimate (BCE). To condition the Master Project Schedule (MPS) for the schedule risk analysis, the PMOC identified numerous adjustments that were incorporated into an Adjusted Project Schedule (APS).
- Risk Workshop 3, held August 2, 2011, addressed the Draft Risk and Contingency Management Plan (RCMP).
- A meeting was held December 8, 2011 to address the reevaluation of the grantee's Secondary Mitigation Measures to ensure that Secondary Mitigation Capacity is not reduced with the adoption of the proposed Cost Reduction Measures.
- A Risk Refresh Workshop was performed the week of April 11, 2012 to address the Preliminary PMOC findings from a scope, schedule, and cost review, Risk Register

and Action Items, and Path Forward.

HART and the PMOC have reviewed the list of potential secondary mitigation measures. The PMOC estimates the current value of viable Secondary Mitigation measures to be \$35 million, which is substantially less than recommended amount of \$149 million. The PMOC requested that HART revisit both its primary and secondary mitigation measures. It is anticipated that a risk refresh workshop would be held in early 2014, once a review of the updated MPS and project estimate are completed.

## 2.7 Action Items

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
<b>Monthly Progress Meeting</b>						
1	Provide summary of delay settlement with Kiewit	HART	Sept-13	Oct-13	Dec-13	Closed
2	Provide DBB terms and conditions	HART	Oct-13	Oct-13	Dec-13	Closed
3	Provide technical specification on opaque wall panels for Federal Courthouse	HART	Oct-13	Oct-13		Open
4	PMOC to schedule PMP & QMP compliance audit	PMOC	Nov-13	Mar-14		Open
5	HART to schedule Mitigation Monitoring Program (MMP) meeting to discuss revisions to simplify monitoring and reporting protocols	HART	Nov-13	Apr-14		Open
6	HART to provide PMOC with monthly Safety and Security Roadmap updates	HART	Nov-13	Dec-13		Closed
7	HART to provide PMOC with updated costs for Pearl Harbor station based on new Navy directive	HART	Nov-13	Nov-13		Open
8	HART to provide PMOC with updated costs for Pearl Harbor station based on new Navy directive	HART	Nov-13	Nov-13		Open – HART to issue waiver letter to Navy
9	HART to provide summary of clearance	HART	Dec-13	Jan-14		Open
10	HART to provide PMOC with Post Rod changes submitted to the FTA weekly	HART	Dec-13	Dec-13		Open
11	HART to engage GEC & CE&I consultants to perform bidability/constructability reviews	HART	Dec-13	Dec-13		Open
12	HART to add major developers to Third Party Agreement list	HART	Dec-13	Dec-13		Open
13	PMOC to schedule meeting with new HDOT State Oversight Agency Project Manager	PMOC	Dec-13	Feb-14		Open
14	HART to perform Buy America Compliance Audit on AHJV 4-car trains	HART	Dec-13	Jan-14		Open
15	HART to discuss the possibility of pre-qualifying contractor for station packages	HART	Dec-13	Jan-14		Open
<b>Project Controls Meeting</b>						
1	Update Contract Package Plan	HART	Jan-13	Nov-13		Open
2	Submit baselined RCMP	HART	Jan-13	Sep-13		Open

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
<b>Monthly Progress Meeting</b>						
3	Update primary and secondary mitigation measures	HART	May-13	Jan-14		Open
4	Update MPS	HART	Jun-13	Dec-13		Open
5	Provide summary of estimate changes associated with revised consultant contract packaging	HART	Aug-13	Oct-13		Open
6	Revisit Hold Points when MPS is updated	HART/PMOC	Sept-13	Jan-13		Open
7	Update Project Cost Estimate	HART	Sept-13	Dec-13		Open
8	Provide GEC III Scope of Work	HART	Nov-13	Nov-13		Closed
9	Review HART's schedule for updated costs	HART/PMOC	Dec-13	Jan-14		Open
10	HART to provide realistic schedule for MPS to include City Center ROW issues	HART	Dec-13	Jan-14		Open

