

PMOC MONTHLY REPORT

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

February 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

Jacobs Engineering Group, Inc., 501 North Broadway, St. Louis, MO 63102
Tim Mantych, P.E., (314) 335-4454, tim.mantych@jacobs.com
Length of Time Assigned: Five Years (November 18, 2009 through November 17, 2014)

TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF APPENDICES	i
1.0 EXECUTIVE SUMMARY	2
1.1 Project Description.....	2
1.2 Project Status	2
1.3 PMOC Issues or Concerns	4
1.4 Core Accountability Items	5
2.0 BODY OF REPORT	6
2.1 Grantee’s Capabilities and Approach	6
2.1.1 Technical Capacity and Capability (TCC).....	6
2.1.2 Project Controls for Scope, Quality, Schedule, Cost, Risk, and Safety.....	6
2.1.3 Compliance with Applicable Statutes, Regulations, Guidance and FTA Agreements	8
2.2 Project Scope	9
2.2.1 Status of Design/Construction Documents	10
2.2.2 Status of Third-Party Agreements	10
2.2.3 Delivery Method	12
2.2.4 Core Systems and Vehicle Status	12
2.3 Project Management Plan and Sub-Plans	14
2.4 Project Schedule Status.....	14
2.5 Project Cost Status	15
2.5.1 Standard Cost Category (SCC).....	15
2.5.2 Contingency	18
2.5.3 Funding Sources.....	18
2.6 Project Risk.....	18
2.7 Action Items.....	20
APPENDICES	22

LIST OF APPENDICES

- Appendix A: Acronym List
- Appendix B: Contract Status
- Appendix C: Bidding Schedule
- Appendix D: Final Design Approval Letter Requirements
- Appendix E: Core Accountability Items
- Appendix F: Project Overview and Map (Transmitted as a separate file)
- Appendix G: 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. 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 hired Brennon Morioka as Deputy Executive Director. Mr. Morioka began in this new role in February 2013.
- 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). Final Design work is still proceeding on all contracts that have been awarded to date. HART continues to analyze cost and schedule ramifications. Their analysis indicates the delay will cost between \$7 and \$10 million per month. Delay is anticipated to extend nine to twelve months, but may be longer depending on the length of SHPD review and satisfaction of permitting requirements. PMOC is awaiting an updated MPS to complete a review of HART's cost impact assessment and Mitigation Strategies. FTA and HART are developing a proposed schedule for completion of the additional environmental evaluation required by the federal court ruling. HART has indicated it would like to complete that work within the construction suspension period related to the state court case. However, that schedule is ambitious given the amount of work and reviews that must be completed. As a result of an injunction, HART cannot acquire real estate or perform any construction in the City Center Segment, which may have an effect on overall project schedule.
- 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	\$517.5M	\$162.5M	Construction suspended; design activities ongoing
Kamehameha Highway (KH) Guideway DB Contract	Kiewit	\$372.2M	\$82.4M	Construction suspended; design activities ongoing
Maintenance and Storage (MSF) DB Contract	Kiewit/Kobayashi Joint Venture	\$214.9M	\$38.1M	Construction suspended; design activities ongoing
Core Systems Contract	Ansaldo Honolulu Joint Venture (AHJV)	\$573.8M	\$24.7M	Definitive design activities ongoing.
Airport Guideway and Utilities Design	AECOM	\$39.1M	\$15.2M	Interim design activities ongoing
City Center Guideway and Utilities Design	AECOM	\$43.9M	\$0.3M	PE activities ongoing
Farrington Station Group Design	HDR/HPE, Inc.	\$8.0M	\$6.1M	No-cost time extension to April 2013 currently being negotiated
West Oahu Station Group	URS	\$7.8M	\$1.9M	PE activities ongoing
Kamehameha Station Group Design	Anil Verma Associates, Inc.	\$8.5M	\$0M	Initial design workshops ongoing
Airport Station Group Design	AECOM	\$10.1M	\$0M	PE activities ongoing
Elevators and Escalators	TBD	TBD	\$0M	Request for Proposal (RFP) Part 1 qualification submitted on October 25, 2012. Priority list of Offerors for RFP Part 2 was completed on November 9, 2012. RFP Part 2 was issued in December 2012.

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

Item	Contract Number	Final Design Contracts	Percent Complete
1	DB-120	West Oahu Farrington Highway Guideway Project (WOFH)	95%
2	DB-320	Kamehameha Highway Guideway Project (KHG)	91%
3	DB-200	Maintenance and Storage Facility (MSF)	95%
4	DBOM-920	Core Systems Contract (CSC)	12%
5	FD-430	Airport Segment Guideway and Utilities Final Design	40%
6	FD-530	City Center Segment and Utilities Final Design	15%
7	FD-140	West Oahu Station Group (WOSG)	25%
8	FD-240	Farrington Highway Station Group (FHSG)	76%
9	FD-340	Kamehameha Highway Station Group (KHSG)	10%
10	FD-245	Pearl Highlands Parking Structure/Bus Transit Center	10%
11	FD-440	Airport Station Group Design	10%
12	FD-540	Dillingham Station Group Design	10%
13	FD-545	Kaka'ako Station Group Design	10%
14	FD-600	UH West Oahu Park and Ride/Ho'opili Station Design	10%
15	MI-930	Elevators and Escalators	10%

The Total Design Percent Complete is approximately 34%. Final Design work and engineering activities are still proceeding on all contracts that have been awarded to date.

1.3 PMOC Issues or Concerns

The following key issues or concerns have been identified:

- The PMOC had expressed some concern with the adequacy of the grantee's ability to forecast costs for the existing Design-Build (DB) contracts. The grantee's Estimate at Completion (EAC) did not accurately provide an assessment of the contract costs. However, HART has provided significantly improved EAC assessments of the contract costs to the PMOC. In addition, HART and the PMOC have held monthly breakout sessions to review the status of the forecast costs, schedule management, risk management, and cost containment measures. These breakout sessions have resulted in increased confidence by the PMOC of the grantee's ability to manage budget and schedule of the project.
- The grantee must execute a license agreement with the Department of Hawaiian Homelands (DHHL) for the MSF on the Navy Drum Site. 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.
- 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 is having difficulty finding a full-time SOA Project Manager, and there are no indications when a full time person will be hired.
- HDR's acquisition of InfraConsult LLC (HART's Program Management Consultant) has created conflict of interest issues for HART since HDR is currently under contract to complete design of FHSG. HART submitted a White Paper on Organizational Conflict of Interest to FTA that discussed measures to mitigate this conflict, which includes several critical aspects of the project (quality, safety/security, and project controls). There will no longer be a conflict of interest issue after April 30, 2013 when HDR anticipates completing Final Design and issuing a bid-ready submittal for construction to HART. HART proposes selecting another design consultant to perform construction administration for FHSG.
- The PMOC had indicated previously that HART lacked the Technical Capacity and Capability specific to project controls. The PMOC has received only sporadic Master Project Schedule (MPS) updates, with the most recent one from July 2012. HART acknowledged the situation and recently hired a new Project Controls Manager. The new Project Controls Manager intends to submit a current update of MPS in early March 2013.

