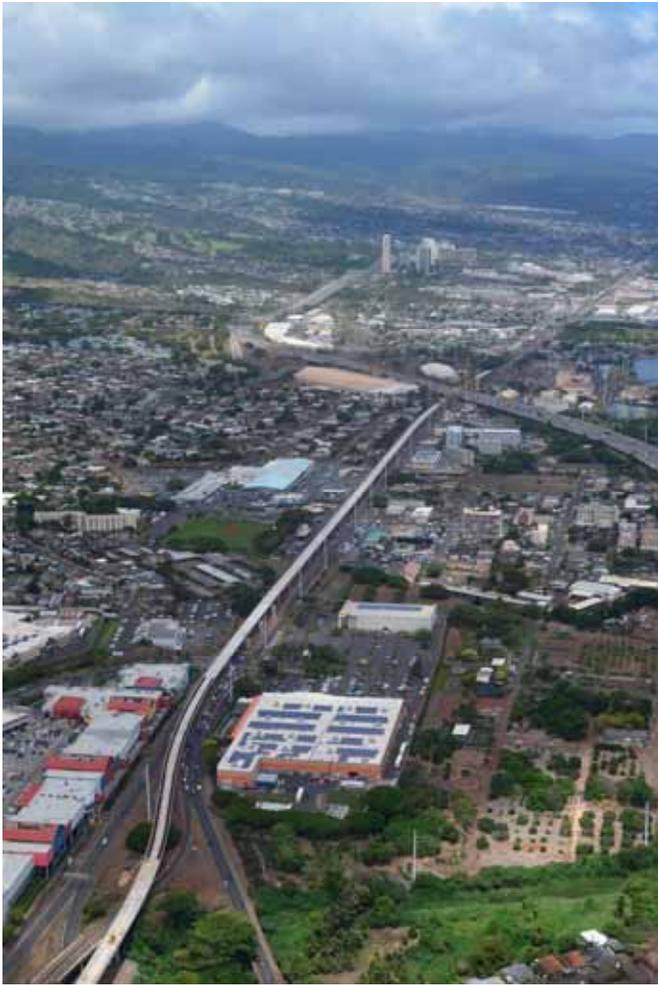


HONOLULU RAIL TRANSIT PROJECT



June 2016 MONTHLY PROGRESS REPORT



www.HonoluluTransit.org

THIRD PARTY DISCLAIMER

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

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

REPORT FORMAT AND FOCUS

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

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

ON THE COVER:

Left: Guideway along Kamehameha Highway looking town bound.

Upper right: Kamehameha Highway Guideway along Kamehameha Highway near Aloha Stadium.

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

TABLE OF CONTENTS

TABLE OF FIGURES 4

LIST OF ACRONYMS 5

PROJECT MAP 8

PROGRESS REPORT SUMMARY OF CHANGES..... 9

1 EXECUTIVE SUMMARY 11

2 OVERALL PROJECT PROGRESS AND FINANCIALS 13

 2.1 Project Progress 13

 2.2 Project Budget 15

 2.3 Project Contingency 15

 2.4 Project Funding 17

 2.5 Project Revenue and Costs 19

3 SCHEDULE..... 20

4 CONTRACT STATUS 22

 4.1 System-Wide 23

 4.2 Section I – West O’ahu/Farrington Highway: East Kapolei to Pearl Highlands 31

 4.3 Section II – Kamehameha Highway: Pearl Highlands to Aloha Stadium 43

 4.4 Section III – Airport: Aloha Stadium to Middle Street Transit Center Station 51

 4.5 Section IV – City Center: Middle Street Transit Center Station to Ala Moana Center..... 57

 4.6 Project-Wide 61

5 OVERALL PROJECT-WIDE ACTIVITIES 68

 5.1 Permits 68

 5.2 Hawai’i Department of Transportation (HDOT) Agreements 68

 5.3 Utility Agreements 69

 5.4 Right-of-Way 71

6 MANAGEMENT AND ADMINISTRATIVE UPDATES 76

 6.1 Safety and Security 76

 6.2 Quality Management 84

 6.3 Buy America Compliance 88

 6.4 Disadvantaged Business Enterprise (DBE) 88

 6.5 Planning and Environment..... 89

 6.6 Risk Management 90

 6.7 Community Outreach 92

 6.8 Staffing 93

APPENDICES..... 96

 A. Action Items 97

 B. Project Contingency Management General Background and Clarifications 98

 C. Project Cost Reports 106

 D. Procurement and Contract Status..... 112

 E. Vehicle Car Shell Progress Tracker 113

 F. DBE Participation..... 114

 G. Project Organization Chart 117

 H. Indices on Key Commodities 118

 I. Project Photos 119

Table of Figures

Figure 1. Overall Project Progress (% Complete) 13

Figure 2. Construction Progress (% Complete) 13

Figure 3. Design Progress (% Complete) 14

Figure 4. Utilities Progress (% Complete)..... 14

Figure 5. Project Contingency Budget..... 15

Figure 6. Draft Cost Contingency Drawdown Chart 16

Figure 7. Planned vs. Received Project Funding..... 17

Figure 8. Project Funding Sources (YOE \$M)..... 17

Figure 9. New Starts Drawdown by Federal Fiscal Year 18

Figure 10. Project Revenue versus Incurred Costs..... 19

Figure 11. Cash Balance Summary 19

Figure 12. HRTP Master Project Schedule Summary (MPSS) 21

Figure 13. Right-of-Way Status for the Parcels 71

Figure 14. Relocation Status for the Occupants..... 72

Figure 15. Third-Party Agreement Status..... 73

Figure 16. DBE Participation this Month 88

Figure 17. Public Outreach 93

Figure 18. Staffing Activities..... 94

Figure 19. Project Staffing (Actual vs. Planned) 95

LIST OF ACRONYMS

AB	AnsaldoBreda	DCCC	Design Criteria Conformance Checklists
ACHP	Advisory Council on Historic Preservation	DCN	Design Change Notice
ACS	Access Control System	DDC	Department of Design and Construction
AFE	Authorized for Expenditure	DES	Department of Environmental Services
AGS	Airport Guideway and Stations	DFIM	Design Furnish Install Maintain
AHJV	Ansaldo Honolulu Joint Venture	DFM	Department of Facility Maintenance
AIS	Archaeological Inventory Survey	DHHL	Department of Hawaiian Homelands
APTA	American Public Transportation Association	DHR	Department of Human Resources
ARRA	American Recovery and Reinvestment Act	DIT	Department of Information Technology
ASG	Airport Station Group	DKSG	Dillingham and Kaka'ako Station Group
ASU	Airport Section Utilities	DLIR	Hawai'i Department of Labor and Industrial Relations
ATC	Automated Train Control	DLNR	Department of Land and Natural Resources
ATO	Automated Train Operation	DOE	Department of Education
AVA	Anil Verma Associates, Inc.	DOH	Department of Health
BA	Buy America	DOL	Department of Labor
BAC	Buy America Compliance	DPM	Deputy Project Managers
BACM	Buy America Compliance Matrix	DPP	Department of Planning and Permitting
BAFO	Best and Final Offer	DPR	Department of Parks and Recreation
BCS	Balanced Cantilever System	DPS	Department of Public Safety
BFS	Budget and Fiscal Services	DS	Downstream
BLS	Bureau of Labor Statistics	DTS	Department of Transportation Services
BMP	Best Management Practice	DVT	Design Verification Test
BOD	Board of Directors	ECP	Environmental Compliance Plan
BPS	Baseline Project Schedule	E/E	Elevator/Escalator
BUE	Bottom-Up Estimate	EK	East Kapolei
BUEG	Back-up Emergency Generator	EMC	Electromagnetic Compatibility
CAM	Construction Access Milestone	EMF	Electromagnetic Forces
CAR	Corrective Actions	EMI	Electromagnetic Interference
CCGS	City Center Guideway and Stations	EMP	Environmental Management Plan
CCO	Contract Change Order	EOR	Engineer of Record
CCTV	Closed Circuit Television	EOS	Electrically Operated Switch
CDC	Compendium of Design Criteria	ESA	Engineering Services Agreement
CDL	Commercial Driver License	FAA	Federal Aviation Administration
CDR	Conceptual Design Review	FAI	First Article Inspections
CE&I	Construction Engineering and Inspection	FAT	Factory Acceptance Tests
CEL	Certifiable Elements List	FD	Final Design
CIC	Communication Interface Cabinet	FDAS	Fire Detection Alarm System
CIL	Certifiable Items List	FDC	Field Design Change
CIP	Cast-in-place	FEIS	Final Environmental Impact Statement
CJA	Condon- Johnson & Associates	FFC	Fixed Facility Contractors
CM	Construction Manager	FFGA	Full Funding Grant Agreement
CMP	Corrugated Metal Pipe	FHSG	Farrington Highway Station Group
CMS	Contract Management System	FISC	Fleet and Industrial Supply Center
CMU	Concrete Masonry Unit	FLSWG	Fire Life Safety Working Group
CNMMP	Construction Noise Mitigation and Monitoring Plan	FOCN	Fiber Optic Communication Network
CO	Certificate Occupancy	FPO	Federal Preservation Officer
COI	Conflict of Interest	FTA	Federal Transit Administration
COMMs	Communications	FTE	Full-Time Equivalent
CONRAC	Consolidated Rental Car Facility	FWS	Fish and Wildlife Service
COR	Corporation Counsel	GAT	Great Aleutian Tsunami
CP	Consulting Party	GBS	Gap Breaker Station
CPM	Critical Path Method	GDR	Geotechnical Data Report
CPO	Chief Procurement Officer	GEC	General Engineering Consultant
CPP	Contract Packaging Plan	GET	General Excise Tax
CROE	Construction Right-of-Entry	GIS	Geographic Information System
CSC	Core Systems Contract	GSA	General Services Administration
CSCC	Construction Specification Conformance Checklists	GT	General Terms
CSL	Cross Hole Sonic Logging	HA	Hazard Analysis
CSOC	Core Systems Oversight Consultant	HABS	Historic American Buildings Survey
CSSP	Construction Safety & Security Plan	HAER	Historic American Engineering Record
CTS	Communications Transmission System	HALS	Historic American Landscape Survey
CWR	Continuous Welded Rail	HART	Honolulu Authority for Rapid Transportation
CWRM	Commission on Water Resource Management	HCC	Honolulu Community College
CZM	Coastal Zone Management	HCDA	Hawaii Community Development Authority
DAGS	Department of Accounting & General Services	HCSD	Hawai'i Capital Special District
DB	Design-Build	HDCC	Hawaiian Dredging Construction Company
DBB	Design-Bid-Build	HDOE	Hawai'i Department of Education
DBE	Disadvantaged Business Enterprise	HDOH	Hawai'i Department of Health
DBEDT	Department of Business, Economic Development and Tourism	HDOT	Hawai'i Department of Transportation
DBOM	Design-Build-Operate-Maintain	HDOT-A	Hawai'i Department of Transportation Airports Division
DCAB	Disability and Communication Access Board	HDPE	High-density polyethylene