## APPENDICES

### Appendix A: Acronym List

ATC	▪ Alternative Technical Concept
BAFO	▪ Best and Final Offers
BFMP	▪ Bus Fleet Management Plan
CMP	▪ Construction Management Plan
CSC	▪ Core Systems Contract
CSSO	▪ Chief Safety and Security Officer
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
DLNR	▪ Department of Land and Natural Resources
DOE	▪ Department of Education
EAC	▪ Estimate at Completion
FD	▪ Final Design
FEIS	▪ Final Environmental Impact Statement
FFGA	▪ Full Funding Grant Agreement
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
HDOT	▪ Hawaii Department of Transportation
KH	▪ Kamehameha Highway
LCC	▪ Leeward Community College
LEED	▪ Leadership in Energy and Environmental Design (LEED)
LONP	▪ Letter of No Prejudice
MOA	▪ Memorandum of Agreement
MOT	▪ Maintenance of Traffic
MPS	▪ Master Project Schedule
MSF	▪ Maintenance and Storage Facility
NCR	▪ Non-Compliance Report
NEPA	▪ National Environmental Policy Act
NTP	▪ Notice to Proceed
OCIP	▪ Owner Controlled Insurance Program
PA	▪ Programmatic Agreement
PE	▪ Preliminary Engineering
PMC	▪ Project Management Consultant
PMOC	▪ Project Management Oversight Contractor
PMP	▪ Project Management Plan
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
RFP	▪ Request for Proposals
RFQ	▪ Request for Qualifications
ROD	▪ Record of Decision

ROE	▪ Right of Entry
RSD	▪ Revenue Service Date
SCC	▪ Standard Cost Category
SHPD	▪ State Historic Preservation Division
SM	▪ Schedule of Milestone
SOA	▪ State Oversight Agency
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
VE	▪ Value Engineering
WOFH	▪ West Oahu/Farrington Highway
YOE	▪ Year of Expenditure

## Appendix B: Contract Status

The following sections provide the status of various ongoing contracts associated with this Project.

<b>Contract No.</b>	<b>MM-901</b>	
<b>Contract Description:</b>	<b>Program Management Support Consultant (PMSC-2)</b>	
<b>Status:</b>	Grantee executed a contract with InfraConsult LLC to provide PMC services. NTP was issued February 23, 2012.	
<b>Cost:</b>	Original Contract Value	\$33,000,000
	Approved Change Orders	\$0
	Current Contract Value	\$33,000,000
	Expended to Date	\$14,600,000
	% Expended	43.7%
	DBE Participation	0%
<b>Schedule:</b>	Contract duration is approximately 36 months from NTP.	
<b>Issues or Concerns:</b>	None	

<b>Contract No.</b>	<b>MM-910</b>	
<b>Contract Description:</b>	<b>General Engineering Consultant (GEC II) Contract</b>	
<b>Status:</b>	Grantee executed contract with Parsons Brinkerhoff on June 30, 2011. The contract amount is \$300 million (\$150 million base amount plus \$150 million allowance amount). It is anticipated that the \$150 million allowance for additional work will be used after the initial three-year term of the contract. However, it is possible with a contract amendment to expend a portion of the allowance amount any time during the term of the contract. Notice to Proceed (NTP) 1 was issued on August 2, 2011.	
<b>Cost:</b>	Original Contract Value	\$300,000,000
	Approved Change Orders	\$0
	Current Contract Value	\$300,000,000
	Expended to Date	\$132,000,000
	% Expended	42.6%
	DBE Participation	0%
<b>Schedule:</b>	The contract duration is approximately 36 months from NTP with an option for an additional 36 months.	
<b>Issues or Concerns:</b>	HART issued a Request for Proposals for a new General Engineering Consultant (GEC) contract in July 2013. The scope or work for the new GEC would be modified significantly from that for the current GEC contract and would be developed to fit within the project budget more effectively. HART issued NTP to the new GEC in December 2013.	

<b>Contract No.</b>	<b>DB-120</b>	
<b>Contract Description:</b>	<b>West Oahu/Farrington Highway (WOFH) DB Contract</b>	
<b>Status:</b>	Kiewit was awarded a contract on November 18, 2009. The following NTPs have been issued: <ul style="list-style-type: none"> <li>NTP 1 – Issued December 1, 2009, authorizing \$27 million to complete elements of PE whose principal purpose is refinement and validation of information supporting the NEPA process.</li> </ul>	