1.4 Core Accountability Items

Core Accountability Items			
Project Status: FFGA		Original at FFGA:	Current Estimate:
Cost	Cost Estimate	\$5,122,000,000	\$5,122,000,000
Contingency	Unallocated Contingency	\$101,900,000	\$101,900,000
	Total Contingency (Allocated plus Unallocated)	\$644,000,000	\$478,000,000
Schedule	Revenue Service Date	1/30/2020	1/30/2020
Total Project Percent Complete	Based on Expenditures	12.7%	
	Based on Earned Value	10.6% (December 2012)	
Major Issues	Status	Comments/Planned Action	
Technical Capacity Issues	HART lacked the Technical Capacity and Capability specific to project controls, which is a crucial element of project management oversight. PMOC has received only sporadic MPS updates, with the most recent one from July 2012.	HART acknowledged the situation and recently hired a new Project Controls Manager. The new Project Controls Manager intends to submit a current update of MPS in early March 2013.	
Potential Cost & Schedule Delays	HART continues to analyze the cost and schedule ramifications resulting from the Hawaii Supreme Court Archeological Inventory Survey (AIS) ruling. The analysis indicates that the delay will cost between \$7 and \$10M per month, and it is anticipated to be a nine to twelve month period. Delay may be longer depending on the length of SHPD review and satisfaction of permitting requirements.	HART's cost impact assessment and Mitigation Strategies are under review by the PMOC. PMOC is awaiting an updated MPS to complete the review.	
Remaining Construction Contracts	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.	HART and 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.	
Date of Next Quarterly Meeting:		TBD	

2.0 BODY OF REPORT

2.1 Grantee's Capabilities and Approach

2.1.1 Technical Capacity and Capability (TCC)

The PMOC has assessed the grantee's Technical Capacity and Capability to successfully implement, manage, and complete a major Federal-assisted capital project as well as its ability to recognize and manage project risk factors and implement mitigation measures.

The PMOC had expressed some concern that the grantee may continue experiencing difficulty attracting and retaining the experienced staff needed for long-term project assignment and permanent grantee employment (post-Project) given Hawaii's geographic isolation, salary limits, and high cost of living relative to the mainland. It was recommended that the grantee adhere to the staffing plan to address the transition of staff during the Final Design and construction phases for positions currently occupied by PMC and GEC staff to grantee staff.

The grantee submitted a Staffing and Succession Plan Revision 5 dated May 25, 2012 to support the basis for the base soft cost reductions that were incorporated into the Capital Cost Estimate. The grantee reduced the PMC and GEC contract duration for some key staff positions to transfer to HART, but the Staffing and Succession Plan did not include some key positions that are needed by HART to complete the project by the Revenue Service Date. The grantee has, however, taken appropriate measures to help ensure that an adequate transition occurs. Most recently, the Executive Director has enacted significant restructuring of the organization of the agency. These changes are appropriate and should result in more effective management of the project.

As noted in Section 1.3, it is the PMOC's professional opinion that the grantee currently lacks the Technical Capacity and Capability specific to project controls, which is a crucial element of project management oversight and control. HART acknowledged the situation and has hired a new Project Controls Manager, who began working on the project in February 2013.

The PMOC will continue monitoring the grantee's project management process to ensure that it is effectively managing the project and continuing fiscal responsibility and accountability for all decisions affecting project design, cost, and schedule.

HART hired Brennon Morioka as Deputy Executive Director. Mr. Morioka began in this new role in February 2013.

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 PMOC will review this target date when the updated MPS is made available in March 2013.

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 a monthly breakout session 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

- HART performed an audit of the HART safety and security department's adherence to the SSMP and associated plans and procedures requirements in February 2013.
- HART designated the Director of QA/QC as the HART Buy America Compliance Officer (BACO) and developed the HART Buy America Compliance Program Plan (BACPP).

System Safety and Security

- There are currently two vacant Construction Safety and Security Compliance Officer (CSSCO) positions that report to the GEC Construction Safety and Security Manager (CSSM), only one of which is planned for filling by the GEC in the near future. The second CSSCO position provides a good opportunity to hire a HART safety professional to be trained and mentored by the GEC CSSM in construction safety and security oversight and management. The timetable for some of the staffing recommendations may be affected by the current suspension of construction activities.
- There is also a current vacancy for a System Security Specialist (SSS) that reports to the GEC System Safety and Security Manager (SSSM) that is not programmed for filling in the near future. The SSS position provides a good opportunity to hire a HART security professional to be trained and mentored by the SSSM and the existing well-seasoned GEC senior security specialist in security oversight and management. The timetable for some of the staffing recommendations identified may be affected by the current suspension of construction activities.
- There are no full time security professionals in the combined HART organization. Although there is one GEC security professional assigned to the project, his assignment is on a part-time basis. Since GEC personnel report to a separate chain of command, the

possibility exists that his availability may not be guaranteed over the life of the project.

- The CSC has not yet provided a safety and security professional on-site in Honolulu, and communication with off-site personnel is proving difficult due to the time difference between locations. The CSC is proposing to provide a part-time person initially until June 2013, and then switch the part time person with a new full-time person after June 2013. The PMOC feels a continuous full-time person is needed. There are also concerns that the staff being proposed by the CSC has no FTA New Starts experience.
- The Safety and Security Certification Manager (SSCM) position that reports to the CSSO remains vacant, with certification efforts expected to increase in the near future. HART anticipates hiring the SSCM in March 2013.
- HDOT awarded a consultant contract to Dovetail, Inc. in July 2012 and provided an advanced NTP on July 31, 2012 to develop the System Safety and Security Program Standards (SSSPS), which will become an important part of HDOT's comprehensive safety and security assessment. That program will formalize the safety and security duties and responsibilities of the transit organization and ensure a process for identifying and correcting safety and security hazards.
- An interim HDOT State Oversight Agency (SOA) Project Manager has been working part-time since April 2011. HDOT is having difficulty finding a full-time SOA Project Manager and there are no indications when a full time person will be hired. HDOT revised the job posting to eliminate the Professional Engineer license requirement to broaden the pool of applicants and the job posting is open until filled. Given the status of this Project, it is critical that a permanent lead be identified as soon as possible.

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 already 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). Final Design work is still proceeding on all contracts that have been awarded to date. HART continues to analyze cost and schedule ramifications. Their analysis indicates the delay will cost between \$7 and \$10 million per month. Delay is anticipated to extend

nine to twelve months, but may be longer depending on the length of SHPD review and satisfaction of permitting requirements. PMOC is awaiting an updated MPS to complete a review of HART's cost impact assessment and Mitigation Strategies. FTA and HART are developing a proposed schedule for completion of the additional environmental evaluation required by the federal court ruling. HART has indicated it would like to complete that work within the construction suspension period related to the state court case. However, that schedule is ambitious given the amount of work and reviews that must be completed. As a result of an injunction, HART cannot acquire real estate or perform any construction in the City Center Segment, which may have an effect on overall project schedule.