HECO	Hawaiian Electric Company	O&M	Operations and Maintenance
HFD	Honolulu Fire Department	OCC	Operations Control Center
HHF	Historic Hawai'i Foundation	OCIP	Owner-Controlled Insurance Program
HHPRB	Hawai'i Historic Places Review Board	OIBC	O'ahu Island Burial Council
HIE	Hawaii Independent Energy	OIL	Open Items List
HILT	Hawaiian Islands Land Trust	OMPO	Oahu Metropolitan Planning Organization
HIOSH	Hawaii Occupational Safety and Health Division	ORCC	Operational Readiness Conformance Checklists
HP	Historic Preservation	OSB	Operations and Servicing Building
HPC	Historic Preservation Committee	OSHA	Occupational Safety and Health Administration
HPCA	Historic Preservation Certification Application	OTS	O'ahu Transit Services
HPD	Honolulu Police Department	OTW	Oceanic Time Warner
HPF	Historic Preservation Fund	OTWC	Oceanic Time Warner Cable
HRHP	Hawai'i Register of Historic Places	P3	Public-private partnership
HRI	Hitachi Rail Italy	PA	Programmatic Agreement
HRTF	Honolulu Rail Transit Project	PAIS	Programmatic Agreement Implementation Schedule
HTI	Hawaiian Telcom	PARs	Preventative Actions
HTL	Hazard Tracking Log	PB	Parsons Brinckerhoff, Inc.
HVAC	Heating, Ventilation and Air Conditioning	PE	Preliminary Engineering
I&T	Inspection & Testing	PGC	Pacific Guardian Center
IAMR	Interstate Access Modification Report	PHA	Preliminary Hazard Analysis
ICCS	Integrated Communications Control System	PHPR	Pearl Highlands Park and Ride
ICD	Interface Control Documents	PICM	Project Interface Control Manual
ICE	Independent Cost Estimate	PIG	Permitted Interaction Group
ICM	Interface Control Manual	PIM	Project Interface Manager
ICWG	Interim Certification Working Group	PLA	Project Labor Agreement
IDS	Intrusion Detection System	PLO	Priority-Listed Offerors
IFB	Issued for Bid	PM	Project Managers
IFC	Issued for Construction	PMC	Project Management Consultant
IJ	Insulation Joint	PMIM	Project Management and Interface Management
INMS	Integrated Network Management System	PMOC	Project Management Oversight Contractor
IP	Implementing Procedures	PMP	Project Management Plan
ITP	Inspection and Test Plan	PMSC	Program Management Support Consultant
ITS	Intelligent Transportation Systems	PPE	Personal Protective Equipment
JTMS	Joint Traffic Management System	PRTCC	Pre-revenue Testing Conform Checklist
JU&O	Joint Use & Occupancy	PSG	Platform Screen Gate
JUOA	Joint Use and Occupancy Agreement	PSGS	Platform Screen Gate System
JV	Joint Venture	PSIT	Pre-shipment Inspection Test
KCDD	Kaka'ako Community Development District	PT	Post Tensioning
KCH	Kanehili Cultural Hui	PUP	Property Utilization Plan
KHG	Kamehameha Highway Guideway	PV	Passenger Vehicle
KHSG	Kamehameha Highway Station Group	QA	Quality Assurance
KIWC	Kiewit Infrastructure West Company	QAM	Quality Assurance Manager
KKJV	Kiewit/Kobayashi Joint Venture	QAP	Quality Assurance Plan
LCC	Leeward Community College	QC	Quality Control
LEED	Leadership in Energy and Environmental Design	QMP	Quality Management Plan
LPR	License Plate Reader	QMS	Quality Management System
LRV	Light Rail Vehicle	QTF	Quality Task Force
MIM	Manufacture-Install-Maintain	R&R	Revise & Re-submit
MITT	Multimodal Integration Technical Team	RAC	Rail Activation Committee
MMIS	Maintenance Management Information System	RAMP	Real Estate Acquisition and Relocation Management Plan
MMP	Mitigation Monitoring Program	RCMP	Risk and Contingency Management Plan
MOT	Maintenance of Traffic	RCP	Reinforced Concrete Pipe
MOU	Memorandum of Understanding	RE	Resident Engineer
MOW	Maintenance of Way	READ	Real Estate Acquisition Database
MPS	Master Project Schedule	RFC	Request for Change
MPSS	Master Project Schedule Summary	RFI	Request for Information
MPV	Multiple Purpose Vehicle	RFID	Requests for Interface Data
MS4	Municipal Separate Storm Sewer System	RFMP	Rail Fleet Management Plan
MSE	Mechanically Stabilized Earth	RFP	Request for Proposals
MSF	Maintenance and Storage Facility	RFQ	Request for Qualifications
MTM	Modern Track Machineries	ROC	Rail Operations Center
NCE	Non-Conformance Evaluation	ROD	Record of Decision
NCR	Non-Conformance Report	ROE	Right of Entry
NDC	Notice of Design Change	ROW	Right-of-Way
NEPA	National Environmental Policy Act	RR	Risk Register
NHL	National Historic Landmark	RSD	Revenue Service Date
NOI	Notice of Intent	RTM	Requirements Traceability Matrix
NPDES	National Pollutant Discharge Elimination System	RTSA	Regional Transit Stabilization Agreement
NPS	National Park Service	S1	Segment 1
NR	National Register	SAIS	Supplemental Archaeological Inventory Survey
NRHP	National Register of Historic Places	SCADA	Supervisory Control and Data Acquisition
NSM	Negotiation Strategy Memo	SCAP	Stream Channel Alteration Permit
NTP	Notice to Proceed	SCC	Standard Cost Category
NTS	Network Time Server	SHPD	State Historic Preservation Division

SIC	Sandwich Isle Communications	TVA	Threat & Vulnerability Assessments
SIT	System Integration Testing	TVM	Ticket Vending Machine
SLAN	Station Local Area Network	TWF	Train Wash Facility
SOG	Slab on Grade	UCA	Utility Construction Agreement
SOI	Secretary of the Interior	UFCRA	Utility Facilities Relocation and Cost Reimbursement Agreement
SOW	Scope of Work	UH	University of Hawai'i
SP	Special Provisions	UHWO	University of Hawai'i West O'ahu
SQP	Supplemental Quality Plan	UL	Underwriters Laboratories
SSC	Safety Security Certification	UPS	Uninterrupted Power Supply
SSCP	Safety and Security Certification Plan	USACE	U.S. Army Corps of Engineers
SSCWG	Safety and Security Certification Working Group	USDOT	U.S. Department of Transportation
SSI	Sensitive Security Information	VE	Value Engineering
SSMP	Safety and Security Management Plan	VRCS	Voice Radio Communication System
SSRC	Safety and Security Review Committee	VRF	Variable Refrigerant Flow
SSSP	Site Safety Security Plan	WA	Work Area
STCC	Specification/Testing Conform Checklists	WHS	Waipahu High School
SWPPP	Storm Water Pollution Prevention Plan	WL	West Loch
T&M	Time and Material	WLO	West Loch
TCCR	Train Control and Communications Room	WOEDA	West Oahu Economic Development Association
TCE	Temporary Construction Easement	WOFH	West O'ahu/Farrington Highway
TCO	Temporary Certificate Occupancy	WOSG	West O'ahu Station Group
TCP	Traffic Control Plan	WSS	West Side Stations
TCS	Train Control System	WSSG	West Side Station Group
TES	Traction Electrification System	WTB	Wheel Truing Building
TIGER	Transportation Investment Generating Economic Recovery	WTC	Waipahu Transit Center
TIP	Transportation Improvement Program	WYL	West Yard Lead
TOC	The Outdoor Circle	YCB	Yard Control Bungalow
TOD	Transit-Oriented Development	YOE	Year of Expenditure
TPO	Thermoplastic Olefin		
TPSS	Traction Power Sub-Station		
TSA	Transportation Security Administration		
TSI	Transportation Safety Institute		

PROJECT MAP



PROGRESS REPORT SUMMARY OF CHANGES

The following is a brief summary of changes that have occurred from the previous month's report. For more information and detail, please refer to the respective pages in the report.

Project Progress

- The early and late plan percentages for "Overall Project Progress" have been corrected. Please see pages 11 and 13.
- The actual percentage for "Overall Design Progress" has been adjusted as two final design contracts had contract change orders that added to the commitment of design. Please see pages 11 and 14.

Project Budget

- The Project Budget amount has been adjusted as WOFH and KHG had two Archaeological Inventory Survey (AIS) credits, which reduced the budget of the contracts. Please see pages 11 and 15.
- The Project Budget is being updated to reflect current program expectations and will be finalized in collaboration with the FTA. The PMOC's predicted EAC values, not including finance costs, were \$7.338 billion and \$7.623 billion for the p50 and p65 probability levels, respectively, based on FTA's Beta Range model. Please see page 15.

Project Contingency

- \$0.2M contingency credit during May 2016. Please see pages 15-16.

Project Funding

- The Section 5309 New Starts Revenue amount received has increased by \$13.5 million. Please see pages 17-18.
- The total amount of cash received has increased by \$13.5 million. Please see pages 17-18.

Schedule

- The Full Revenue Service Date in the Master Project Schedule Summary has shifted from January 2022 to December 2024. HART has reassessed its master schedule and included more details regarding the required utility work and the 138KV work. In this reevaluation, productivity rates observed in ongoing utility relocation work at the Airport section have been used. Based on the above, the forecast for the completion of the city center facilities is April 2023, and the completion of systems' installation, testing and commissioning work is December 2024. Please see pages 20-21.

Contract Status

- Contracts in Procurement
 - HART entered into an agreement with ACM Consultants, Inc. for the On Call Appraisers Contract. Please see page 22.
 - HART entered into an agreement with Arcadis U.S. Inc., Hill International Consulting, Inc., and Kobayashi Sugita & Goda, LLP for the Complex Construction Claims Negotiation and Litigation Services Multi-Award Contract. Please see page 22.
 - The date for City Center Guideway and Stations RFP Part 2 Proposals Due has shifted from October 11, 2016 to March 24, 2017. Please see page 22.
 - Pearl Highlands Transit Center and Ramp H2R1 Design-Build Contract and Core Systems Back-up Generators have been added to the Remaining Contracts table. Please see page 22.
- "Earned value" on the construction contract pages has changed to "weighted value," as the value is based on the weighted expenditure calculation of the individual construction contracts. "Earned value" continues to be calculated for final design contract pages. Please see pages 24 to 60.
- Core Systems Contract (CSC)
 - The contract substantial completion date has been corrected. Please see page 23-24.
 - The projected substantial completion date has shifted from January 2022 to April 2024. Please see page 23-24.

- Fare Collection System
 - Additional cost information has been included. Please see page 29.
 - A schedule graphic has replaced bulleted information. Please see page 30.
- West O'ahu Farrington Highway Guideway (WOFH)
 - The current contract value has decreased due to a change order. Please see page 31.
 - A "Substantial Completion" section has been added to the WOFH contract page. Please see page 33.
- Farrington Highway Station Group (FHSB)
 - A schedule graphic has been included. Please see page 38.
- Maintenance and Storage Facility (MSF)
 - The DBE participation amount has been corrected. Please see page 39.
- Kamehameha Highway Guideway (KHG)
 - The DBE participation amount has been corrected. Please see page 43.
- Ramp H2R2
 - The projected substantial completion date has shifted from March 2017 to April 2017. Please see pages 47-48.
- Airport Section Utilities
 - The projected substantial completion date has shifted from September 2016 to November 2016. Please see pages 53-54.
- Dillingham and Kaka'ako Station Group
 - The current contract value amount has increased due to an amendment. Please see page 59.
 - The actual percentage complete has been adjusted due to the current contract value increasing. Please see page 59.
- General Engineering Consultant III (GEC-3)
 - The current contract value has increased due to a contract amendment. Please see page 62.
- Construction Engineering & Inspection West Side Sections
 - The DBE participation amount has been corrected. Please see page 63.

Right-of-Way

- At the direction of the HART Board in executive session at its regular June 16, 2016 meeting, the Right-of-Way Section is temporarily suspending certain acquisition transactions beyond the planned Middle Street Station, including any new eminent domain actions and negotiations that have not resulted in a signed agreement amongst the parties. However, relocations are continuing at the option of the displacee, if the suspended relocation will result in harm to the displacee. Please see page 72.

Risk Management

- The Risk Matrix and Top Project Risks tables have been removed, as the top risks are discussed in the narrative. The Risk by Contract Package and Comparison of Risk Ratings tables that were previously in the appendix have been removed. As HART implements a new risk management system focused on mitigation, monitoring, and control, the PMOC has requested to work with HART to possibly develop a new tracking mechanism or data reporting set to better assist in the oversight of the program. Please see pages 90-92.

Staffing

- The Project Organization Chart has been updated to reflect several personnel changes and some minor organizational structure changes. Please see page 117.

1 EXECUTIVE SUMMARY

KEY ACTIVITIES THIS MONTH

Project Overview

Through the West O’ahu Farrington Highway and Kamehameha Highway Guideway sections, approximately 400 columns have been completed and more than 340 spans have been stressed. The Honolulu Rail Transit Project has also begun the balanced cantilever work over the H-1 Freeway near the Sears Distribution Center.

PMOC Provides 2016 Risk Refresh Report

On June 16, 2016, the FTA’s Project Management Oversight Contractor (PMOC) provided their final 2016 Risk Refresh report which recommended that HART revise its Revenue Service Date (RSD) to be no earlier than December 2024, based on a 75% confidence level from a Schedule Risk Model. The PMOC also provided FTA-model predictions for the project’s Estimate at Completion (EAC), exclusive of finance costs. The PMOC’s predicted EAC values, not including finance costs, were \$7.338 billion and \$7.623 billion for the p50 and p65 probability levels, respectively, based on FTA’s Beta Range model. The final 2016 Risk Refresh report can be downloaded here: <http://hartdocs.honolulu.gov/docushare/dsweb/View/Collection-955>

FTA Requests Recovery Plan

On June 6, 2016, in anticipation of the PMOC’s findings in its final 2016 Risk Refresh report, the Federal Transit Administration (FTA) required that HART submit a Recovery Plan demonstrating that HART is taking every reasonable measure to mitigate cost overruns and minimize the delay to opening the project for revenue operations. The FTA’s requested deadline for receipt of the Recovery Plan is August 7, 2016.

Mayor’s Response To FTA

On June 24, 2016, Mayor Kirk Caldwell issued a letter to the FTA requesting an additional ten months to submit a recovery plan. The mayor stated: “A June 1, 2017 date will provide the City the time it needs to more fully develop and cost Project options based not only on the resources available today, but resources the City intends to aggressively pursue between now and the first half of CY 2017.” The goal is to submit a “... Recovery Plan that is thorough, achievable and...honors our commitment.”



Ivan Lui-Kwan

HART Board

Ivan Lui-Kwan has left the HART board of directors, after his term expired June 30. Lui-Kwan is an attorney and director with Starn O’Toole Marcus & Fisher, and a former director of the City and County of Honolulu’s Department of Budget and Fiscal Services. Lui-Kwan served as board chairman in 2014 and 2015, and has been a member of the board since its inception in 2011. The City Council will appoint his replacement on the board.