	<ul style="list-style-type: none"> <li>• NTP 1A – Issued March 11, 2010, authorizing \$25.8 million for PE activities to be completed.</li> <li>• NTP 1B - Issued March 23, 2010, authorizing \$21.2 million for interim design activities.</li> <li>• NTP 1C – Issued June 7, 2010, authorizing \$3.5 million for test and demonstration drilled shafts to complete the deep foundations interim design.</li> <li>• NTP 1D – Issued January 6, 2011, authorizing \$8.7 for continued administrative costs through June 2011 including project management, quality management, safety plan administration, coordination with local agencies, design management, and public information.</li> <li>• NTP 2 – Issued March 3, 2011, authorizing \$62 million for work activities related to the relocation of utilities, in accordance with the grantee’s pre-award authority associated with the FTA’s issuance of a ROD.</li> <li>• NTP 3 – Issued June 2011, authorizing \$4.7 million for Final Design activities to allow contractor to submit drawings to the City’s Department of Permit and Planning for permit approval.</li> <li>• NTP 4A – Issued February 6, 2012, authorizing construction activities, excluding activities associated with the precast yard under the LONP 2 authority. The contractor began installation of the guideway piers in May 2012.</li> <li>• NTP 4B – Issued May 17, 2012, authorizing limited construction activities associated with the precast yard.</li> </ul>												
<b>Cost:</b>	<table border="1"> <tr> <td>Original Contract Value</td> <td>\$482,924,000</td> </tr> <tr> <td>Approved Change Orders</td> <td>\$54,800,000</td> </tr> <tr> <td>Current Contract Value</td> <td>\$552,346,279</td> </tr> <tr> <td>Expended to Date</td> <td>\$193,427,474</td> </tr> <tr> <td>% Expended</td> <td>33.5%</td> </tr> <tr> <td>DBE Participation</td> <td>0.48%</td> </tr> </table>	Original Contract Value	\$482,924,000	Approved Change Orders	\$54,800,000	Current Contract Value	\$552,346,279	Expended to Date	\$193,427,474	% Expended	33.5%	DBE Participation	0.48%
Original Contract Value	\$482,924,000												
Approved Change Orders	\$54,800,000												
Current Contract Value	\$552,346,279												
Expended to Date	\$193,427,474												
% Expended	33.5%												
DBE Participation	0.48%												
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>• Original contract duration was approximately 43 months from NTP. Grantee has approved the baseline schedule submittal. The contractor is preparing a schedule analysis for NTP delays.</li> <li>• Substantial completion is now scheduled for July 2016.</li> </ul>												
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>• The executed agreement called for issuance of all four NTPs within 120 calendar days of December 1, 2009. Since that requirement was not met, the grantee has been coordinating with Kiewit to determine the extent of any impact to the approved baseline schedule.</li> <li>• Contractor must submit a revised baseline schedule to reflect AIS delays.</li> <li>• HART instructed Kiewit to remove their Project Manager from the WOFH Guideway project. He was also serving as the Project Manager for the KHG Guideway project too. Kiewit is in the process of submitting other Project Manager’s to HART for approval.</li> <li>• Construction resumed on September 16, 2013.</li> <li>• HART and Kiewit have completed workshops to address settlement of NTP Delays and AIS Delays. HART reported that most issues have been resolved, and bi-lateral change orders would be executed. The PMOC has requested that HART provide a summary of all issues that have been resolved, including cost and time impacts. The PMOC will review the proposed change order(s) and provide the FTA with an assessment. HART has indicated that they would like to execute the change order(s) in December 2013.</li> </ul>												

<b>Contract No.</b>	<b>DB-320</b>	
<b>Contract Description:</b>	<b>Kamehameha Highway Guideway DB Contract</b>	
<b>Status:</b>	<p>Kiewit was awarded a contract on June 30, 2011. Following NTPs have been issued:</p> <ul style="list-style-type: none"> <li>• NTP 1 – Issued July 12, 2011, authorizing \$102 million to perform PE including interim/definitive design submittals and coordinating with other contracts.</li> <li>• NTP 1(Rev 2) - Issued December 23, 2011 for approximately \$107 million (net increase of \$5 million) to allow for a three month extension of monthly management activities.</li> <li>• NTP 2 - Issued January 10, 2012 for approximately \$22 million and authorizes FD work activities. The grantee anticipates issuing multiple NTPs for limited construction activities associated with LONP 2 and full construction activities once it receives the appropriate authorizations from FTA.</li> <li>• NTP 3A – Issued February 7, 2012 authorizing construction activities, excluding activities associated with the precast yard under the LONP 2 authority.</li> <li>• NTP 3B – Issued on May 22, 2012 authorizing limited construction activities associated with the precast yard.</li> </ul>	
<b>Cost:</b>	Original Contract Value	\$372,150,000
	Approved Change Orders	\$4,200,000
	Current Contract Value	\$378,860,981
	Expended to Date	\$85,764,186
	% Expended	22.6%
	DBE Participation	0.08%
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>• Contract duration is approximately 48 months from NTP.</li> <li>• Substantial completion is now scheduled for September 2016.</li> </ul>	
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>• Contractor must submit a revised baseline schedule to reflect AIS delays.</li> <li>• HART instructed Kiewit to remove their Project Manager from the WOFH Guideway project. He was also serving as the Project Manager for the KHG Guideway project too. Kiewit is in the process of submitting other Project Manager's to HART for approval.</li> <li>• Construction resumed on September 16, 2013.</li> <li>• HART and Kiewit have completed workshops to address settlement of NTP Delays and AIS Delays. HART reported that most issues have been resolved, and bi-lateral change orders would be executed. The PMOC has requested that HART provide a summary of all issues that have been resolved, including cost and time impacts. The PMOC will review the proposed change order(s) and provide the FTA with an assessment. HART has indicated that they would like to execute the change order(s) in December 2013.</li> </ul>	