Letters of No Prejudice (LONP)

- FTA has approved three LONPs to date:
 - LONP 1 – Approved on May 24, 2011 to incur costs of \$4.7 million for final design activities associated with the WOFH DB Contract.
 - LONP 2 – Approved on February 6, 2012 to incur costs of \$184.7 million for limited construction activities associated with West Oahu /Farrington Highway (WOFH) Design-Build Contract, the Kamehameha Highway (KH) Guideway DB Contract, the Maintenance and Storage (MSF) DB Contract, and the Farrington Station Group Construction Contract. This LONP approval precludes activities associated with the precast yard, which were estimated at \$21.8 million.
 - LONP 2A – Approved on May 17, 2012 for \$21.8 million for limited construction activities associated with the precast yard for the WOFH and KHG Guideway segments.

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 34%. 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
TOTAL	154	\$710.2	79	\$310.3

*Total includes “conditionally accepted” 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.

2.2.2 Status of Third-Party Agreements

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

Agreement	Segment/ Contract	Target Date	Completion Date	Status
University of Hawaii Master Agreement	WOFH, KHG, City Center	Feb 2013	Pending	Tentative agreement is in place on path forward to secure access to the property
Leeward Community College Sub-agreement	WOFH	Feb 2013	Pending	Property appraisal complete.
UHWO Sub-agreement	WOFH	Feb 2013	Pending	Property appraisal complete.
DLNR Agreement	WOFH	Feb 2013	Pending	DLNR is finalizing staff summary
Department of Education Master Agreement and Consent to Construct	WOFH	-	Feb 8, 2011	Executed
DR Horton Consent to Construct	WOFH	-	Mar 7, 2012	Executed
DR Horton Master Agreement	WOFH	-	Mar 7, 2012	Executed
DHHL Master Agreement	WOFH and MSF	-	Mar 10, 2010	Executed
DHHL Consent to Construct	WOFH and MSF	-	Dec 1, 2011	Executed
DHHL License or Property Transfer	WOFH and MSF	Dec 2012	Pending	City reviewing DHHL license agreement comments.

Agreement	Segment/ Contract	Target Date	Completion Date	Status
HDOT Master Agreement for WOFH	WOFH	-	Oct 31, 2011	Executed
HDOT Use and Occupancy Sub-agreement for WOFH	WOFH	-	April 5, 2012	Executed
UH Urban Garden Sub-agreement	KHG	Feb 2013	Pending	Property appraisal complete.
HDOT Master Agreement for KHG	KHG	Feb 2013	Pending	HART has received comments and is resolving issues.
HDOT Use and Occupancy Sub-agreement for KHG	KHG	Feb 2013	Pending	Will complete after KHG Master Agreement is completed
Aloha Stadium/ Department of Accounting and General Services (DAGS)	KHG	Feb 2013	Pending	Finalized agreement. Aloha Stadium Board approved agreement. Awaiting revision to agreement based on Stadium Board action.
Navy/General Services Administration (GSA)	Airport	N/A	Pending	Navy will provide consents to enter until all required easements are in place. Progressing fee taking of Pearl Harbor Station site.
US Post Office Honolulu Processing and Distribution Center	Airport	Nov 2013	Pending	Initiated request to secure an easement for Post Office Property.
FAA Master Agreement	Airport	Jul 2013	Pending	As design progresses, a determination will be made if an agreement is required.
HDOT Master Agreement for Airport	Airport	Jun 2013	Pending	Pending
HDOT Joint Use and Occupancy Sub-agreement for Airport	Airport	Jul 2013	Pending	Will complete after Airport Master Agreement is completed
HDOT Master Agreement for City Center	City Center	Jun 2014	Pending	Pending awaiting completion of the KHG master agreement
HDOT Joint Use and Occupancy Sub-agreement for City Center	City Center	Jul 2014	Pending	Will complete after City Center Master Agreement is completed.
Honolulu Community College Sub-agreement	City Center	May 2014	Pending	Property appraisal completed.
Federal Court House/GSA	City Center	Oct2014	Pending	HART is reviewing the GSA draft agreement. Conducting monthly meetings with parties.
Hawaii Community Development Agreement (HCDA)	City Center	Oct2014	Pending	Awaiting final design requirements for the guideway
DAGS	City Center	Oct2014	Pending	Awaiting final design requirements for the guideway

Agreement	Segment/ Contract	Target Date	Completion Date	Status
Kamehameha Schools/Stanford Carr Development	City Center		Pending	Property required for Civic Center Station is owned by Kamehameha Schools and is to be developed by Stanford Carr Development. Agreement may be required with both parties
The Howard Hughes Corporation	City Center		Pending	Agreement likely needed for the guideway and Kaka’ako Station located on property to be redeveloped near Ward Avenue
General Growth Properties	City Center		Pending	Agreement likely needed for guideway and Ala Moana Station located on property adjacent to Ala Moana Mall

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 will combine Segments III and IV into a single guideway construction contract.

The DB approach was used to advance the project schedule in order to minimize escalation costs and start construction of the initial portion of the project while the remainder of the project proceeds through the DBB process. Work on these early contracts (Segments I & II, MSF and CSC) was initiated ahead of the FFGA utilizing excise tax funding through LONPs.

The PMOC has reviewed the grantee’s contracting plan for project delivery and procurement and evaluated the soundness and adequacy of its approach to bidding and awarding of contracts, procurement of materials, equipment, and vehicles, and the construction administration and construction management of the Project. The selected project delivery methods and contract packaging strategies are reasonable and are reflected in project schedules and cost estimates.

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:

Core System Description	Status
Core System - General	
Notice to Proceed (NTP) Delay Claim	HART requested AHJV to re-submit claim thru a Request For Contractor Change (RFCC). AHJV claims 9-month delay in starting work due to CSC protest
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
Fare Collection System	HART is reviewing possibility of installing fare gates
Core System Train Control/SCADA Subsystem	
Operational Control Center (OCC) Layout	Operational Control Center (OCC) layout may be smaller than the area originally proposed to accommodate equipment.
Stopping Accuracy	AHJV reviewing stopping accuracy at station platforms
Braking Distance Model Accuracy	AHJV is reviewing braking distance model accuracy for the entire guideway
Mixed Fleet Operation	AHJV has issues with installing redundant systems for future four-car train consist operation. HART will provide contract details
Maintenance Of Way (MOW) Vehicle Automatic Train Control (ATC) Capabilities	HART considering Automatic Vehicle Indication (AVI)/Automatic Vehicle Location (AVL)
Core System Traction Electrification	
Train Evacuation – Wayside Energy Storage	HART is reviewing two types of Wayside Energy Storage scenarios: Emergency Generators (Diesel) or Capacitor Storage devices.
Station Train Emergency Stops and Blue Light Stations	HART and AHJV are evaluating the locations for installing the emergency stops and blue lights
Core System Communication Subsystems	
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
Core System O&M Subsystem	
Maintenance and Storage Facility (MSF) Yard Configuration	AHJV is evaluating HART’s proposed MSF yard configuration changes
Guideway Track Parameters	AHJV to provide HART with its assessment of gain/loss in trip time due to H1 changes.
Vehicles	
Long gaps in contact rail for diamond crossovers	AHJV proposes smaller diamond crossovers to eliminate long gaps
Vehicle/Platform Interface Tolerances	HART and AHJV are evaluating the gap tolerances between the vehicle and station platform
Train Evacuation – Onboard Energy Storage	Not considered by HART. HART will pursue Wayside Energy Storage instead.
Derailment Mitigation	AHJV claims no responsibility for installing guard rails to prevent derailments. HART to provide AHJV with contract details