In June, the HART board unanimously reelected Colleen Hanabusa as board chair, and Damien Kim as vice-chair of the board.



Colleen Hanabusa



Damien Kim

Cost:

Project Costs Summary Through May 27, 2016		
	Current Budget (\$M)	Incurred To Date (\$M)
Project Budget	\$4,478.9	\$2,143.8
Project Contingency	\$469.7	\$0.7
Finance Charges*	\$173.1	\$0.0
TOTAL	\$5,121.7	\$2,144.5

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

Schedule:

Project Progress* Through May 27, 2016				
	Actual		Early Plan	Late Plan
Overall Project Progress	48.8%		78.9%	72.7%
Overall Construction Progress	41.9%		73.9%	66.4%
Overall Design Progress	89.0%		100%	99.6%
Overall Utilities Progress	43.7%		97.1%	95.2%

* The progress charts reflect early program expectations regarding the type of contract, timing of award, design, and execution of the nine western stations, eastern guideway and stations, and utilities work. These contracts have been repackaged and rescheduled to later dates and once the overall schedule is rebaselined, the cost curves will be revised to reflect the contract approved dates at that time. With the extension of the GET, the curves are under review.

Overview:Core Systems Contract (CSC)

The CSC contractor (AHJV) is continuing to progress through Final Design. Qualification and design verification tests are ongoing. AHJV continues to test equipment in the Yard Control Bungalow (YCB). AHJV continues to install fire detection equipment at the MSF Operations and Servicing Building (OSB), Train Wash Facility (TWF) and Wheel Truing Building (WTB). Fire Detection Alarm System (FDAS) installation and testing is complete in the Maintenance of Way (MOW) building. AHJV continues to pull train control cables and traction power cables in the MSF; installation of Electrically Operated Switch (EOS) cabinets and train control devices in the MSF is also continuing. Final Assembly activities are ongoing for Train 2 and Train 3. (See Section 4.1.A for details)

Elevators and Escalators Manufacture-Install-Maintain Contract

The Elevator/Escalator contractor has completed final design for the WOSG, FHSG and KHSG stations. The contractors for FHSG, WOSG and KHSG must provide an acceptable schedule in order for the manufacturing of the equipment to be released. (See Section 4.1.B for details)

West O'ahu Farrington Highway (WOFH) Contract

The progress schedule through April 2016 reflects more than ten months of delay to the substantial completion date, primarily from the LCC portable classrooms, parking lot, station's access structure and track construction activities. This schedule has been under review to analyze the numerous unilateral logic and duration changes made by KIWC. HART has executed the LCC CCOs, which brings an end to the critical path impacts. A revised baseline schedule was submitted via a contract Request for Change (RFC) by KIWC in August 2015. That revised baseline also contains numerous unilateral logic and duration changes, therefore, it is considered unacceptable.

The contractor is continuing to focus their efforts on the emergency walkways, rail and third rail installations, and civil and traffic signal works. Several areas of the project were inspected, punchlist generated and partial acceptance/substantial completion letters issued. Substantial completion for base scope is scheduled for July, however a significant amount of CCOs remain to be settled and completion dates for these items are still pending. (See Section 4.2.A for details)

Maintenance and Storage Facility (MSF) Contract

All construction activities for the Train Wash Facility (TWF), Maintenance of Way (MOW), and Wheel Truing Building (WTB) have been completed and the punch listed activities are complete. The elevator installation in the Operations and Servicing Building (OSB) is complete pending inspection, and substantial completion verification is progressing. (See Section 4.2.D for details)

Kamehameha Highway Guideway (KHG) Contract

KIWC's April 2016 schedule reflects more than 12 months of delay to the contractual substantial completion date, with the guideway structure completion in April 2017 and the remaining roadway civil work being completed by September 2017. This schedule has not been accepted by HART due to KIWC's unilateral modifications. HART continues to monitor lower than planned KIWC production rates as it relates to potential schedule impacts and both parties continue to work together to mitigate the impacts to the critical path activities. (See Section 4.3.A for details)

Airport Section Utilities (ASU) Construction Contract

The Airport Section Utilities contract work is proceeding along Kamehameha Highway, the Airport area, and the Nimitz Off-Ramp area. Probing work along the proposed shaft locations has been conducted incidental to verifying locations of existing abandoned utilities and have resulted in the discovery of additional utility conflicts. Those unforeseen wet and dry utilities that have been encountered along Kamehameha Highway are addressed as RFI's have been prepared and answered, Requests for Proposals have been generated, and change orders and/or directives are being prepared or issued. HART is coordinating the remaining scope of work relative to the schedule with the contractor. (See Section 4.4.B for details)

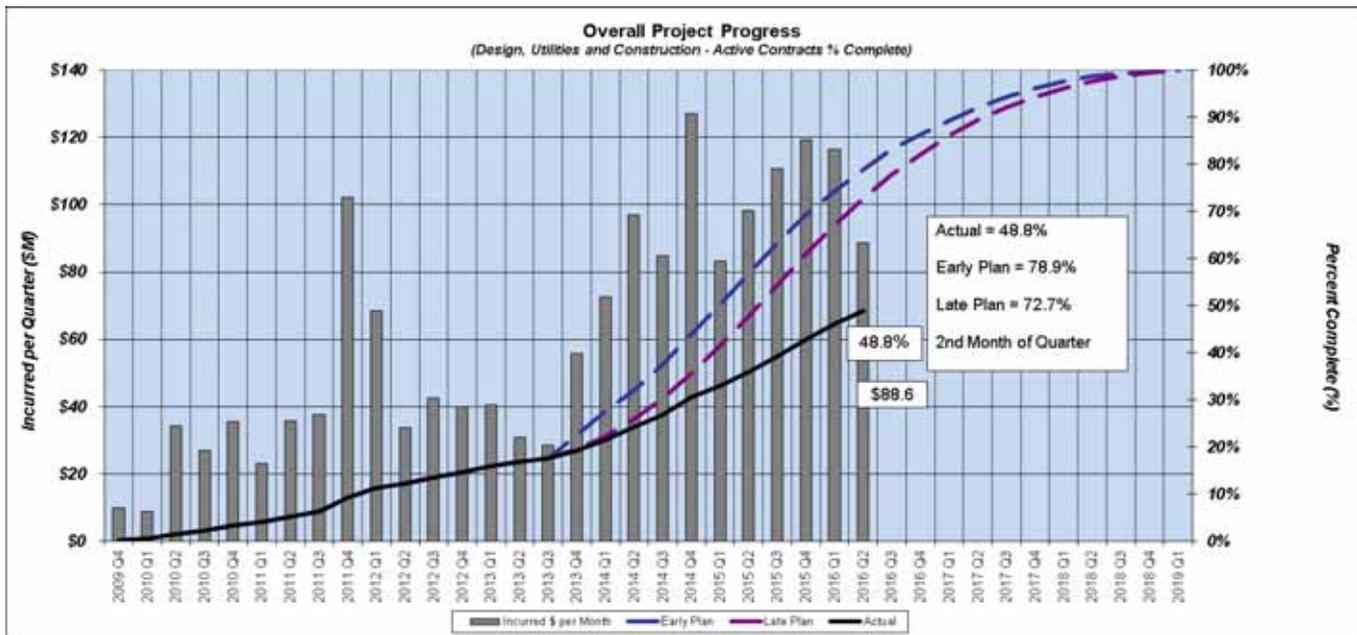
2 OVERALL PROJECT PROGRESS AND FINANCIALS

2.1 Project Progress (data as of May 27, 2016)

The progress charts reflect early program expectations regarding the type of contract, timing of award, design, and execution of the nine western stations, eastern guideway and stations, and utilities work. These contracts have been repackaged and rescheduled to later dates and once the overall schedule is rebaselined, the cost curves will be revised to reflect the contract approved dates at that time. With the extension of the GET, the curves are under review.

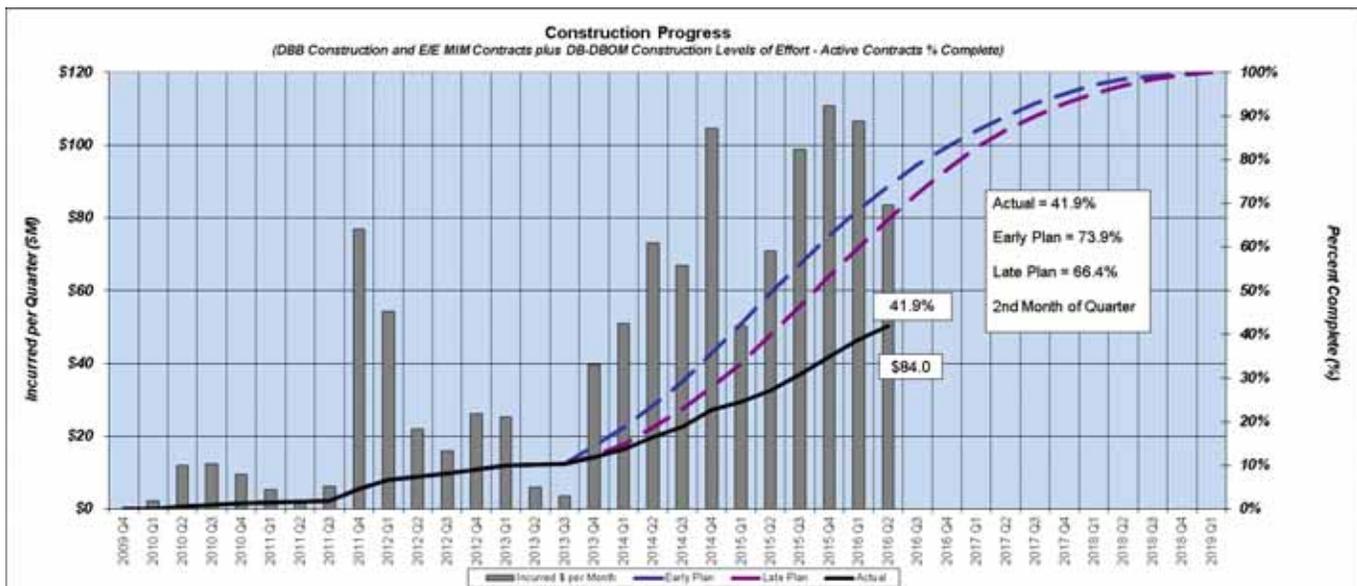
- Note:
- Actual = Actual cost of work performed, based on invoiced-to-date amount.
 - Early Plan = Earliest dates activities can begin and finish, based on logic and durations used in the schedule.
 - Late Plan = Latest dates activities can begin and finish and not have an impact on completion date,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

Figure 1. Overall Project Progress (% Complete)



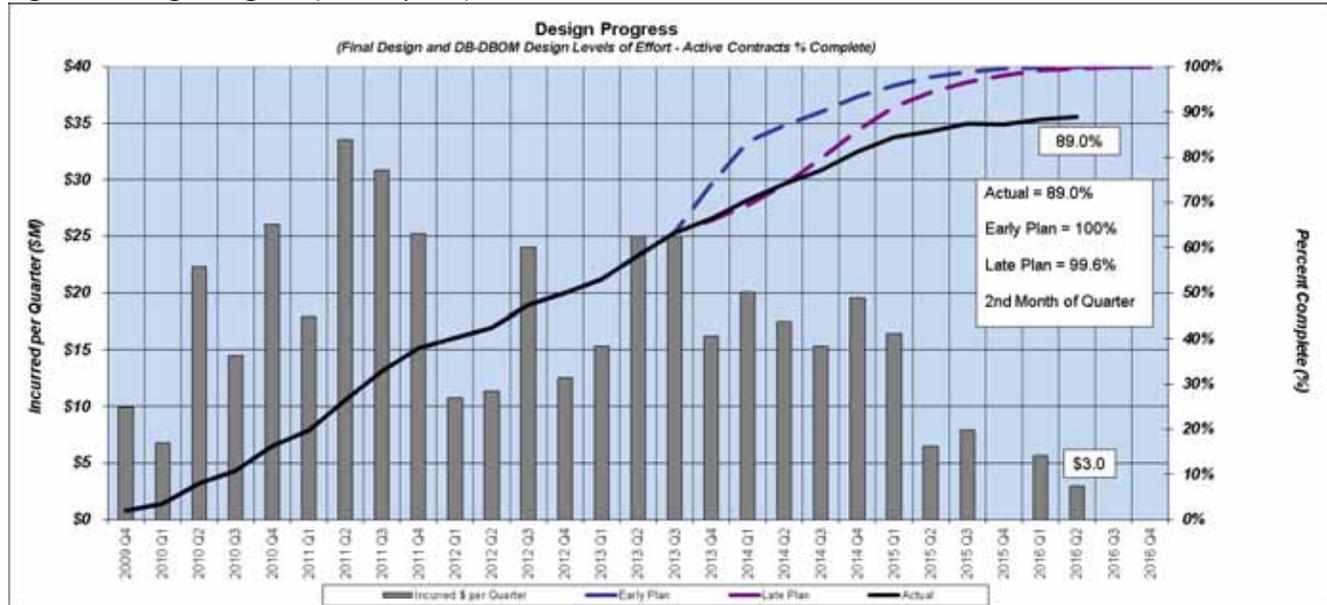
At present “overall” project progress is based on the weighted value progress of the individual construction and design contracts (Design-Build [DB], Design-Bid-Build [DBB], Design-Build-Operate-Maintain [DBOM], Elevator/Escalator Manufacture-Install-Test-Maintain [MIM], Final Design [FD] and DB-DBOM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