<b>Contract No.</b>	<b>DB-200</b>	
<b>Contract Description:</b>	<b>Maintenance and Storage Facility DB Contract</b>	
<b>Status:</b>	<p>Kiewit/Kobayashi Joint Venture was awarded a contract on June 30, 2011. Following NTPs have been issued:</p> <ul style="list-style-type: none"> <li>• NTP 1 – Issued July 25, 2011, authorizing \$16.8 million to perform PE, associated site investigations and coordinating with other contractors.</li> <li>• NTP 2 - Issued January 10, 2012 for approximately \$66 million and authorizes FD work activities and procurement of long</li> </ul>	

	<p>lead items (rail). The grantee anticipates issuing multiple Notices to Proceed (NTP) for limited construction activities associated with LONP 2 and full construction activities once it receives the appropriate authorizations from the Federal Transit Administration (FTA).</p> <ul style="list-style-type: none"> <li>• NTP 3 – Issued February 7, 2012 authorizing construction activities under the LONP 2 authority.</li> </ul>	
<b>Cost:</b>	Original Contract Value	\$195,258,000
	Approved Change Orders	\$19,597,737
	Current Contract Value	\$221,180,398
	Expended to Date	\$54,582,635
	% Expended	25.6%
	DBE Participation	0.12%
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>• Contract duration is approximately 36 months from NTP.</li> <li>• Completion is anticipated in December 2014.</li> </ul>	
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>• The grantee must execute a license agreement with DHHL. The PMOC has recommended that the License Agreement be provided to the FTA and PMOC for review prior to execution. A Request for Right of Entry (ROE) for construction was approved by the DHHL Board. The ROE allows access to Navy Drum Site for construction until the property acquisition occurs or the License Agreement is finalized.</li> <li>• Contractor must submit a revised baseline schedule to reflect AIS delays.</li> <li>• Construction resumed on September 16, 2013.</li> <li>• HART and Kiewit have completed workshops to address settlement of NTP Delays and AIS Delays. HART reported that most issues have been resolved, and bi-lateral change orders would be executed. The PMOC has requested that HART provide a summary of all issues that have been resolved, including cost and time impacts. The PMOC will review the proposed change order(s) and provide the FTA with an assessment. HART has indicated that they would like to execute the change order(s) in December 2013.</li> </ul>	

<b>Contract No.</b>	<b>DBOM-920</b>	
<b>Contract Description:</b>	<b>Core Systems Contract (CSC)</b>	
<b>Status:</b>	<p>Ansaldo Honolulu Joint Venture was awarded a contract on November 28, 2011. The following NTPs have been issued:</p> <ul style="list-style-type: none"> <li>• NTP 1 – Issued on January 13, 2012, authorizing \$20,285,221 million to support the design efforts of fixed facilities by providing interface management and coordination. In addition, NTP 1 includes work required to advance all Core Systems to final design.</li> </ul>	
<b>Cost:</b>	Original Contract Value	\$573,782,793
	Approved Change Orders	\$0
	Current Contract Value	\$573,782,793
	Expended to Date	\$47,535,609
	% Expended	8.2%
	DBE Participation	0.24%
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>• Contract duration is approximately 88 months from NTP.</li> <li>• Completion is anticipated in April 2019.</li> </ul>	