Core System Description	Status
Collector Shoe/Contact Rail	AHJV claims there are clearance issues between the collector shoe and the contact rail. HART sees no issue since the clearance being proposed is similar to what CSC has installed in Los Angeles.

HART and the PMOC continue to hold monthly breakout sessions to review the status of Core Systems and Vehicle activities.

2.3 Project Management Plan and Sub-Plans

The following table presents the status of each of the grantee's management deliverables in preparation of an application for an FFGA.

Sub-Plan	Revision No.	Date	Notes
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)	3A	29-Feb-12	Accepted
Safety and Security Certification Plan (SSCP)	2A	01-Mar-12	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; revision pending review by new Project Controls Manager
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

2.4 Project Schedule Status

The Revenue Service Date (RSD) identified in the FFGA is January 31, 2020. The grantee's Master Project Schedule (MPS), Data Date of July 27, 2012, identifies the target date for the start of full revenue operations as March 2019. To date, the PMOC is receiving sporadic schedule update reports. The new Project Controls Manager intends to submit a current update of MPS in early March 2013.

The table below provides a comparison of key milestone dates at the start of PE and in the current MPS.

Milestone Description	Finish Date		Variance (Days)
	PE Entry Baseline	MPS (Data Date 27-Jul-12)	
FTA Award Full Funding Grant Agreement	11-Sep-10	12-Nov-12	(793)
WOFH/KH Revenue Service	14-Sep-16	15-Jun-16	91
Airport/City Center Revenue Service (RSD)	31-Mar-19	15-Mar-19	16

It should be noted that the above milestone dates do not reflect the recent suspension of ground disturbing activities that occurred in August 2012. HART is updating the MPS with regard to the suspension of activities to determine impact. The grantee's preliminary schedule analysis indicates that there could be a nine to twelve-month impact on the interim opening but possibly no impact to the full Revenue Service Date. The PMOC will review the impact to the target date and RSD when the updated MPS is made available in March 2013.

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

Period: March 2013 – May 2013		
Activity	Responsibility	Date
Monthly Progress Meeting	FTA, HART, PMC, GEC and PMOC	March 13, 2013
Safety & Security Quarterly Meeting	FTA, HART, HDOT and PMOC	March 14, 2013
Monthly Progress Meeting	FTA, HART, PMC, GEC and PMOC	April 10, 2013
Monthly Progress Meeting	FTA, HART, PMC, GEC and PMOC	May 8, 2013
Quarterly Progress Meeting	FTA, HART, PMC, GEC and PMOC	TBD

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
Total Project Cost	\$5.122 billion

Total Expenditures to Date – \$0.592 billion (through December 2012)

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
10	GUIDEWAY & TRACK ELEMENTS	1,275,328,962	1,114,305,144	161,023,818	17,412,662	1,134,290,904
10.04	Guideway: Aerial structure	1,175,328,184	1,022,380,670	152,947,514	6,239,062	1,039,128,341
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	11,173,600	82,827,829
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	3,200,603
20	STATIONS, STOPS, TERMINALS, INTERMODA	506,165,689	421,804,742	84,360,947	0	417,704,740
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	290,463,457
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	54,721,186
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	99,425,456	92,535,013	6,890,443	3,480,730	101,949,391
30.02	Light Maintenance Facility	8,161,279	7,591,887	569,392	0	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	73,606	7,735,910
30.05	Yard and Yard Track	41,975,018	39,046,528	2,928,490	749,250	48,769,658
40	SITWORK & SPECIAL CONDITIONS	1,103,867,264	980,569,426	123,297,838	198,587,513	912,565,734
40.01	Demolition, Clearing, Earthwork	34,695,802	29,980,157	4,715,645	6,614	27,672,011
40.02	Site Utilities, Utility Relocation	350,694,801	299,449,755	51,245,046	6,965,887	302,390,398
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	7,228,935	6,590,542	638,393	131,320	3,777,603
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks	30,841,906	26,979,122	3,862,784	3,856,633	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	507,888	170,471,360
40.08	Temporary Facilities and other indirect costs during construction	410,969,241	386,517,624	24,451,617	186,543,833	325,364,025
50	SYSTEMS	247,460,781	221,284,483	26,176,298	0	220,601,453
50.01	Train control and signals	91,492,532	81,982,556	9,509,976	0	82,402,646
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	54,251,397
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
Construction Subtotal (10 - 50)		3,232,248,152	2,830,498,808	401,749,344	219,480,905	2,787,112,222

SCC	SCC Description	FFGA Budget	Base Cost	Allocated Cont.	Incurred	EAC
60	ROW, LAND, EXISTING IMPROVEMENTS	222,188,386	197,397,947	24,790,439	39,233,692	197,675,747
60.01	Purchase or lease of real estate	201,658,907	179,360,664	22,298,243	37,076,398	179,360,664
60.02	Relocation of existing households and businesses	20,529,479	18,037,283	2,492,196	2,157,294	18,315,083
70	VEHICLES	208,501,186	186,829,020	21,672,166	212,900	190,028,297
70.02	Heavy Rail	186,061,066	166,721,385	19,339,681	0	171,122,353
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
80	PROFESSIONAL SERVICES	1,183,826,026	1,090,438,814	93,387,212	333,929,284	1,073,768,431
80.01	Preliminary Engineering	95,120,484	94,055,262	1,065,222	104,049,579	117,965,633
80.02	Final Design	257,934,908	228,321,632	29,613,276	31,255,158	189,113,670
80.03	Project Management for Design and Construction	385,825,694	366,458,463	19,367,231	164,378,015	362,775,906
80.04	Construction Administration & Management	218,155,752	199,656,728	18,499,024	25,601,568	200,179,928
80.05	Professional Liability and other Non-Construction Insurance	52,138,030	46,549,724	5,588,306	263,370	42,554,494
80.06	Legal; Permits; Review Fees by other agencies, cities, etc.	76,135,125	67,641,006	8,494,119	6,194,474	67,641,005
80.07	Surveys, Testing, Investigation, Inspection	24,955,327	21,759,335	3,195,992	1,361,035	28,733,724
80.08	Start up	73,560,706	65,996,664	7,564,042	826,085	64,804,071
90	Subtotal (10 - 80)	4,846,763,750	4,305,164,589	541,599,161	592,856,781	4,248,584,697
	UNALLOCATED CONTINGENCY	101,871,170	0	101,871,170	0	101,871,170
100	Subtotal (10 - 90)	4,948,634,920	4,305,164,589	643,470,331	592,856,781	4,350,455,867
	FINANCE CHARGES	173,058,242			0	173,058,243
	Total Project Cost (10 - 100)	5,121,693,162	4,305,164,589	643,470,331	592,856,781	4,523,514,110

2.5.2 Contingency

HART forecasts a need of approximately \$167.6 million of contingency, which includes the potential AIS delay costs and the estimated value of all known and pending change orders associated with the project as of December 2012. This projected use results in a \$476 million balance of available contingency for the remainder of the project, or until the RSD of January 2020. PMOC and HART hold monthly workshops to review contingency use and forecast in detail. Following table presents the status of the project contingency.