Figure 2. Construction Progress (% Complete)



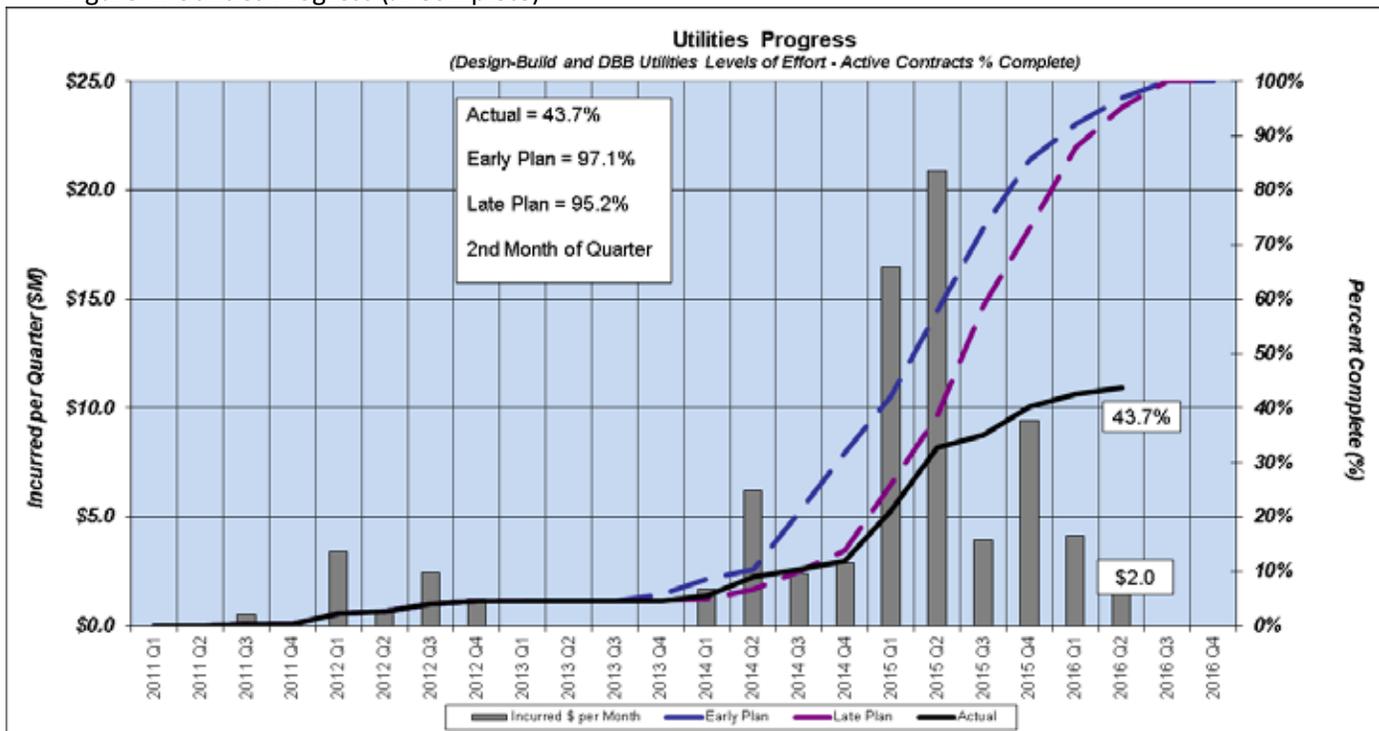
Overall construction progress is based on the weighted average progress of the individual DBB and E/E MIM construction contracts and the DB-DBOM construction levels of effort, not including consultant construction engineering and inspection (CE&I) services.

Figure 3. Design Progress (% Complete)



Overall design progress is based on the weighted average progress of the individual FD contracts and the design levels of effort of the DB and DBOM construction contracts, not including City or non-design consultant labor.
Note: Design responsibility will be transferred to DB, once DB packages are awarded. Deductive change orders will be issued to correct the total contract amount.

Figure 4. Utilities Progress (% Complete)



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

2.2 Project Budget (data as of May 27, 2016)

- FFGA Project Budget = **\$5,121.7M**
 - Current Project Budget - \$4,478.9M
 - Current Project Contingency - \$469.7M
 - Project Finance Charges - \$173.1M
- Total Incurred Cost = **\$2,144.5M** (47.9% of current project budget)
 - May 2016 Incurred Cost = \$53.2M
- The Project Budget is being updated to reflect current program expectations and will be finalized in collaboration with the FTA. The PMOC’s predicted EAC values, not including finance costs, were \$7.338 billion and \$7.623 billion for the p50 and p65 probability levels, respectively, based on FTA’s Beta Range model.

*Total Incurred Cost = \$2,144.5M
(previous report = \$2,091.2M)*

2.3 Project Contingency (data as of May 27, 2016)

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

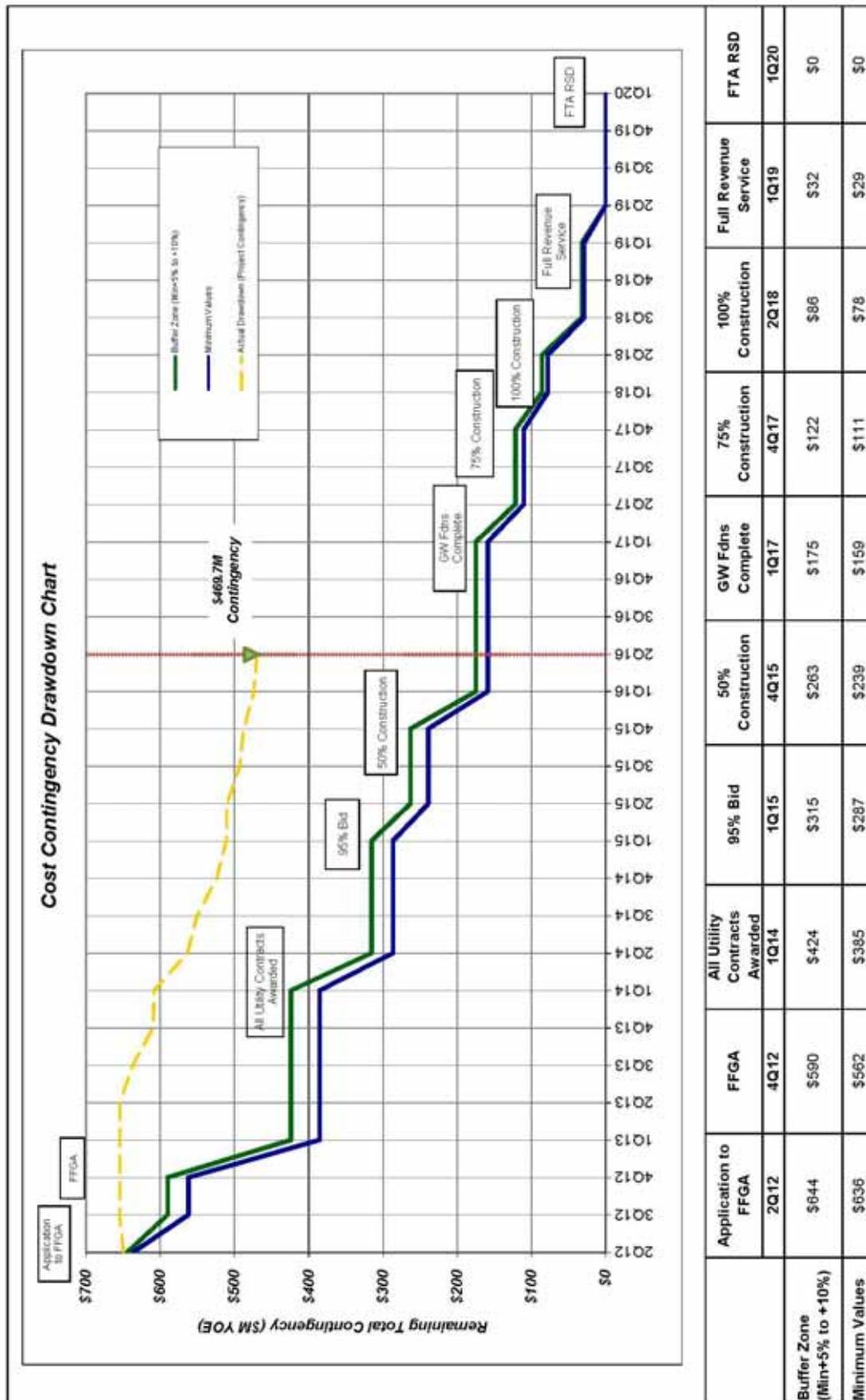
- Current Project Contingency Balance = **\$469.7M**
 - Contingency drawdown to date – \$173.9M (27.0% of baseline project contingency budget)
 - \$0.2M contingency credit during May 2016. Please see Appendix B for more details.

*Current Contingency Balance = \$469.7M
(previous report = \$469.5M)*

Figure 5. Project Contingency Budget

Project Contingency Budget		
Contingency	SCC Code	Budget (\$M)
Unallocated Contingency	90.01	\$101.9
Allocated Contingency	90.02	\$540.1
Allowances	90.03	\$1.6
Baseline FFGA Project Contingency Budget	90.01 - 90.03	\$643.6
Contingency drawdown through March 2016 Report	90.01 - 90.03	(\$168.5)
Contingency drawdown April 2016 Report	90.01 - 90.03	(\$1.6)
Contingency drawdown May 2016 Report	90.01 - 90.03	(\$4.0)
Contingency drawdown June 2016 Report	90.01 - 90.03	\$0.2
Contingency drawdown to date	90.01 - 90.03	(\$173.9)
Current FFGA Project Contingency	90.01 - 90.03	\$469.7

Figure 6. Draft Cost Contingency Drawdown Chart



Data as of 5/27/16 - May '16 Reporting Period

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

2.4 Project Funding (data as of May 27, 2016)

Figure 7. Planned vs. Received Project Funding

Planned vs. Received Project Funding				
Funding Source	Pre-FFGA Project ¹	FFGA Project Period		Total Project
	2007 - 2009 Actuals Received	Planned ² (\$YOE M)	2009 - Present Actuals Received	2007 - Present Actuals Received
	[A]		[B]	[C] = A + B
Beginning Project Cash Balance ³	0	298	298	n/a
Interest Income on Cash Balance	7	3	2	9
FTA Section 5309 New Starts Revenue ⁴	0	1,550	551	551
FTA Section 5307 Formula Funds ⁵	0	210	0	0
ARRA Funds	0	4	4	4
Net General Excise Tax (GET) Surcharge revenues FY2010-FY2022 ⁵	378	3,291	1320	1,698
Total	385	5,356	2,175	2,262

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

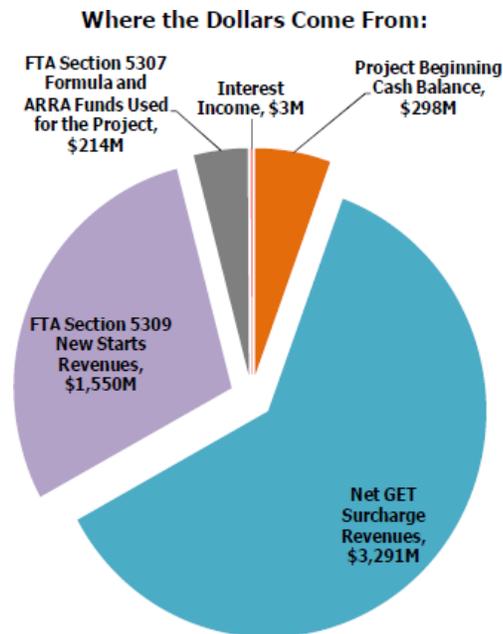
² FFGA Financial Plan, Table A-1 Capital Plan Cash Flows .

³ Beginning Project Cash Balance at Entry into Preliminary Engineering (PE) on October 16, 2009 (the FFGA Project start date) = Pre-PE GET, investment and miscellaneous income minus pre-PE expenditures. The \$298 million is included in the Pre-FFGA actual amounts received between 2007-2009 of \$378 million.

⁴ New Starts Funds Obligated Through Federal Fiscal Year 2014 Totals \$806.3 Million

⁵ On January 27, 2016 the City Council of Honolulu passed Bill 23 which extended the GET surcharge to December 31, 2027. The planned amounts for funding will be adjusted in a future Monthly Progress Report to reflect the extension of the GET surcharge.