<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>• Grantee has provided approval with comments of the baseline schedule.</li> <li>• AHJV is restructuring baseline schedule to include vehicle related activities.</li> <li>• HART has rejected AHJV's proposed candidate for this Safety and Security Certification Manager. HART is in discussions with AHJV on how to address this position.</li> </ul>
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<b>Contract No.</b>	<b>FD-430</b>												
<b>Contract Description:</b>	<b>Airport Section Guideway and Utilities Final Design</b>												
<b>Status:</b>	AECOM was awarded a contract on December 15, 2011. The following NTPs have been issued: <ul style="list-style-type: none"> <li>• NTP 1A – Issued on January 5, 2012 for a design workshop and to develop a schedule of milestones and activities.</li> <li>• NTP 1B – Issued on February 22, 2012 to advance design.</li> </ul>												
<b>Cost:</b>	<table border="1"> <tr> <td>Original Contract Value</td> <td>\$39,115,960</td> </tr> <tr> <td>Approved Change Orders</td> <td>\$275,000</td> </tr> <tr> <td>Current Contract Value</td> <td>\$39,580,074</td> </tr> <tr> <td>Expended to Date</td> <td>\$26,870,128</td> </tr> <tr> <td>% Expended</td> <td>71.6%</td> </tr> <tr> <td>DBE Participation</td> <td>0.38%</td> </tr> </table>	Original Contract Value	\$39,115,960	Approved Change Orders	\$275,000	Current Contract Value	\$39,580,074	Expended to Date	\$26,870,128	% Expended	71.6%	DBE Participation	0.38%
Original Contract Value	\$39,115,960												
Approved Change Orders	\$275,000												
Current Contract Value	\$39,580,074												
Expended to Date	\$26,870,128												
% Expended	71.6%												
DBE Participation	0.38%												
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>• Contract duration is approximately 61 months from NTP 1A.</li> <li>• Completion is anticipated in January 2017.</li> </ul>												
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>• HART is proposing additional value engineering design changes to reduce airport guideway costs to previous FD estimate. HART will also incorporate these value engineering design changes to the City Center Guideway design contract.</li> </ul>												

<b>Contract No.</b>	<b>FD-530</b>												
<b>Contract Description:</b>	<b>City Center Section Guideway and Utilities Final Design</b>												
<b>Status:</b>	AECOM was awarded a contract on July 30, 2012. The following NTPs have been issued: <ul style="list-style-type: none"> <li>• NTP 1A – Issued on July 31, 2012 for a design workshop and to develop a schedule of milestones and activities.</li> <li>• NTP 1B – Issued on October 25, 2012 for preliminary engineering revisions.</li> </ul>												
<b>Cost:</b>	<table border="1"> <tr> <td>Original Contract Value</td> <td>\$43,948,220</td> </tr> <tr> <td>Approved Change Orders</td> <td>\$0</td> </tr> <tr> <td>Current Contract Value</td> <td>\$44,481,020</td> </tr> <tr> <td>Expended to Date</td> <td>\$13,571,146</td> </tr> <tr> <td>% Expended</td> <td>32.0%</td> </tr> <tr> <td>DBE Participation</td> <td>0.32%</td> </tr> </table>	Original Contract Value	\$43,948,220	Approved Change Orders	\$0	Current Contract Value	\$44,481,020	Expended to Date	\$13,571,146	% Expended	32.0%	DBE Participation	0.32%
Original Contract Value	\$43,948,220												
Approved Change Orders	\$0												
Current Contract Value	\$44,481,020												
Expended to Date	\$13,571,146												
% Expended	32.0%												
DBE Participation	0.32%												
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>• Contract duration is approximately 61 months from NTP 1A.</li> <li>• Completion is anticipated in January 2017.</li> </ul>												
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>• Airport and City Center Guideway Construction Packages will be combined.</li> </ul>												

<b>Contract No.</b>	<b>FD-240</b>	
<b>Contract Description:</b>	<b>Farrington Highway Station Group Final Design 1 &amp; 2</b>	
<b>Status:</b>	HDR/HPE, Inc. was awarded a contract on April 15, 2010. The following NTP's have been issued: <ul style="list-style-type: none"> <li>• NTP 1 – Issued on January 14, 2011 to begin PE.</li> <li>• NTP 2 – Issued on February 13, 2012 to begin Interim Design.</li> <li>• NTP 3 – Issued on January 28, 2012 to begin Final Design.</li> </ul>	
<b>Cost:</b>	Original Contract Value	\$5,500,000
	Approved Change Orders	\$2,508,045
	Current Contract Value	\$12,208,045
	Expended to Date	\$8,478,450
	% Expended	76.7%
	DBE Participation	4.63%
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>• Contract duration is approximately 55 months from NTP 1.</li> <li>• Contract closeout in November 2013.</li> </ul>	
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>• HART issued a letter to HDR and InfraConsult LLC (HART's Program Management Consultant) on November 8, 2013 for contract closeout and there is no longer a conflict of interest. HART selected URS, Inc to combine station design packages and complete construction administration.</li> </ul>	