Contingency	FFGA Amount
Unallocated	\$101.9 M
Allocated	\$540.1 M
Allowances	\$1.6 M
Total	\$643.6 M
Expended to Date	(\$34.4M)
Forecast	(\$133.2M)
Uncommitted	\$476.0M

HART continually manages the strategy to avoid or mitigate use of contingency as well as plan the timing of any potential changes. Breakout session discussions between HART and the PMOC focus on opportunities to reduce costs and accelerate contract-scheduled activities to attain key milestones earlier than targeted. The sessions conclude with an overview of the cost and schedule drawdown curves in order to assess project performance against total project contingencies and buffer float. HART has developed a forecast of contingency use that is plotted on the drawdown curve.

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
Total	\$5.122 billion

The GET surcharge receipts received to date are approximately \$554 million.

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.

Upon submittal of the updated cost estimate by the grantee in spring 2012 to support the FFGA application, it was observed that significant contingency reduction occurred, to a point where contingency was below accepted control levels. The grantee had identified a total of \$644 million in contingency in the cost estimate used for the Risk Refresh Workshop in April 2012. This was \$222 million less than the amount of contingency of \$866 million identified during the prior review to support the request to enter into Final Design.

Subsequent to that April 2012 Risk Refresh Workshop, the grantee implemented efforts to recover contingency levels through cost reduction measures, value engineering, and revised project delivery strategies. In addition, strong controls were put in place to avoid future rapid contingency loss. HART and the PMOC have held monthly breakout sessions to review the status of the forecast costs, schedule management, risk management, and cost containment measures. These breakout sessions have resulted in increased confidence by the PMOC of the grantee's ability to manage budget and schedule of the project.

The PMOC had also recommended that the grantee develop more detail for the Secondary Mitigation items and attempt to identify secondary mitigation measures that approach a total value of \$149 million. The grantee has undertaken an exercise to both develop more detail for its proposed Secondary Mitigation items and to identify additional viable items. This information was reviewed by the PMOC and will be incorporated into a final updated RCMP.

2.7 Action Items

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Schedule a meeting with HDOT to discuss KHG agreements	HART	Jan-12	Jan-13		Open – meeting to be scheduled in January 2013.
2	Amend previous agreements to include Buy America provisions for utility companies	HART	Aug-12	Feb-13		In Progress – discussions with utility vendors is underway
3	Hire Safety and Security Certification Manager prior to FFGA	HART	Aug-12	Jan-13		In Progress – recruiting has begun
4	Provide compendium of design criteria and Design Bid Build (DBB) Standard Special Provisions and Division 1 Specifications	HART	Sep-12	Feb-13		Open – item is under HART review.
5	Core Systems Safety officer on site	HART	Oct-12	Jan-13	2/13/13	Closed
6	Update the construction safety reporting in the Monthly Report and presentation to include more detailed break-down (i.e., context of hours)	HART	Oct-12	Jan-13		Open – HART to include in Monthly report
7	Conduct quality audit on Safety (HART)	HART	Oct-12	HART-Feb 13		Open
8	Provide the PMOC the outcome product of independent cost estimate	HART	Nov-12	Jan-13		Closed
9	Provide response to FHSG design review comments	PMOC	Dec-12	Jan-13		Closed
10	Provide FTA/PMOC with staff summary on real estate packages	HART	Dec-12	Jan-13		Open
11	Provide list of Post-ROD Changes and schedule MMP workshop with FTA/PMOC	HART	Jan-13	Feb-13		Open
12	Develop CIL/CEL list for FHSG	HART	Jan-13	Feb-13		Open
13	Populate the Safety & Security Roadmap with dates	HART	Jan-13	Jan-13		Open
14	Include a ROW summary table into monthly presentation to report budget/spent	HART	Jan-13	Feb-13	2/13/13	Closed
15	Provide PMOC with design package for Core Systems	HART	Feb-13	Mar-13		Open
16	HART to provide response letter for Judge	HART	Feb-13	Feb-13		Open
17	Provide resumes for on-site Core Systems Safety officers	HART	Feb-13	Feb-13		Open
18	HART to provide QA Audit schedule and NCRs	HART	Feb-13	Feb-13		Open

The following action items were discussed during the Project Controls Meeting:

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	HART to enact and include cost reduction measures for GEC, PMC and CE&I contracts (FFGA cost reduction measures)	HART	Aug-12	Feb-13		Open – provide documentation to PMOC
2	PMOC to provide an assessment of the AIS Cost/Schedule Impact Analysis	PMOC	Dec-12	Jan-13		Open – draft has been submitted to FTA
3	HART to provide a target date for the Master Project Schedule Update availability	HART	Dec-12	Mar-13		Open – Initial CPM by end of January and cost loading March
4	HART to provide back-up to the mitigation cost estimates included in the AIS Cost/Schedule Impact Analysis (re-package estimates)	HART	Dec-12	Jan-13		Open
5	Complete and submit the updated Contract Package Plan	HART	Jan-13	Mar-13		Open
6	Submit the Base-lined RCMP	HART	Jan-13	Jan-13		Open
7	Complete a forecast curve on the Cost Drawdown curve	HART	Jan-13	Feb-13		Open
8	Complete a Schedule drawdown curve	HART	Jan-13	Mar-13		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 Homelands
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.

Contract No.	MM-901	
Contract Description:	Program Management Support Consultant (PMSC-2)	
Status:	Grantee executed a contract with InfraConsult LLC to provide PMC services. NTP was issued February 23, 2012.	
Cost:	Original Contract Value	\$33,000,000
	Approved Change Orders	\$0
	Current Contract Value	\$33,000,000
	Expended to Date	\$ 2,000,000
	% Expended	5.7%
	DBE Participation	0%
Schedule:	Contract duration is approximately 36 months from NTP.	
Issues or Concerns:	None	

Contract No.	MM-910	
Contract Description:	General Engineering Consultant (GEC II) Contract	
Status:	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.	
Cost:	Original Contract Value	\$300,000,000
	Approved Change Orders	\$0
	Current Contract Value	\$300,000,000
	Expended to Date	\$81,495,000
	% Expended	27%
	DBE Participation	0%
Schedule:	The contract duration is approximately 36 months from NTP with an option for an additional 36 months.	
Issues or Concerns:	None identified at this time.	