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



Source: FFGA Financial Plan, p. 2-1

- General Excise Tax (GET) Surcharge (data as of May 27, 2016)
 - \$1,320M = amount received since the Project’s entry into FTA’s Preliminary Engineering phase of project development.
 - \$1,358M = Projected Net GET Surcharge Revenue for FYs 2010-4Q 2016, as stated in FFGA Financial Plan (Table A-1 *Capital Plan Cash Flows*)
 - GET receipts are currently running 3% short of Projections to date, or \$38M behind.
 - \$0 = GET surcharge received in May 2016.

- Full Funding Grant Agreement (FFGA)
 - \$13.5M = New Starts drawdown processed and received in May 2016.

- The \$5307 funds for the Project, per the FFGA Financial Plan, are \$210M.

Total Cash Received Since PE = \$2,175M
 (previous report = \$2,161M)

GET Received Since PE = \$1,320M
 (previous report = \$1,320M)

GET Received Since 2007 = \$1,698M
 (previous report = \$1,698M)

Figure 9. New Starts Drawdown by Federal Fiscal Year (data date as of May 31, 2016)

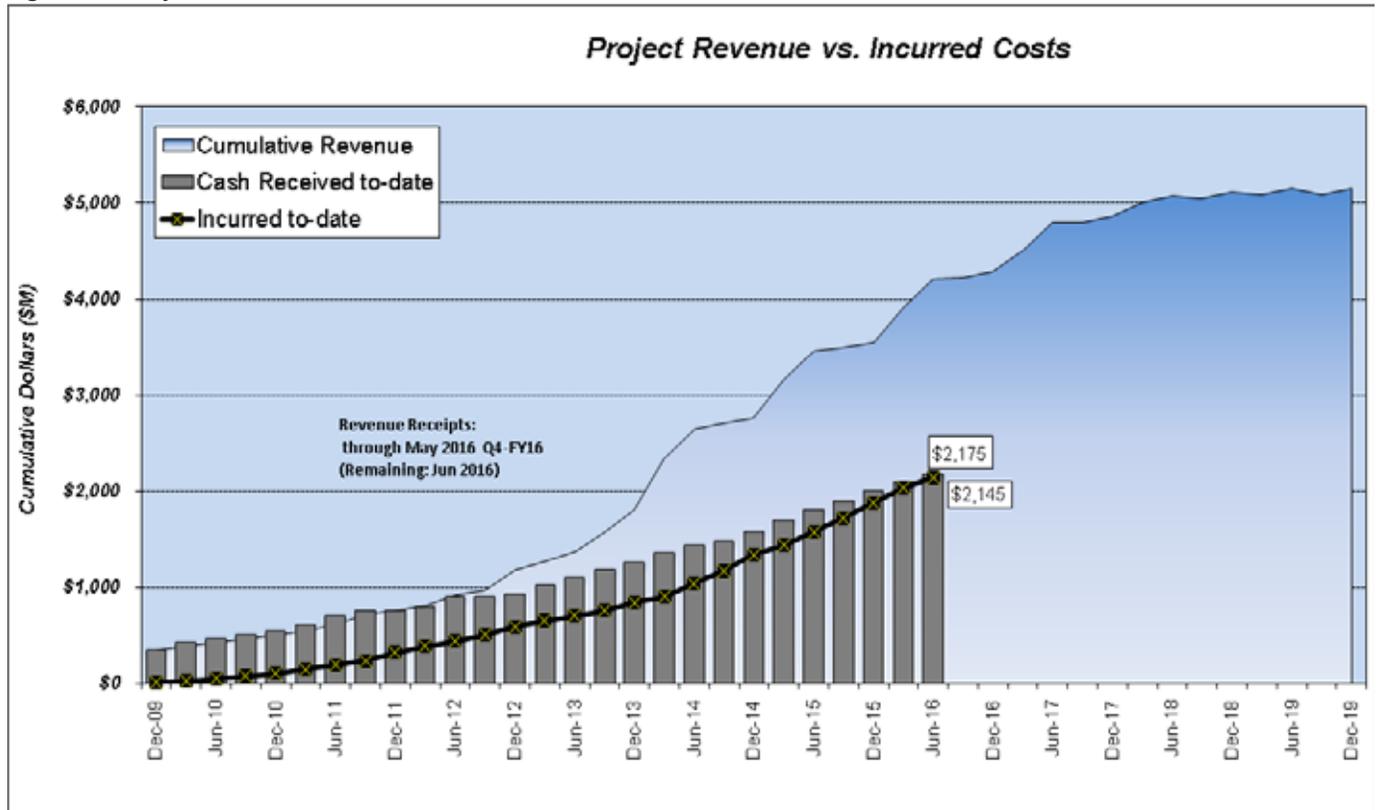
New Starts Grant Information by Federal Fiscal Year (Amounts in italics are pending)				
Federal Fiscal Year Allocation	FTA Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance	FFGA Base Case Cash flow
2008	\$15,190,000	\$15,190,000	\$0	
2009	\$19,800,000	\$19,800,000	\$0	
2010	\$30,000,000	\$30,000,000	\$0	
2011	\$55,000,000	\$55,000,000	\$0	\$20,607,242
2012	\$200,000,000	\$200,000,000	\$0	\$99,382,758
2013	\$236,277,358	\$230,855,295	\$5,422,063	\$258,280,277
2014	\$250,000,000	\$0	\$250,000,000	\$441,719,724
<i>2015 (pending award of grant)</i>	<i>\$250,000,000</i>	<i>\$0</i>	<i>\$250,000,000</i>	<i>\$250,000,000</i>
<i>2016 (pending appropriation and award of grant)</i>	<i>\$250,000,000</i>	<i>\$0</i>	<i>\$250,000,000</i>	<i>\$250,000,000</i>
<i>2017 (pending appropriation and award of grant)</i>	<i>\$243,732,642</i>	<i>\$0</i>	<i>\$243,732,642</i>	<i>\$230,010,000</i>
Total	\$1,550,000,000	\$550,845,295	\$999,154,705	\$1,550,000,000

2.5 Project Revenue and Costs

(data as of May 27, 2016)

Ending Cash Balance 5/31/16 = \$123.0M
(previous report = \$172.6M)

Figure 10. Project Revenue versus Incurred Costs



Planned Funding levels as per the June 2012 FFGA Finance Plan
Data date for Revenue & Incurred Cost = May 27, 2016

Figure 11. Cash Balance Summary

MAY 2016 CASH BALANCE SUMMARY		
	MAY	FY16 YTD Cumulative
Beginning Cash Balance 05/01/16	172,630,715	293,010,823
Expenditures:		
Operating Expenditures	(1,318,775)	(15,408,040)
Capital Expenditures	(61,883,720)	(523,902,661)
Expenditures Total:	(63,202,495)	(539,310,700)
Receipts:		
GET Surcharge	0	229,344,241
FTA Drawdown	13,539,367	139,338,664
Interest	38,851	261,045
Other (rental, refunds, copy fees, etc.)	10,013	372,378
Receipts Total:	13,588,231	369,316,329
Ending Cash Balance 05/31/16	123,016,451	123,016,451

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

3 SCHEDULE

(data as of May 27, 2016)

OVERVIEW

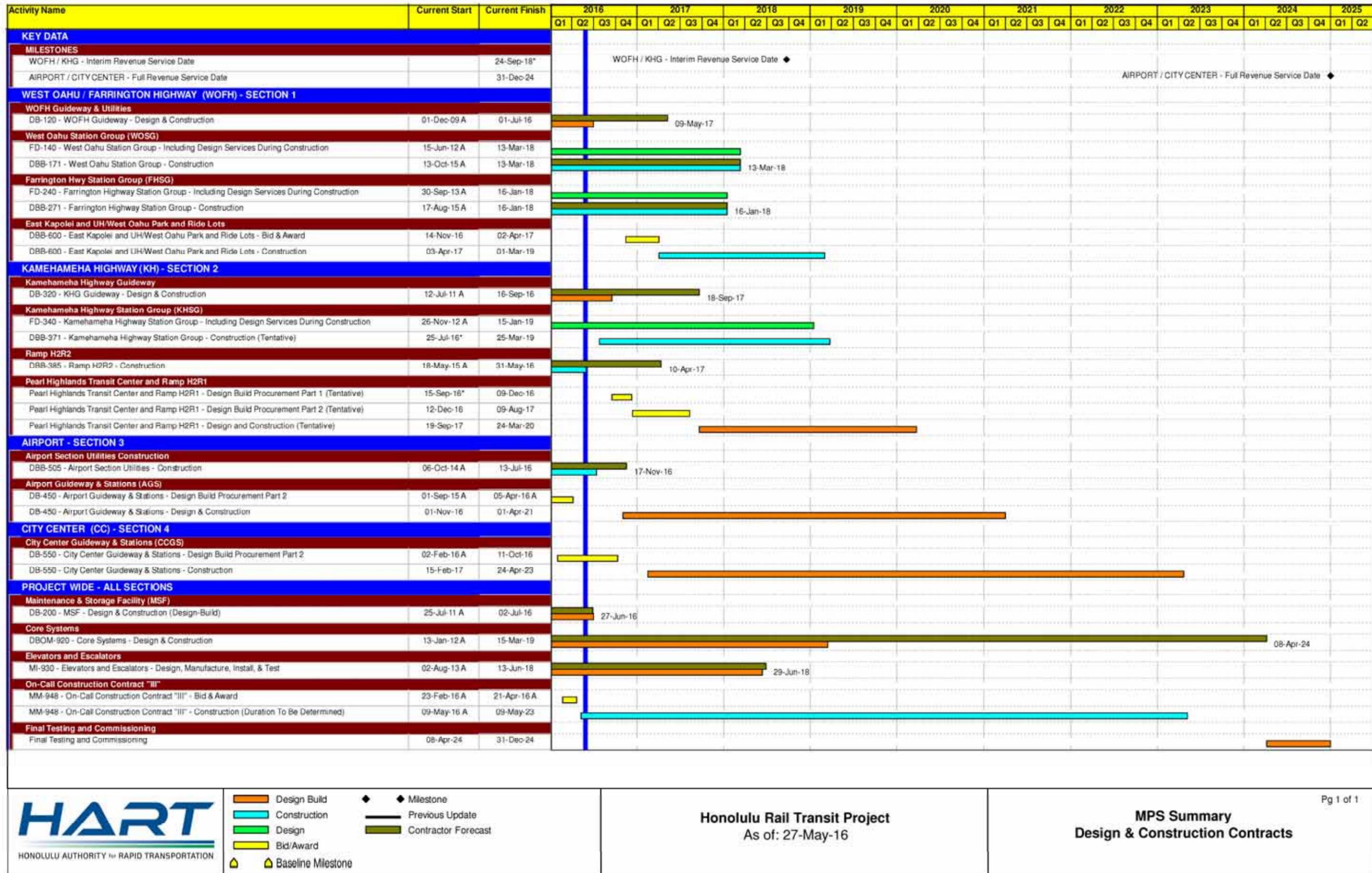
- HART has reassessed its master schedule and included more details regarding the required utility work and the 138KV work. In this reevaluation, productivity rates observed in ongoing utility relocation work at the Airport section have been used. Based on the above, the forecast for the completion of the city center facilities is April 2023, and the completion of systems' installation, testing and commissioning work is December 2024.
- The CCGS RFP Part 2 proposals due date has been postponed to October 2016.
- On June 8, 2016, HART made a presentation titled: "Options to the current FFGA scope" to address a possible shortfall in revenue needed to construct the full FFGA scope. In this presentation, five CCGS options were presented:
 - Build to Middle Street as planned plus guideway only to Ala Moana
 - Build to Middle Street as planned and continue with bus service or at-grade rail system
 - Construct as far as funding allows (a la carte evaluation)
 - Public-Private Partnership (P3) solicitations for all stations
 - Change Alignment to Nimitz
- Feedback to that presentation is being sought prior to further refinement and presentations to the Mayor's office and the City Council. A working group has been tasked to develop plans to complete the project.
- HART continues to closely monitor, review and manage all active construction packages. Previously reported delays continue to be addressed by the project teams. See contract pages for further details.

KEY ISSUES

- WOFH construction progress is behind the approved schedule for the LCC station area civil and structural work by ten months.
- KHG guideway construction progress is behind the approved schedule by 12 months.
- WOSG and FHSG stations' construction has begun at West Loch and Ho'opili Stations.
- ASU construction is behind the approved schedule by four months due to various delays, including differing site conditions.
- The overall critical path to full Revenue Service is the CCGS guideway and stations' construction, core systems installation, testing and commissioning.

Figure 12. H RTP Master Project Schedule Summary (MPSS)

The Master Program Summary Schedule reflects currently approved schedule end dates for contracts that have been awarded, and planned dates for future contracts. It is statused against the FFGA Baseline MPS. Active contracts' end dates will not change, unless a change order is issued. For the contractors' forecasts of active contracts end dates, see Contract Status section (Section 4).