<b>Contract No.</b>	<b>FD-140</b>	
<b>Contract Description:</b>	<b>West Oahu Station Group Construction Final Design</b>	
<b>Status:</b>	URS, Inc. was awarded a contract on June 14, 2012. The following NTP's have been issued: <ul style="list-style-type: none"> <li>• NTP 1A – Issued on June 15m, 2012 to prepare statement of work and mobilize.</li> <li>• NTP 1B – Issued on September 6, 2012 to begin advanced PE.</li> <li>• NTP 1C – Issued on January 4, 2013 to begin Interim Design.</li> </ul>	
<b>Cost:</b>	Original Contract Value	\$7,789,000
	Approved Change Orders	\$0
	Current Contract Value	\$7,789,000
	Expended to Date	\$5,125,258
	% Expended	65.8%
	DBE Participation	0%
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>• Contract duration is approximately 55 months from NTP 1A.</li> <li>• Completion is anticipated in October 2015.</li> </ul>	
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>• None at this time</li> </ul>	

<b>Contract No.</b>	<b>FD-340</b>	
<b>Contract Description:</b>	<b>Kamehameha Highway Station Group Construction Final Design</b>	
<b>Status:</b>	Anil Verma, Inc. was awarded a contract on November 26, 2012. The following NTP's have been issued: <ul style="list-style-type: none"> <li>• NTP 1A – Issued on November 26, 2012 to prepare statement of work and mobilization.</li> </ul>	

<b>Cost:</b>	Original Contract Value	\$8,500,000
	Approved Change Orders	\$0
	Current Contract Value	\$8,702,592
	Expended to Date	\$6,294,535
	% Expended	74.1%
	DBE Participation	27.82%
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>Contract duration is approximately 33 months from NTP 1A.</li> <li>Completion is anticipated in August 2015.</li> </ul>	
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>None at this time</li> </ul>	

<b>Contract No.</b>	<b>FD-440</b>	
<b>Contract Description:</b>	<b>Airport Station Group Construction Final Design</b>	
<b>Status:</b>	AECOM was awarded a contract on November 7, 2012. The following NTP's have been issued: <ul style="list-style-type: none"> <li>NTP 1A – Issued on November 14, 2012 to prepare statement of work and advanced activities.</li> <li>NTP 1B – Issued on January 4, 2013 to begin advanced PE.</li> </ul>	
<b>Cost:</b>	Original Contract Value	\$10,177,365
	Approved Change Orders	\$0
	Current Contract Value	\$10,177,365
	Expended to Date	\$ 6,589,970
	% Expended	66.3%
	DBE Participation	2.12%
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>Contract duration is approximately 57 months from NTP 1A.</li> <li>Completion is anticipated in July 2017.</li> </ul>	
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>None at this time</li> </ul>	

<b>Contract No.</b>	<b>FD-550</b>	
<b>Contract Description:</b>	<b>Dillingham and Kaka'ako Station Group Construction Final Design</b>	
<b>Status:</b>	Perkins & Will was awarded a contract on August 31, 2013.	
<b>Cost:</b>	Original Contract Value	\$18,321,918
	Approved Change Orders	\$0
	Current Contract Value	\$18,321,918
	Expended to Date	\$ 0.00
	% Expended	0%
	DBE Participation	0%
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>Completion is anticipated in July 2018.</li> </ul>	
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>None at this time</li> </ul>	

<b>Contract No.</b>	<b>MI-930</b>	
<b>Contract Description:</b>	<b>Elevators and Escalators Install &amp; Maintain</b>	
<b>Status:</b>	Schindler Elevator Corporation was awarded a contract on August 2, 2013.	
<b>Cost:</b>	Original Contract Value	\$50,982,714
	Approved Change Orders	\$0
	Current Contract Value	\$50,982,714
	Expended to Date	\$ 0.00
	% Expended	0%
	DBE Participation	0%
<b>Schedule:</b>	<ul style="list-style-type: none"> <li>• Completion is anticipated in May 2018.</li> </ul>	
<b>Issues or Concerns:</b>	<ul style="list-style-type: none"> <li>• None at this time</li> </ul>	