Contract No.	DB-120	
Contract Description:	West Oahu/Farrington Highway (WOFH) DB Contract	
Status:	<p>Kiewit was awarded a contract on November 18, 2009. The following NTPs have been issued:</p> <ul style="list-style-type: none"> • 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. • NTP 1A – Issued March 11, 2010, authorizing \$25.8 million for PE activities to be completed. • NTP 1B - Issued March 23, 2010, authorizing \$21.2 million for interim design activities. 	

	<ul style="list-style-type: none"> • NTP 1C – Issued June 7, 2010, authorizing \$3.5 million for test and demonstration drilled shafts to complete the deep foundations interim design. • 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. • 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. • 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. • 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. • NTP 4B – Issued May 17, 2012, authorizing limited construction activities associated with the precast yard. 	
Cost:	Original Contract Value	\$482,924,000
	Approved Change Orders	\$32,527,270
	Current Contract Value	\$517,451,291
	Expended to Date	\$162,470,510
	% Expended	31.4%
	DBE Participation	1.23%
Schedule:	<ul style="list-style-type: none"> • 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. • Completion is anticipated in January 2015. 	
Issues or Concerns:	<ul style="list-style-type: none"> • 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. • Contractor must submit a revised baseline schedule. • No construction activity will continue until future written notice is provided by HART due to AIS. 	

Contract No.	DB-320
Contract Description:	Kamehameha Highway Guideway DB Contract
Status:	<p>Kiewit was awarded a contract on June 30, 2011. Following NTPs have been issued:</p> <ul style="list-style-type: none"> • NTP 1 – Issued July 12, 2011, authorizing \$102 million to perform PE including interim/definitive design submittals and coordinating with other contracts. • 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. • 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. • NTP 3A – Issued February 7, 2012 authorizing construction activities, excluding activities associated with the precast yard

	under the LONP 2 authority. <ul style="list-style-type: none"> • NTP 3B – Issued on May 22, 2012 authorizing limited construction activities associated with the precast yard. 	
Cost:	Original Contract Value	\$372,150,000
	Approved Change Orders	\$0
	Current Contract Value	\$372,150,000
	Expended to Date	\$82,491,730
	% Expended	22.2%
	DBE Participation	0.35%
Schedule:	<ul style="list-style-type: none"> • Contract duration is approximately 48 months from NTP. • Completion is anticipated in July 2015. 	
Issues or Concerns:	<ul style="list-style-type: none"> • No construction activity will continue until future written notice is provided by HART due to AIS. 	

Contract No.	DB-200	
Contract Description:	Maintenance and Storage Facility DB Contract	
Status:	Kiewit/Kobayashi Joint Venture was awarded a contract on June 30, 2011. Following NTPs have been issued: <ul style="list-style-type: none"> • NTP 1 – Issued July 25, 2011, authorizing \$16.8 million to perform PE, associated site investigations and coordinating with other contractors. • NTP 2 - Issued January 10, 2012 for approximately \$66 million and authorizes FD work activities and procurement of long 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). • NTP 3 – Issued February 7, 2012 authorizing construction activities under the LONP 2 authority. 	
Cost:	Original Contract Value	\$195,258,000
	Approved Change Orders	\$19,597,737
	Current Contract Value	\$214,855,737
	Expended to Date	\$38,142,099
	% Expended	17.8%
	DBE Participation	0.14%
Schedule:	<ul style="list-style-type: none"> • Contract duration is approximately 36 months from NTP. • Completion is anticipated in December 2014. 	
Issues or Concerns:	<ul style="list-style-type: none"> • 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. • No construction activity will continue until future written notice is provided by HART due to AIS. 	

Contract No.	DBOM-920	
Contract Description:	Core Systems Contract (CSC)	
Status:	Ansaldo Honolulu Joint Venture was awarded a contract on November 28, 2011. The following NTPs have been issued: <ul style="list-style-type: none"> • 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. 	
Cost:	Original Contract Value	\$573,782,793
	Approved Change Orders	\$0
	Current Contract Value	\$573,782,793
	Expended to Date	\$24,734,191
	% Expended	3.4%
	DBE Participation	0.00%
Schedule:	<ul style="list-style-type: none"> • Contract duration is approximately 88 months from NTP. • Completion is anticipated in April 2019. 	
Issues or Concerns:	<ul style="list-style-type: none"> • Grantee has provided approval with comments of the baseline schedule. 	

Contract No.	FD-430	
Contract Description:	Airport Section Guideway and Utilities Final Design	
Status:	AECOM was awarded a contract on December 15, 2011. The following NTPs have been issued: <ul style="list-style-type: none"> • NTP 1A – Issued on January 5, 2012 for a design workshop and to develop a schedule of milestones and activities. • NTP 1B – Issued on February 22, 2012 to advance design. 	
Cost:	Original Contract Value	\$38,840,960
	Approved Change Orders	\$275,000
	Current Contract Value	\$39,253,055
	Expended to Date	\$15,253,055
	% Expended	39.0%
	DBE Participation	0.76%
Schedule:	<ul style="list-style-type: none"> • Contract duration is approximately 61 months from NTP 1A. • Completion is anticipated in January 2017. 	
Issues or Concerns:	<ul style="list-style-type: none"> • 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. 	

Contract No.	FD-530	
Contract Description:	City Center Section Guideway and Utilities Final Design	
Status:	AECOM was awarded a contract on July 30, 2012. The following NTPs have been issued: <ul style="list-style-type: none"> • NTP 1A – Issued on July 31, 2012 for a design workshop and to develop a schedule of milestones and activities. • NTP 1B – Issued on October 25, 2012 for preliminary engineering revisions. 	
Cost:	Original Contract Value	\$43,948,220

	Approved Change Orders	\$0
	Current Contract Value	\$43,948,220
	Expended to Date	\$267,688.00
	% Expended	0.6%
	DBE Participation	0%
Schedule:	<ul style="list-style-type: none"> Contract duration is approximately 61 months from NTP 1A. Completion is anticipated in January 2017. 	
Issues or Concerns:	<ul style="list-style-type: none"> Airport and City Center Guideway Construction Packages will be combined. 	