4 CONTRACT STATUS

Contracts in Procurement (For a list of awarded contracts, please see Appendix D)

OVERVIEW

- **Awarded Contracts:**
 - On June 23, 2016, HART entered into an agreement with ACM Consultants, Inc. for the On Call Appraisers Contract in the amount of \$1M.
 - On June 29, 2016, HART entered into an agreement with Arcadis U.S. Inc., Hill International Consulting, Inc., and Kobayashi Sugita & Goda, LLP for the Complex Construction Claims Negotiation and Litigation Services Multi-Award Contract. The contract amount for each of the three contracts is \$270,000.

- **Active Procurements:**
 - Art-in-Transit: HART is in negotiations or will commence negotiations with the highest-ranked artists for each of the stations. HART has begun award of the Art-in-Transit contracts.
 - Airport Guideway and Stations Design-Build RFP: The solicitation is currently being evaluated.
 - City Center Guideway and Stations (CCGS) Design-Build RFP: RFP Part 2 was issued on Feb. 2, 2016. The proposals are not yet due.
 - Complex Real Property Negotiations and Litigation Support RFP: The RFP was issued on Feb. 23, 2016. Proposals were received on April 4, 2016 and are currently being evaluated.
 - Outside Counsel for Land Court Petition Services RFP: The RFP was issued on March 4, 2016. HART received one proposal on April 15, 2016. After evaluation, HART determined that it would be in the public’s best interest to cancel the existing solicitation and re-issue the solicitation. The new Outside Counsel for Land Court Petition Services RFP was re-issued on May 13, 2016. Proposals were accepted on June 14, 2016, and is currently under evaluation.
 - Real Estate Contractor Contract “II” RFP: The RFP was issued on March 4, 2016. Proposals were received on April 28, 2016, and are currently being evaluated.
 - Program Management Contractor Contract RFQ: The RFQ was issued on May 9, 2016. Proposals are due on July 14, 2016.

- **Upcoming Procurements:**
 - Procurements for UH West O’ahu Temporary Park and Ride and UH West O’ahu Campus Road “B” Design-Bid-Build Contract; Pearl Highlands Garage, Transit Center and Ramp H2R1; Core Systems Back-up Generators; and East Kapolei and UH West O’ahu (permanent) Park and Ride are under evaluation.

Remaining Contracts						
Contract Code	Contract Name	Advertise Date	Bids Due/Part 1 Proposals Due	RFP Part 2 Proposals Due	Issue NTP	Projected Contract Substantial Completion Date
AP00	Art-in-Transit	May 9 '13	-	-	TBD	TBD
DB-450	Airport Guideway and Stations	Apr 07 '15	Aug 11 '15	Apr 05 '16	TBD	NTP + 53 months
DB-550	City Center Guideway and Stations	Aug 04 '15	Nov 18 '15	Mar 24 '17	TBD	NTP + 50 months
MM-981	Complex Real Property Negotiations and Litigation Support Contract	Feb 23 '16	Apr 04 '16	-	TBD	NTP + 24 months + 2 year option
MM-936	Real Estate Contractor Contract "II"	Mar 04 '16	Apr 28 '16	-	TBD	NTP + 48 months
MM-902	Program Management Contractor Contract	May 09 '16	Jul 14 '16	-	TBD	Dec 31 '22 + 3 year option
MM-983	Outside Counsel for Land Court Petition Services	May 13 '16	Jun 14 '16	-	TBD	NTP + 36 months
DBB-600	East Kapolei and UH/West O'ahu Park and Ride Lots	Nov 14 '16	Feb 15 '17	-	Apr 03 '17	Mar 01 '19
DB-275	Pearl Highlands Transit Center and Ramp H2R1 Design-Build Contract	TBD	TBD	-	TBD	TBD
MI-940	Core Systems Back-up Generators	TBD	TBD	-	TBD	TBD

4.1 System-wide

A. Core Systems Contract (CSC)

Contract No.: DBOM-920
DBOM Contractor: Ansaldo Honolulu Joint Venture (AHJV)
Contract Start Date: January 2012
Contract Substantial Completion: March 2019
Projected Substantial Completion: April 2024



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

Project Overview: The CSC contractor (AHJV) is continuing to progress through Final Design. Qualification and design verification tests are ongoing. AHJV continues to test equipment in the Yard Control Bungalow (YCB). AHJV continues to install fire detection equipment at the MSF Operations and Servicing Building (OSB), Train Wash Facility (TWF) and Wheel Truing Building (WTB). FDAS installation and testing is complete in the Maintenance of Way (MOW) building. AHJV continues to pull train control cables and traction power cables in the MSF; installation of Electrically Operated Switch (EOS) cabinets and train control devices in the MSF is also continuing. Final Assembly activities are ongoing for Train 2 and Train 3.

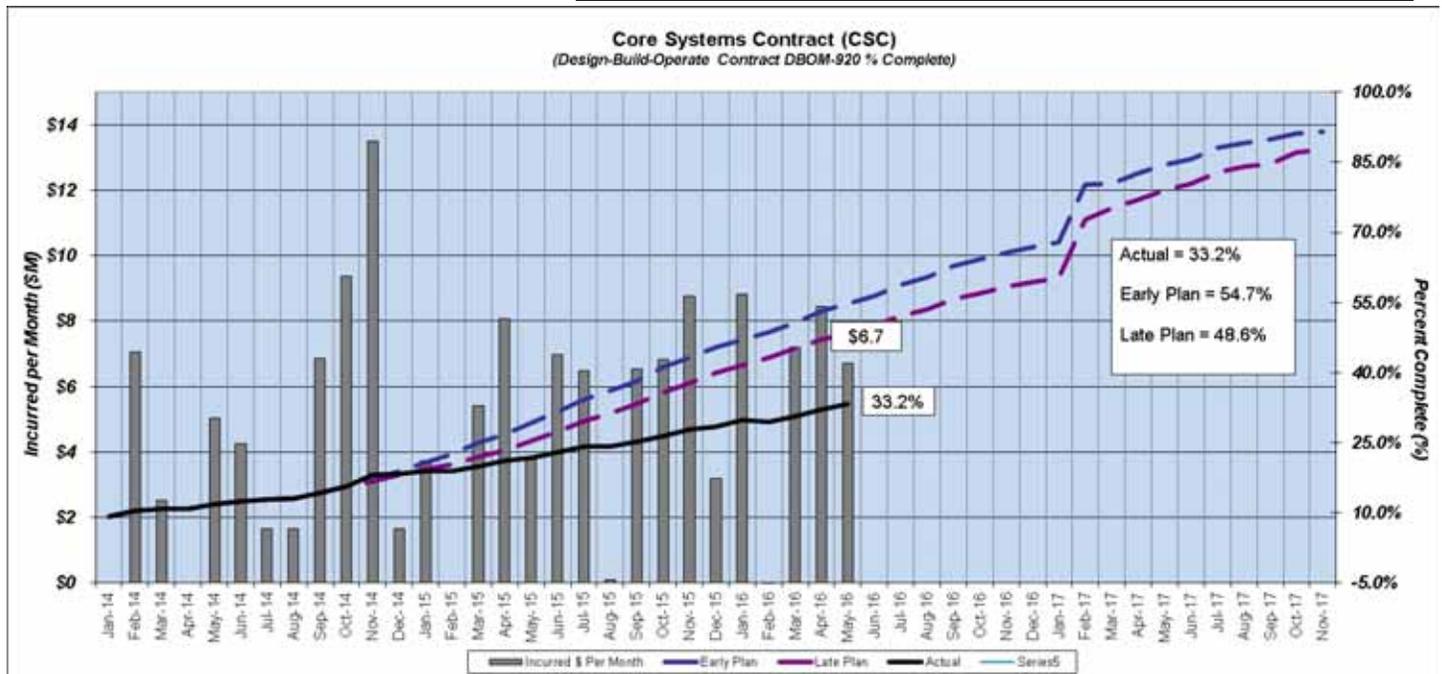
COST INFORMATION:

<u>Original Contract:</u>	<u>\$573,782,793</u>	<u>Incurred-to-Date:</u>	<u>\$199,202,996</u>
<u>Current Contract Value¹:</u>	<u>\$599,843,687</u>	<u>Incurred in May:</u>	<u>\$6,706,149</u>

¹Current Contract Value = Original contract value (excluding \$823.6M O&M budget) + executed Change Orders

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

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$26,060,894



The progress chart reflects early program expectations. When the overall schedule is rebaselined and Construction Access Milestone dates are revised, the cost curve will be revised.

SCHEDULE:



	Final Design Submitted Documents	Final Design Approved Documents	Target Completion Date
Passenger Vehicles	100%	87.5%	3 rd Q 2016
Communications	46.2%	37.6%	4 th Q 2016
ATC/SCADA	99%	88%	3 rd Q 2016
TES	100%	100%	Completed
Fire Detection	66.7%	58.3%	3 rd Q 2016
PSGS	95.5%	81.8%	3 rd Q 2016

*Target Completion Date for Communications and Fire Detection is for the first segment. Second segment completion date is to be determined.

CRITICAL PATH SUMMARY:

- The Core Systems schedule and subsequent Substantial Completion date has been revised to reflect the issuance of revised construction access dates for the west side nine (9) stations and the anticipated construction schedule for the east side construction. AHJV has begun the process of updating their baseline schedule to incorporate the new access dates.
- Continue to oversee construction activities with the CSC installation subcontractor and the On-Call contractor.
- Passenger Vehicle final assembly continues on the second and third trains.

WORK PROGRESS:

Activities this Month:

Weighted Value: 33.2% [(Total Achieved thru May 2016 (\$192.45 million) + Projected June 2016 Period (\$6.7 million))/Total Contract Including Executed Change Orders (\$599.84 million)].

Design:

- ATC/SCADA – Documents Received: 16, Documents Returned: 14
- Communications – Documents Received: 5, Documents Returned: 1
- Traction Power – Documents Received: 5, Documents Returned: 4
- Fire Detection – Documents Received: 4, Documents Returned: 0
- Platform Screen Gates – Documents Received: 1, Returned: 1
- Passenger Vehicles – Documents Received: 12, Documents Returned: 24

Manufacturing:

- Performed manufacturing oversight work at Hitachi Rail factories. (For additional details, please see the Vehicle Car Shell Progress Tracker in Appendix E.)

Look Ahead:

Design:

- Continue Final Design of all subsystems.

Manufacturing:

- Passenger Vehicle Manufacturing – Continue car shell fabrication in Italy.
- Continue final assembly activities on Train 2 and Train 3.
- PV Truck Fabrication – Continue truck frame and bolster fabrication activities in Italy.
- Continue manufacturing of automated train control, traction power, and other systems equipment.

Installation, Testing and Commissioning:

- Test Fire Detection Alarm System (FDAS) devices in the MSF OSB, TWF and WTB.
- Fire Marshal inspection of complete MSF FDAS.

Activities this Month (continued):

- Performed Passenger Vehicle (PV) truck manufacturing oversight support at Hitachi Rail Subcontract factory in Italy.
- Performed final assembly oversight work at Pittsburg, CA. Equipment installation work on the second train is ongoing.
- Four (4) car shells for train #3 are now in Pittsburg for final assembly.
- Performed Truck Frame and Bolster Production oversight at Hitachi Rail Italy (HRI) supplier, Nuova Comafer, in Italy.
- All eight (8) DRS fabricated truck frames and bolsters have been delivered to the final assembly facility in Pittsburg.
- Vehicles vandalized with graffiti on June 23, 2016. Ansaldo removed graffiti by cleaning trains on June 28 through June 30, 2016.

Look Ahead (continued):

- Completion of MSF yard conduit installation.
- Energization of the MSF Yard TPSS.
- Conduct Type and Routine test on first train.
- Installation of Telecom cabling in the MOW.
- Continue installation of TES cabling and EOS in MSF.
- Continue installation of Train Control cabling and devices in MSF.

Installation, Testing and Commissioning:

- Train 1 located on the M5 track for testing.
- Remaining MOW vehicles (flatbed trailers, rail grinder, geometry checker and high rail vehicles) have been delivered to the MSF and have undergone initial inspection and testing.
- Installation of fiber optic backbone in MSF yard is complete.
- Installation of FDAS devices in the OSB is 80% complete.

KEY ISSUES:

- Revisions to the station and guideway Construction Access Milestone (CAM) dates require evaluation of interfacing work schedules.
- Vehicle Production and Testing is an ongoing monitored risk. HART continues to work closely with AHJV and Hitachi Rail to ensure good progress at the Car Shell Fabrication, Truck Fabrication and Final Assembly facilities.
- Communications System design completion is delayed. HART continues to work closely with AHJV to identify key issues and to implement the corrective action plan to bring design and qualification testing to closure.
- Completion of MSF FDAS system installation, testing and commissioning for MSF substantial completion.

QUALITY MANAGEMENT:

Testing		
Subsystem	Test Completed	Date Completed
PSGS	PSGS Design Verification Test Salt Fog in New Castle, PA	TBD

Passenger Vehicle – Oversight		
Facility	Activity	Date Completed
Pittsburg, CA	On-site inspector in place to oversee and report on Hitachi Rail Final Assembly activities.	Ongoing
Naples, Italy	Visit conducted to Nuova Comafer to inspect status of quality and production of PV truck frame and bolsters.	June 10, 2016

CSC NCR Log			
	TOTAL	CLOSED	OPEN
AHJV & Subs	30	26	4
Hitachi Rail	637	490	147
TOTAL	667	516	151

PROJECT PICTURES:



Interior of Train 2 Car M1 nearing completion in Pittsburg, CA.