## Appendix C: Procurement Schedule

Contract No.	Segment	Type Svc	Status	Description	Advertise	NTP	Bid Ready	Complete
DFIM	PW	Design/Const		Elevators and Escalators	8/17/2012	8/2/2013	N/A	3/15/2018
FD-550	City Cen	Design	Active	Dillingham Station Group/Kaka'ako Station Group	11/16/2012	8/19/2013	5/1/2015	7/30/2018
MM-951	PW	Services	Active	OCIP Brokerage Services	6/4/2013	7/26/2013	N/A	7/31/2014
ART Prg	PW	Art	Active	Art-in-Transit (Call for Artists)	5/14/2013	TBD		
MM-945	PW	Services	Future	On-Call Construction Contractor	9/30/2013	12/2/2013	N/A	3/3/2019
	WOFH	Design		Farrington Highway Station Group Design Support	6/10/2013	9/30/2013	N/A	11/14/2016
FD-245	KHG	Design	Future	Pearl Highlands Parking Structure/Bus Transit Center	3/1/2014	12/28/14	12/30/2013	4/29/2018
	PW	Prof Svcs	Active	General Engineering Consultant Re-compete	7/26/2013	12/5/2013	N/A	3/1/2019
	PW West	Prof Svcs	Active	Construction Engineering & Inspection West	7/26/2013	12/30/2013	N/A	3/1/2019
	PW East	Prof Svcs	Active	Construction Engineering & Inspection East	7/26/2013	12/30/2013	N/A	3/1/2019
	PW	Prof Svcs	Future	Core Systems Support – Re-compete	9/13/2013	12/30/2013	N/A	3/1/2019
DBB-505	Airport	Construction	Future	Airport Section Utilities	12/16/2013	3/5/2013	N/A	12/22/2015
DBB-185	WOFH/ KHG	Construction	Future	West Oahu / Farrington Highway and Kamehameha Station Groups Construction	2/15/2014	6/1/2014	N/A	11/14/2016
DBB-510	City Cen	Construction	Future	City Center Section Utilities	3/15/2014	6/15/2014	N/A	12/22/2015
DBB-520	Airport	Construction	Future	Airport and City Center Guide Guideway Construction	7/1/2014	12/15/2014	N/A	4/29/2018
FD-600	WOFH	Design	Future	UH West Oahu Park-and-Ride and Ho'opili Station Finishes	9/10/2014	3/12/2015	2/15/2016	9/29/2018
DBB-470	Airport	Construction	Future	Airport Station Group	11/1/2014	3/1/2015	N/A	7/15/2017
DBB-580	City Cen	Construction	Future	Dillingham / Kaka'ako Station Group	8/15/2015	12/15/2015	N/A	8/14/2018
DBB-275	KHG	Construction	Future	Pearl Highlands Parking Structure/Bus Transit Center	3/1/2014	12/28/2014	12/30/2014	4/29/2018
DBB-600	WOFH	Construction	Future	UH West Oahu Park-and-Ride and Ho'opili Station Finishes	3/15/2016	9/15/2016	N/A	8/15/2018
PA-102	PW	Pro Svcs	Active	Historic Architectural Design Consultant	3/15/2013	8/1/2013	N/A	5/1/2016
	PW	Pro Svcs	Future	Professional Recruiting Services	10/18/2013	12/30/2013	N/A	9/30/2014
	PW	Pro Svcs	Active	Archeological & Cultural Monitoring	9/10/2013	12/30/2013	N/A	5/30/18
MM-960	PW	Pro Svcs	Future	Safety and Security Support	9/30/2013	1/15/2014	N/A	12/14/2017

<b>Contract No.</b>	<b>Segment</b>	<b>Type Svc</b>	<b>Status</b>	<b>Description</b>	<b>Advertise</b>	<b>NTP</b>	<b>Bid Ready</b>	<b>Complete</b>
MM-937	PW	Pro Svcs	Future	Real Estate Mapping and Surveying	10/4/2013	11/15/2013	N/A	12/30/2017
MM-966	PW	Pro Svcs	Future	Financial Support Services	9/30/2013	11/1/2013	N/A	12/30/2015

Note: PW indicates "Project Wide".

**Appendix D: Open Final Design Approval Letter Requirements**

No.	Item	Completion Date	Comments
<b>Safety and Security</b>			
1	The Hawaii Department of Transportation (HDOT) should accelerate the hiring process and select a qualified State Safety Oversight Agency (SSOA) project manager.	TBD	Pending – Jadine Urasaki had named as Interim Project Manager. However, as of November 2013, HDOT has filled the SOA Project Manager position.
<b>Civil Rights</b>			
2	Title VI program must be submitted to FTA at least 30 calendar days prior to June 10, 2013 which is the expiration of the current Title VI approval.	May-13	Open
3	The City will need to perform a Title VI service and fare equity analysis six months prior to revenue operations of the Project.	Jun-14	Open

## Appendix F: Project Overview and Map

**Date:** December 2013  
**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** 99,800 weekday boardings in 2019; 114,300 weekday boardings in 2030