Contract No.	FD-240	
Contract Description:	Farrington Highway Station Group Final Design	
Status:	<p>HDR/HPE, Inc. was awarded a contract on April 15, 2010. The following NTP's have been issued:</p> <ul style="list-style-type: none"> NTP 1 – Issued on January 14, 2011 to begin PE. NTP 2 – Issued on February 13, 2012 to begin Interim Design. NTP 3 – Issued on January 28, 2012 to begin Final Design. 	
Cost:	Original Contract Value	\$5,500,000
	Approved Change Orders	\$2,508,045
	Current Contract Value	\$8,008,045
	Expended to Date	\$6,108,179
	% Expended	76.3%
	DBE Participation	2.68%
Schedule:	<ul style="list-style-type: none"> Contract duration is approximately 55 months from NTP 1. Completion is anticipated in July 2015. 	
Issues or Concerns:	<ul style="list-style-type: none"> During a workshop in February 2012, HART and the GEC presented the status of station design modifications initiated for the Farrington Highway Stations Group (FHSG) in December 2011 in response to cost estimates trending beyond the budget as identified during Preliminary Engineering. Initial cost reduction measures for the FHSG (West Loch, Waipahu Transit Center and Leeward Community College stations) were developed further by HDR and were applied conceptually to all other stations for the purpose of determining feasibility of cost reduction for each station. HDR's acquisition of InfraConsult LLC (HART's Program Management Consultant) has created conflict of interest issues for HART since HDR is currently under contract to complete design of FHSG. 	

Contract No.	FD-140	
Contract Description:	West Oahu Station Group Construction Final Design	
Status:	<p>URS, Inc. was awarded a contract on June 14, 2012. The following NTP's have been issued:</p> <ul style="list-style-type: none"> NTP 1A – Issued on June 15m, 2012 to prepare statement of work and mobilize. NTP 1B – Issued on September 6, 2012 to begin advanced PE. NTP 1C – Issued on January 4, 2013 to begin Interim Design. 	
Cost:	Original Contract Value	\$7,789,000

	Approved Change Orders	\$0
	Current Contract Value	\$7,789,000
	Expended to Date	\$1,930,988
	% Expended	24.8%
	DBE Participation	0%
Schedule:	<ul style="list-style-type: none"> Contract duration is approximately 55 months from NTP 1A. Completion is anticipated in October 2015. 	
Issues or Concerns:	<ul style="list-style-type: none"> None at this time 	

Contract No.	FD-340	
Contract Description:	Kamehameha Highway Station Group Construction Final Design	
Status:	Anil Verma, Inc. was awarded a contract on November 26, 2012. The following NTP's have been issued: <ul style="list-style-type: none"> NTP 1A – Issued on November 26, 2012 to prepare statement of work and mobilization. 	
Cost:	Original Contract Value	TBD
	Approved Change Orders	\$0
	Current Contract Value	TBD
	Expended to Date	\$0
	% Expended	0%
	DBE Participation	0%
Schedule:	<ul style="list-style-type: none"> Contract duration is approximately 33 months from NTP 1A. Completion is anticipated in August 2015. 	
Issues or Concerns:	<ul style="list-style-type: none"> None at this time 	

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

Contract No.	MM-935	
Contract Description:	Real Estate Services Consultant	
Status:	The grantee issued NTP on March 14, 2012 to Paragon Partners, LTD.	
Cost:	Original Contract Value	\$2,800,000
	Approved Change Orders	\$0
	Current Contract Value	\$2,800,000
	Expended to Date	\$0
	% Expended	0%
	DBE Participation	0%
Schedule:	Completion is anticipated in March 2017.	
Issues or Concerns:	None at this time	

Contract No.	MM-950	
Contract Description:	Owner Controlled Insurance Program (OCIP) Consultant	
Status:	The grantee has decided not to use OCIP for WOFH, MSF and KH DB Contracts. However, OCIP will be included on the remaining contracts. The grantee selected Marsh as its consultant and issued NTP on March 30, 2012.	
Cost:	Original Contract Value	\$1,025,000
	Approved Change Orders	\$0
	Current Contract Value	\$1,025,000
	Expended to Date	\$0
	% Expended	0%
	DBE Participation	0%
Schedule:	Completion is anticipated in December 2019.	
Issues or Concerns:	None at this time	

Contract No.	MM-940	
Contract Description:	Programmatic Agreement (PA) Project Manager	
Status:	The grantee issued an NTP on March 30, 2012 to Pacific Legacy Inc. The consultant will report to the State Historic Preservation Division and the consulting parties listed in the PA.	
Cost:	Original Contract Value	\$950,000
	Approved Change Orders	\$0
	Current Contract Value	\$950,000
	Expended to Date	\$0
	% Expended	0%
	DBE Participation	0%
Schedule:	Completion is anticipated in February 2017.	
Issues or Concerns:	None at this time.	

Appendix C: Procurement Schedule

Contract No.	Segment	Type Svc	Description	Advertise	NTP	Bid Ready Documents	Contract Complete
Active							
FD-340	KHG	Design	Kamehameha Station Group (includes H2/R2 Ramp)	6/28/2011	11/26/2012	12/15/2013	10/31/2016
FD-440	Airport	Design	Airport Station Group	3/30/2012	11/14/2012	8/15/2014	7/29/2017
MM-180	WOFH	CE&I	West Oahu and Farrington Highway Station Groups	3/31/2013	11/15/2013	N/A	6/15/2017
MI-930	All	DFIM	Elevators & Escalators	8/17/2012	4/15/2013	N/A	3/15/18
MM-500	Airport	CE&I	Airport and City Center Utilities CE&I	12/21/2012	10/02/2013	N/A	1/15/2017
Future							
FD-540	City Cen	Design	Dillingham Station Group	11/16/2012	8/15/2013	5/01/2015	7/30/2018
FD-545	City Cen	Design	Kaka'ako Station Group	11/16/2012	8/15/2013	5/01/2015	7/30/2018
MM-380	KHG	CE&I	Kamehameha Station Group (includes H2/R2 Ramp)	3/31/2013	11/15/2013	N/A	6/15/2017
DBB-270	WOFH	Construction	Farrington Highway Station Group Construction	12/15/2013	4/15/2014	N/A	11/14/2016
	Airport	Construction	Airport Section Utilities	11/01/2013	3/05/2013	N/A	12/22/2015
FD-245	KHG	Design	Pearl Highlands Parking Structure/Bus Transit Center	4/15/2013	12/21/2013	10/1/2015	4/29/2018
DBB-505	WOFH	Construction	West Oahu Station Group Construction	12/15/2013	4/15/2014	N/A	11/14/2016
DBB-370	KHG	Construction	Kamehameha Station Group (includes H2/R2 Ramp)	12/15/2013	4/15/2014	N/A	11/14/2016
MM-525	Airport	CE&I	Airport and City Center Guideway CE&I	7/05/2013	4/1/2014	N/A	8/15/2018
MM-485	Airport	CE&I	Airport Station Group	2/05/2014	9/01/2014	N/A	8/14/2018
DBB-510	City Cen	Construction	City Center Section Utilities	3/15/2014	6/15/2014	N/A	12/22/2015
DBB-520	Airport	Construction	Airport and City Center Guide Guideway Construction	5/1/2014	10/15/2014	N/A	4/29/2018
MM-585	City Cen	CE&I	Dillingham and Kako'ako Station Groups CE&I	2/05/2014	9/01/2014	N/A	8/14/2018
FD-600	WOFH	Design	UH West Oahu Park-and-Ride and Ho'opili Station Finishes	9/10/2014	5/12/2015	1/5/2016	9/29/2018
MM-385	KHG	CE&I	Pearl Highlands Parking Structure/Bus Transit Center	12/18/2014	7/16/2015	N/A	4/29/2018
DBB-470	Airport	Construction	Airport Station Group	10/01/2014	2/01/2015	N/A	6/15/2017
DBB-570	City Cen	Construction	Dillingham Station Group	7/15/2015	11/25/2015	N/A	8/14/2018
DBB-575	City Cen	Construction	Kaka'ako Station Group	7/15/2015	11/25/2015	N/A	8/14/2018
	City Cen	Construction	Downtown Station	7/15/2015	11/25/2015	N/A	8/14/2018
DBB-275	KHG	Construction	Pearl Highlands Parking Structure/Bus Transit	8/15/2015	12/28/2015	N/A	4/29/2018