Truck on Test Fixture at Final Assembly Facility.



Testing and initial setup of the Road-rail Flatbed at the MSF.

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

Contract No.: MI-930

Contractor: Schindler Elevator Corporation

Contract Start Date: August 2013

Contract Substantial Completion: June 2018

Projected Substantial Completion: The June 2018 completion date will change to a later date predicated on the award of the DB contracts for the east portion of the guideway.



Project Description: Furnish / install / test / maintain all elevator and escalator equipment located at the 21 stations.

Project Overview: The manufacturing of the FHSG will be released in July as the construction schedule has been accepted in May by HART. The release to begin manufacturing of the WOSG and KHSO equipment will be scheduled once an acceptable construction schedule with the respective contractors has been completed.

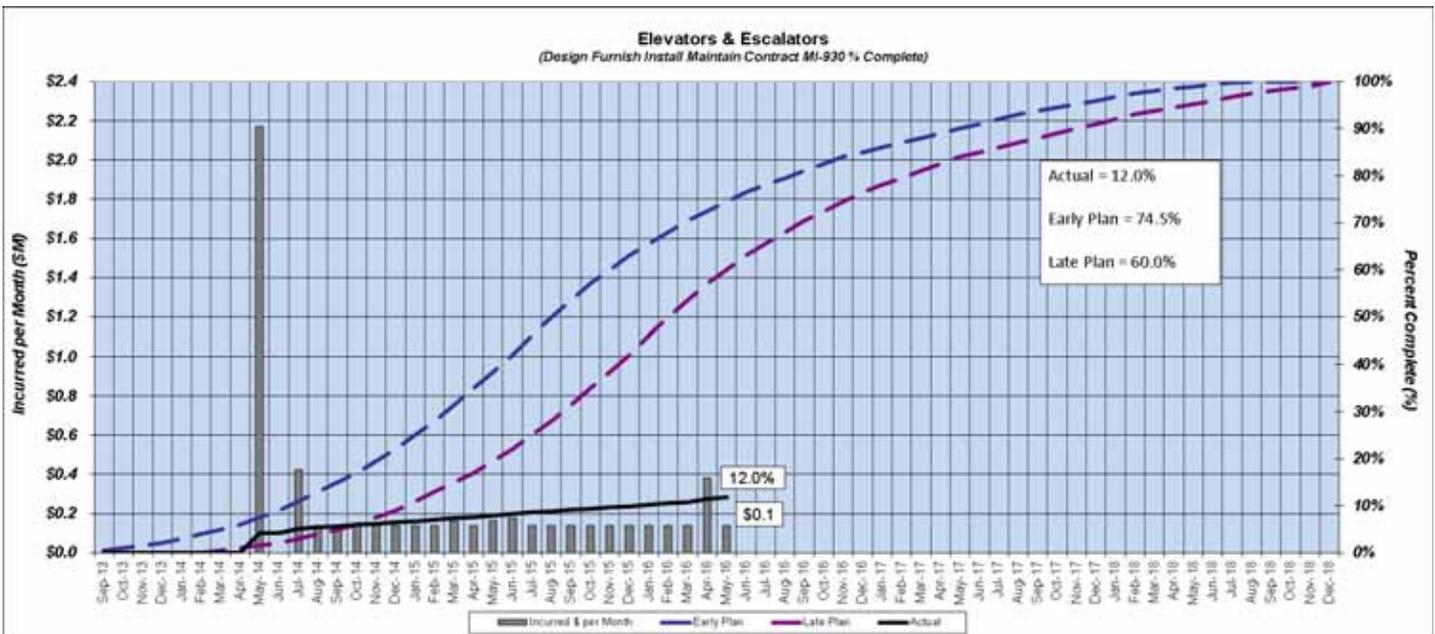
COST INFORMATION:

Original Contract:	\$50,982,714	Incurred-to-Date:	\$6,008,931
Current Contract Value ¹ :	\$51,999,035	Incurred in May:	\$140,825

¹Current Contract Value = Original contract value with Design Allowance + executed Change Orders

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

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$1,016,321



The progress chart reflects early program expectations. When the overall schedule is rebaselined and Construction Access Milestone dates are revised, the cost curve will be revised.

SCHEDULE:

- Elevators' schedule for the FHSG, WOSG and KHSG stations will be published once the respective baseline schedules are accepted and all access dates are transmitted to Schindler. Elevators' schedule for the remaining 12 stations will be published when their contracts are awarded and schedules are accepted.

CRITICAL PATH ISSUES:

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

WORK PROGRESS:Activities this Month:

Weighted Value: 12%; Planned Value: 60%

- Final Design is approximately 41% complete, as 9 of the 21 stations are ready to be released for manufacturing once the contractor's schedules are approved.
- All draft equipment drawings for the 21 stations have been submitted for review and have been accepted.
- Design is complete on the three FHSG stations, three WOSG stations, and the three KHSG stations.
- Permits for the installation of all elevators and escalators for the FHSG, KHSG, and the WOSG have been issued. These permits are for installation only, not operation.

Look Ahead:

- Release for manufacturing for the Farrington Highway Station Group will occur in July; the West O'ahu Station Group elevators and escalators is expected to occur in July 2016, once the construction schedule is accepted by HART. KHSG will be released for construction later this year, once a schedule has been accepted by HART.

KEY ISSUES:

- The release to allow manufacturing for FHSG is expected to occur in July 2016. WOSG will be released in July once the construction schedule is accepted. The release of the equipment required for KHSG will be dependent on the NTP of the KHSG contract. Final completion of the equipment requirements for the four stations included in the DB contract for Airport Guideway and Stations is on hold pending contract award. The eight stations included in the City Center Guideway and Stations contract is also on hold pending contract award of the DB contract for this work. Both of the DB solicitation packages contain the size and configuration of the elevators and escalators purchased for these twelve remaining stations.

C. Fare Collection System

Contract No.: MI-900

Contractor: INIT, Innovations in Transportation Inc.

Contract Start Date: April 2016

Contract Substantial Completion: September 2021

Projected Substantial Completion: 60 days after full rail revenue service date

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

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

Project Overview: The Fare Systems RFP was released on Aug. 11, 2015 and an award was made on March 18, 2016 to INIT. NTP was issued April 18, 2016. An MOU for capital cost sharing with the City was executed on July 11, 2015, and an MOU for Operations and Maintenance was executed on March 10, 2016. A Fare Systems technical consultant contract was awarded on Sept. 24, 2015, to CH2M Hill to support design review, testing and installation. The selected DBOM contractor began conceptual design 45 days after NTP.

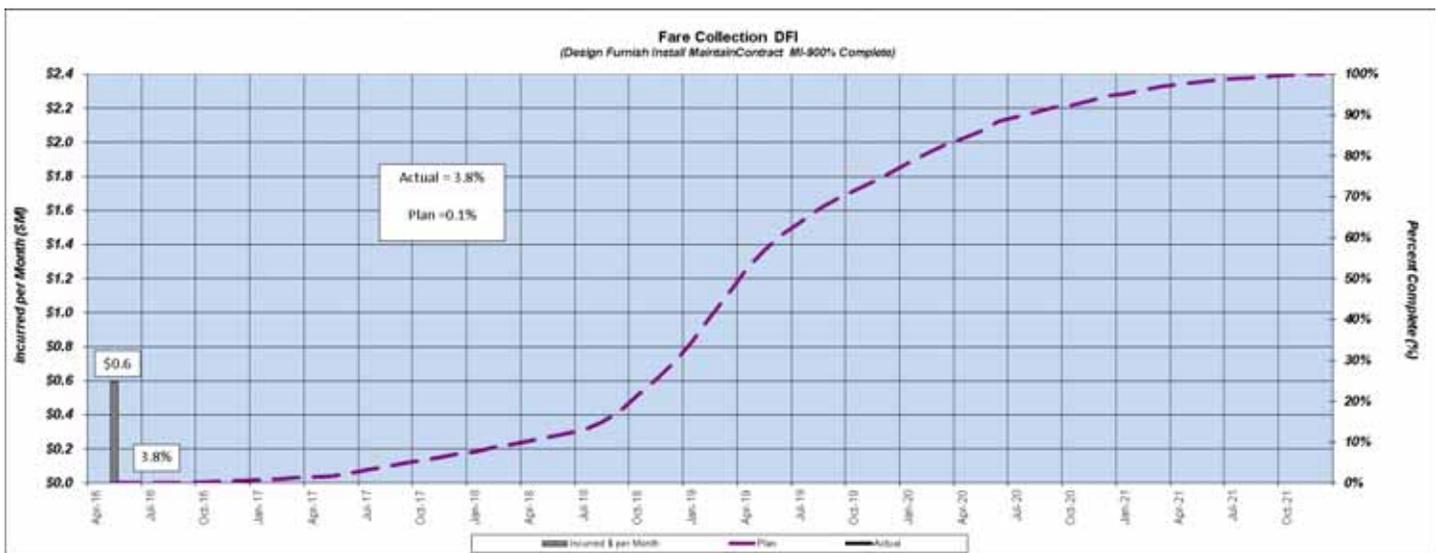
COST INFORMATION:

<u>Original Contract:</u>	<u>\$15,464,198</u>	<u>Incurred-to-Date:</u>	<u>\$593,840</u>
<u>Current Contract Value¹:</u>	<u>\$15,464,198</u>	<u>Incurred in May:</u>	<u>\$593,840</u>

¹Current Contract Value = Original contract value with Design Allowance + executed Change Orders

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

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



SCHEDULE:

May 2016 Update			Data Date: 27-May-16																									
Activity Name	Start	Finish	2016			2017			2018			2019			2020			2021			2022							
			Q	Q2	Q3	Q	Q1	Q	Q3	Q	Q1	Q3	Q4	Q	Q3	Q4	Q	Q2	Q	Q4	Q	Q2	Q	Q4	Q	Q2	Q3	Q
Fare Systems Contract	11-Aug-15 A	30-Sep-21																										
Fare Systems Contract - Bid & Award	11-Aug-15 A	14-Apr-16 A																										
Fare Systems Contract	18-Apr-16 A	30-Sep-21																										
Substantial Completion - Fare Systems		30-Sep-21																										

CRITICAL PATH ISSUES:

- Conceptual design starting by June 20, 2016.

WORK PROGRESS:

Activities this Month:

- Review and comment on Conceptual Design Documents.
- Review model revision requirements and work with fare policy study staff to calibrate the fare model to create a baseline.
- Finalize Fare Systems Project PMP and baseline schedule.
- Confirm milestone payment amounts and dates with the contractor.
- Ongoing business rules document development.

Look Ahead:

- Complete Conceptual Design Review (CDR).
- Confirm fare policy options for modeling.

KEY ISSUES:

- Starting and completing three design reviews on time in order to maintain schedule.

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

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

Contract No.: DB-120

DB Contractor: Kiewit Infrastructure West Company (KIWC)

Contract Start Date: December 2009

Contract Substantial Completion: July 2016

Projected Substantial Completion: May 2017 (Change Work)



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

Project Overview: Progress continues on track installation, road restoration work, LCC Station and traffic signals. Segment erection and final set has been completed along the entire guideway. Several areas of the project were inspected, punch lists generated and partial acceptance/substantial completion letters issued. The project’s key quality issues continue to focus on segment repairs, span shear keys, column pedestal repairs, and NCR closeout.