### SCHEDULE

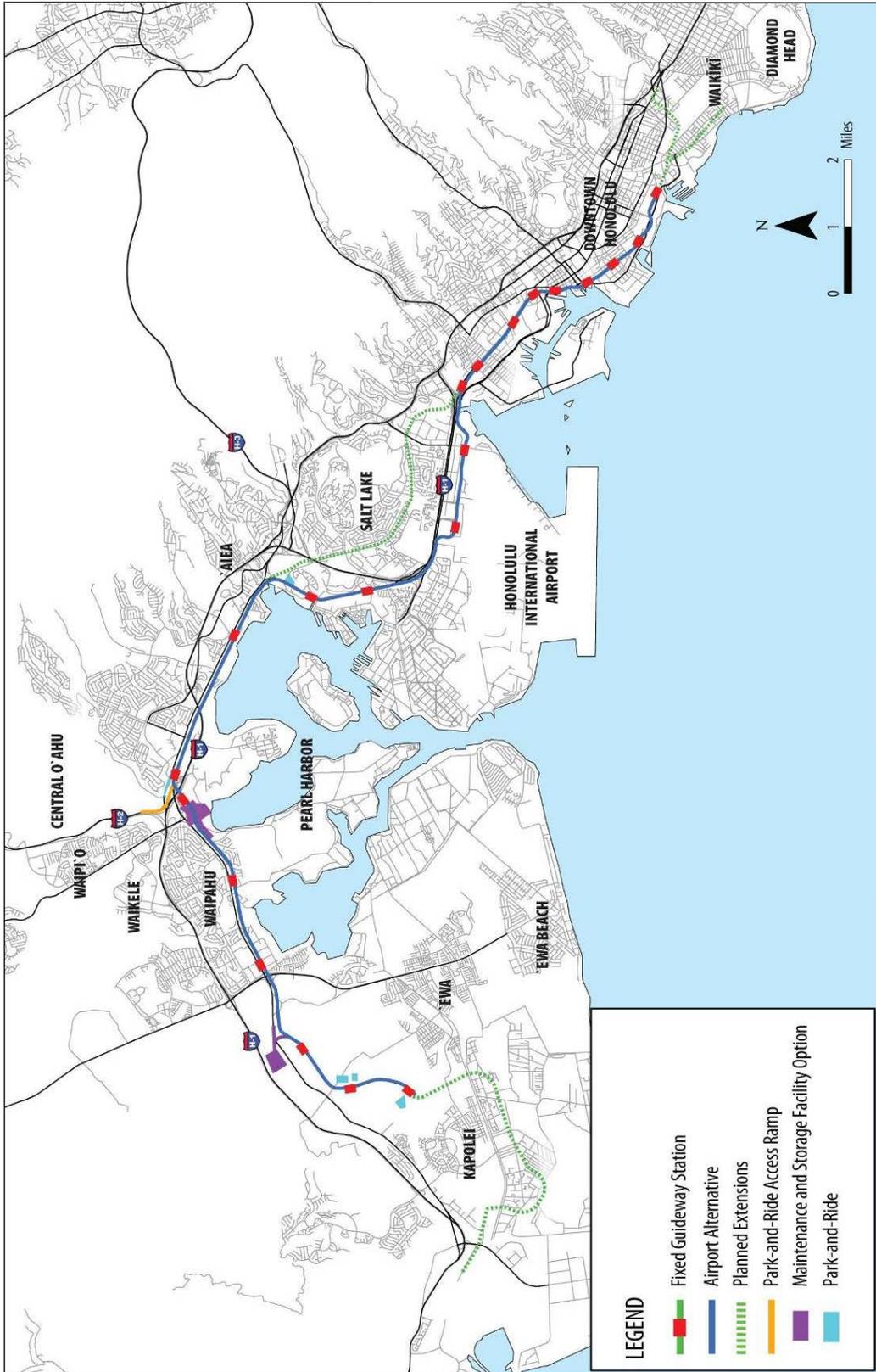
10/09 Approval Entry to PE	03/19 Estimated RSD at Entry to PE
12/11 Approval Entry to FD	03/19 Estimated RSD at Entry to FD
06/12 Request for FFGA	03/19 Estimated RSD at Request for FFGA
12/12 FFGA	01/20 RSD at FFGA

### 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

\$789M Amount of Expenditures at date of this report  
18.4% complete (Total Project Expenditures/Total Project Cost)

# Honolulu Rail Transit Project Map



## Appendix G: 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)			Submittal date Jul-13
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?	N	SOA information	
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	