Contract No.	Segment	Type Svc	Description	Advertise	NTP	Bid Ready Documents	Contract Complete
			Center				
MM-600	WOFH	CE&I	UH West Oahu Park-and-Ride and Ho'opili Station Finishes	8/01/2015	2/14/2016	3/15/2016	8/15/2018
DBB-600	WOFH	Construction	UH West Oahu Park-and-Ride and Ho'opili Station Finishes	3/15/2016	9/15/2016	N/A	8/15/2018
	Pro Svcs		Outside Legal Council	11/30/12	2/01/13	N/A	1/31/16
	Services		Federal Government Liaison	11/30/12	2/01/13	N/A	1/31/16

Appendix D: Open Final Design Approval Letter Requirements

No.	Item	Completion Date	Comments
Safety and Security			
1	The Hawaii Department of Transportation (HDOT) should accelerate the hiring process and select a qualified State Safety Oversight Agency (SSOA) project manager.	Dec-12	Open – Jadine Urasaki named as Interim Project Manager
Civil Rights			
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: February 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

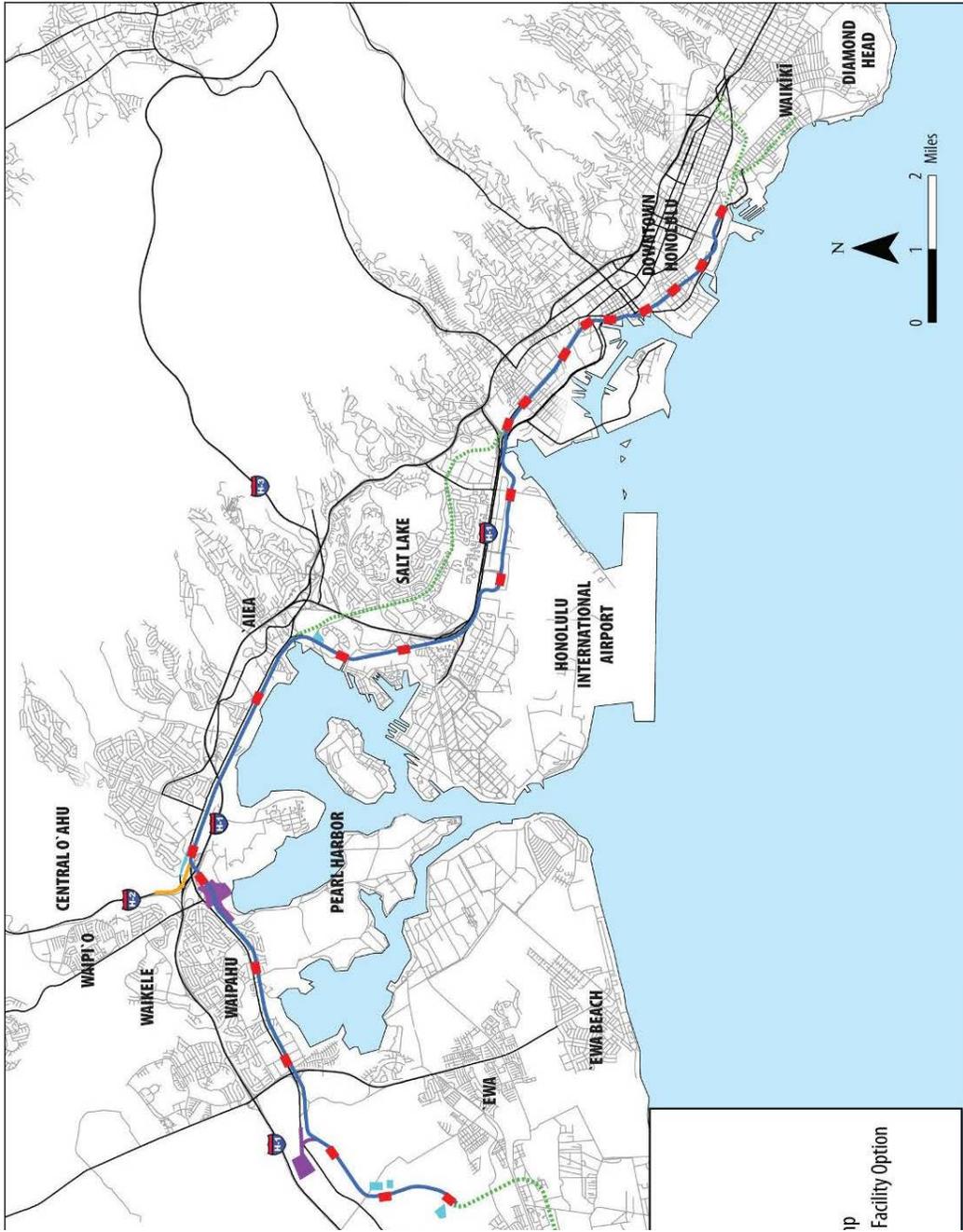
10/09 Approval Entry to PE	03/19 Estimated RSD at Entry to PE
12/11 Approval Entry to FD	03/19 Estimated RSD at Entry to FD
06/12 Requested FFGA	03/19 Estimated RSD at Request for FFGA
12/12 FFGA	01/20 RSD at FFGA

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

\$593M Amount of Expenditures at date of this report
12.7% complete (Total Project Expenditures/Total Project Cost)

Honolulu Rail Transit Project Map



Appendix G: Safety and Security Checklist

Project Overview			
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		
Project Plans	Version	Review by FTA	Status
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
Safety and Security Authority	Y/N	Status	
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 in formation	
Has the grantee submitted its safety certification plan to the oversight agency?	N	SOA in formation	
Has the grantee implemented security directives issues by the Department Homeland Security, Transportation Security Administration?	N	None issued to date	
SSMP Monitoring			
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"> • Activation Plan and Procedures • Integrated Test Plan and Procedures • Operations and Maintenance Plan • Emergency Operations Plan 	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
Construction Safety		
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

Federal Railroad Administration		
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	