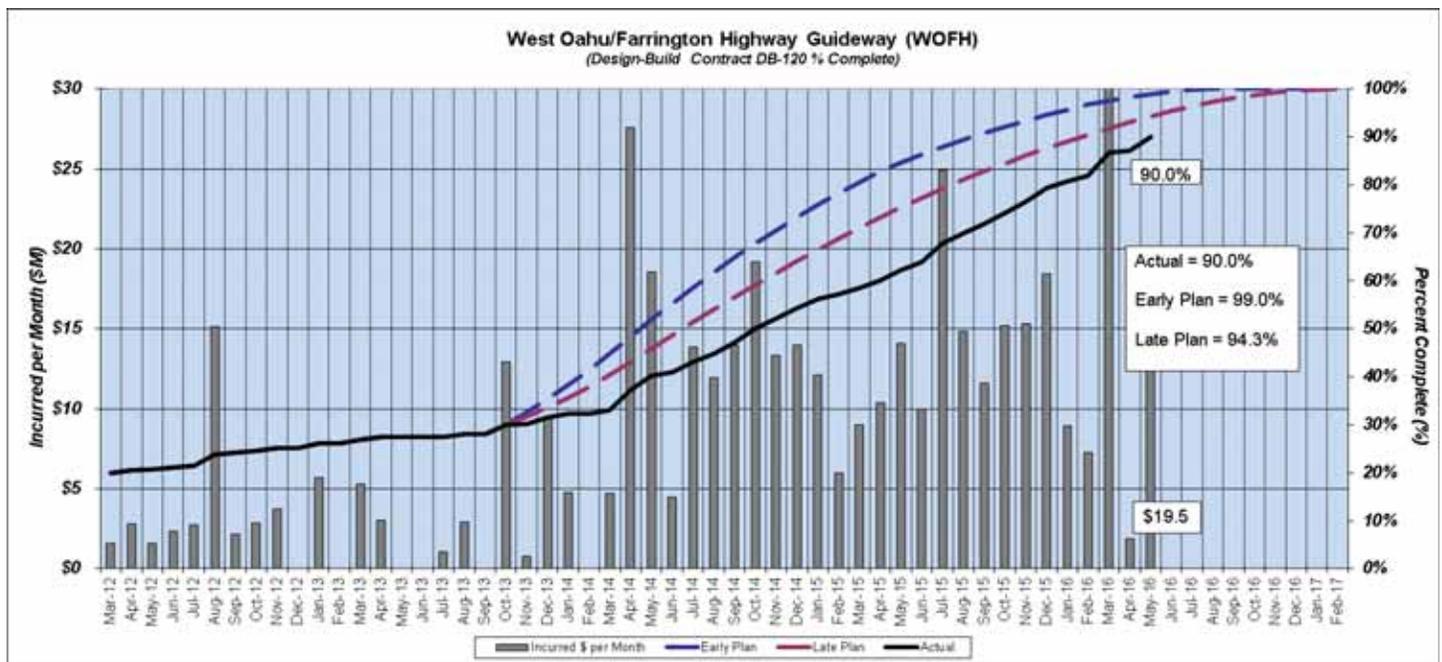
COST INFORMATION:

Original Contract:	\$482,924,000	Incurred-to-Date:	\$580,515,254
Current Contract Value ¹ :	\$647,600,628	Incurred in May:	\$19,536,694

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$7,180,100
DBE % Attained:	1.49%

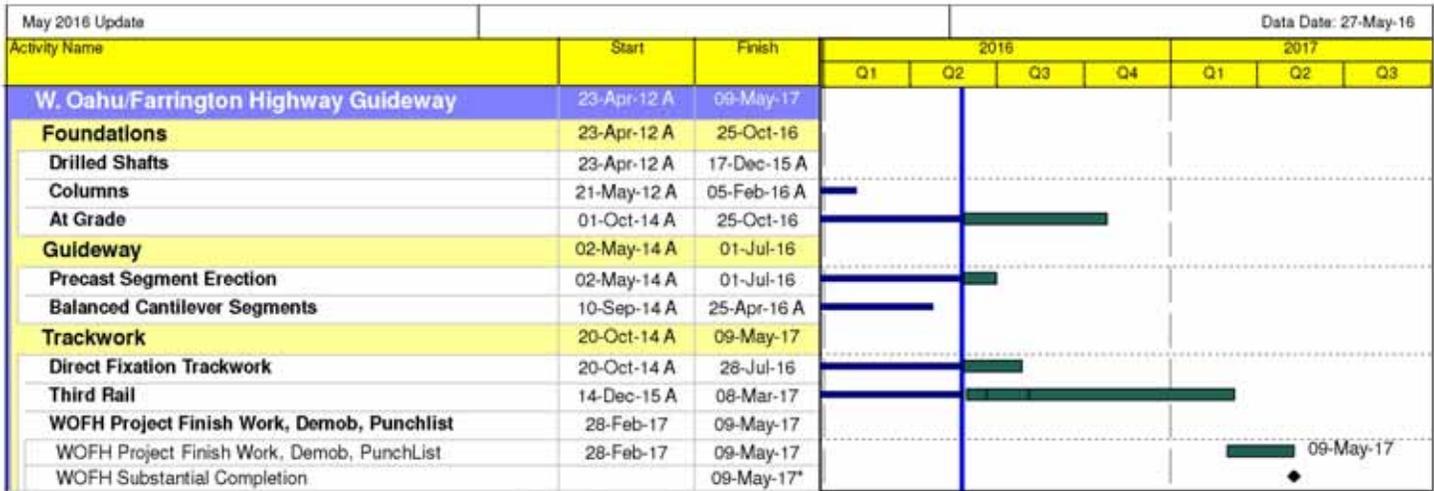
May Change Orders		
Change No.	Description	Amount (\$)
CCO0099	Deletion of Station Platform Girders	(\$451,846)
CCO 0100	Hazmat Transite Pipe Removal at STA	\$48,296
CCO 0102	Hazardous Material at Cutter Property	\$182,299
Cumulative to Date		\$164,676,628



In June, KIWC submitted pay application # 86 for April 2016 billing to HART for review.

SCHEDULE:

As of the April 2016 progress update, substantial completion was further delayed to 10 months due to the work scheduling of all LCC construction activities including KIWC’s unilateral stoppage of work for a period of time. HART has notified KIWC that all base scope work must be complete by July 1, 2016.



CRITICAL PATH ISSUES:

- In late February/early March 2016, KIWC (at risk) resumed LCC construction work activities. The portable classroom turnover to the University occurred on May 2, 2016. Demolition of the existing portables started in mid-May. KIWC’s most recent progress schedule shows the project to be completed ten months beyond contractual substantial completion.

WORK PROGRESS:

WOFH Construction Status as of 6/22/16									
Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	*** Total to Date	Planned to Date		Total Qty	% Complete
						Accepted Schedule *	Revised Schedule **		
Water Line	9,028	9,348	97%	Shafts	309	309	309	309	100%
Sewer Line	550	570	96%	Columns	283	283	283	283	100%
Fuel Line	340	340	100%	Segment Casting	3,209	3,209	3,209	3,209	100%
Gas line	1,591	1,591	100%	Spans Stressed	274	274	274	274	100%
Drainage Line	4,191	5,166	81%	Trackwork	269	269	271	278	96.8%
Elec/Telecom	16,889	21,374	79%	Third Rail	260	278	253	278	93.5%
Street Lights	6,335	8,357	76%	Mill & Overlay	27,353	N/A	N/A	32,903	83.1%
Traffic Sig/ITS Duct bank	8,552	10,802	79%	* Accepted Schedule was submitted in 2013.					
System Sites	1,683	7,046	24%	** The planned values are based on KIWC’s pending July schedule revision dated August 24, 2015. Revised schedule reflects a 6-month delay in completion.					
ITS Systems Devices	821	4,121	20%	*** Total quantity for the construction items has been revised to reflect the latest Issued for Construction number of shafts, columns, segments and spans.					

Activities this Month:

Weighted Value: 93.0% [(Total Achieved to April 2016 (\$561.9 million) + Projected May 2016 (\$17.6 million) + June 2016 Period (\$30.5 million))/Total Contract Including Executed Change Orders (\$655.9 million)]. Planned Value: 95.4%

Shaft/Column

- Completed.

Guideway Segment Erection

- Completed.

Look Ahead:

Design Progress

- KIWC continues to work toward completing final design. Additional submittals are expected to be issued for construction, pending coordination with other parties and contracts.

Shaft/Column

- KIWC will work to complete punch list items and apply anti-graffiti coating to the columns.

Activities this Month (continued):

Utility Relocation

- KIWC continues to relocate third party utilities for station conflicts and traffic signal conflicts.

Balanced Cantilever Structure

- Sound wall erection is complete. Dry finish of the exterior is complete. Continued to construct the plinth.

Track Construction

- KIWC continues to install CWR (Continuous Welded Rail) along the guideway from Span 1 to Span 210, and Spans 231 to 249. KIWC continues to construct the third rail installing the rail, anchors, expansion joints, and cover boards from Span 1 to Span 164, and Span 237 to Span 247.

KIWC/Third-Party Coordination

- HECO and KIWC continued to resolve station and traffic signal utility relocation conflicts.

Civil Structures

- KIWC continues work on roadway restoration to mill and overlay asphalt along Farrington Highway from Fort Weaver Road to Waipahu High School. KIWC continues with median restoration constructing drain inlets, curb and gutter, and installing irrigation, and installing chain link fencing from Fort Weaver Road to Waipahu High School.

Station Contractor Interfaces

- KIWC, URS, MSF and WOSG held an Interface closeout meeting to resolve current design and construction conflict.

Traffic Signals

- KIWC is working on installing the traffic signals per the traffic signal betterment unilateral change order executed with HART.

Look Ahead (continued):

Guideway Segment Erection

- Segment span erection is complete. KIWC continues to make minor repairs in preparation for Substantial Completion.

Utility Relocation

- KIWC will continue to relocate utility conflicts to facilitate traffic signal betterments.

Balanced Cantilever Structure

- Continue with plinth construction.

Track Construction

- Align and final setting of the rail will continue along the guideway. Complete installation of the third rail targeting Substantial Completion.

KIWC/Third-Party Coordination

- Continue to resolve utility conflicts with third parties to achieve Substantial Completion.

Civil Structures

- KIWC will continue with road restoration and mill and overlay work along Farrington Highway. KIWC will continue installing irrigation, and chain link fencing in median areas along Farrington Highway.

Traffic Signals

- KIWC will continue traffic signal installations.

LCC Portables and Parking Lots

- Portables and parking lots construction has been completed. Substantial Completion letter has been issued and punch list activities need to be completed before Final Acceptance is issued.

KEY ISSUES:

- **Leeward Community College (LCC) Portables and Parking Lot Change Order** – KIWC is projected to start construction work activities at the LCC Station area.
- **Closeout and Coordination** – As the project approaches substantial completion, KIWC has continued coordination with station contractors and HART on project closeout documentation requirements including QA-QC final acceptance checklists. As-built and record drawings are currently being reviewed. HART is now utilizing partial acceptance and substantial completion letters on various portions of the guideway works.
- **HDOT Traffic Signal Improvements** – The additional work that HDOT requested has begun. The five month delay in the execution of this change order and subsequent construction of the work has an impact on the overall project schedule.
- **Shared Access** – progress was made for the three western stations, West Loch Station and a target date for Pearl Highlands was set for July 11.

SUBSTANTIAL COMPLETION:

- On May 31, HART issued substantial completion for Leeward Community College – Portable Buildings and Parking Lots, and the Motorcycle Training Area.
- In early June, HART issued substantial completion for finish grade to the underside of the guideway including the exterior surfaces up to the top of the sound wall parapets from piers 45 – 51, and from piers 95 – 124.
- On the week of June 9, HART issued substantial completion for finish grade to the underside of the guideway including the exterior surfaces up to the top of the sound wall parapets from piers 125 – 163, piers 164 - 217, and for piers 217 – 251.
- Civil works in Phases 3, 4 and 5 were walked down and accepted as substantially complete.

QUALITY MANAGEMENT:

- KIWC continues to follow their established quality processes through quality monitoring and audits.

- **Closing Out NCRs** – KIWC has been working to promptly correct, validate, and close out NCR’s during this period. 4 NCRs were closed this period.
- **Track Construction Operations** – HART and KIWC continue to have discussions on Direct Fixation Shim Tolerances. KIWC is working to resolve outstanding technical issues on the shim tolerances.
- **Span 258 – NCR 509** – A few strands of the 12-Strands Tendon T1L installed on Span 258 failed after post-tensioning. KIWC has prepared a Remediation Plan to replace the failed Tendon T1L. The defective tendon was removed and saved for postmortem by KIWC on April 14, 2016; replaced and stressed on April 15, 2016; and grouted on April 22, 2016. Hence, Span 258 was lowered to its correct position.

KIWC will perform a postmortem of the Tendon T1L to determine the root cause of the failure and the corrective action to prevent recurrence on KHG. KIWC will perform a Cause and Effect Fishbone Analysis of the defective tendon, which will be participated in by HART (Design and Engineering, GEC3, CE&I, and QA/QC) and KIWC (HNTB/FIGG, Construction, Tendon Supplier, and QA/QC). Samples of the strand were taken and sent to a Certified Laboratory in the mainland by KIWC. The HART Director of QA/QC will be the Facilitator during the root cause analysis.

- **Span 249 – NCR 525** – A few strands of Tendon T3 installed in Span 249 failed after post-tensioning. The defective Tendon T3 was removed on April 21, 2016. The tendon replacement will occur when the special stressing Jacking system (that will fit the space between the two spans) arrives at the site.

WOFH NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
547	532	15

PROJECT PICTURES:



Concrete placement for plinth on Span 257.



Third rail installation on Span 241, WA 3.



Mill and overlay between piers 229 and 230.

B. West O’ahu Station Group (WOSG)

Contract No.: DBB-171

Contractor: Nan, Inc.

Contract Start Date: October 2015

Contract Substantial Completion: March 2018

Projected Substantial Completion: March 2018

Project Description: The West O’ahu Station Group Construction contract includes services to build three (3) transit stations along Kualaka’i Parkway and Farrington Highway. The stations are East Kapolei (EK), UH West O’ahu (UHWO) and Ho’opili Stations. In addition to the transit stations, operational ancillary buildings, traction power substation and adjacent areas are included in this project.



Project Overview: The contractor was issued Notice-to-Proceed (NTP) on Oct. 13, 2015. The projected substantial completion is March 2018, based off of the accepted baseline schedule. However, the baseline schedule will be updated and this date will change.

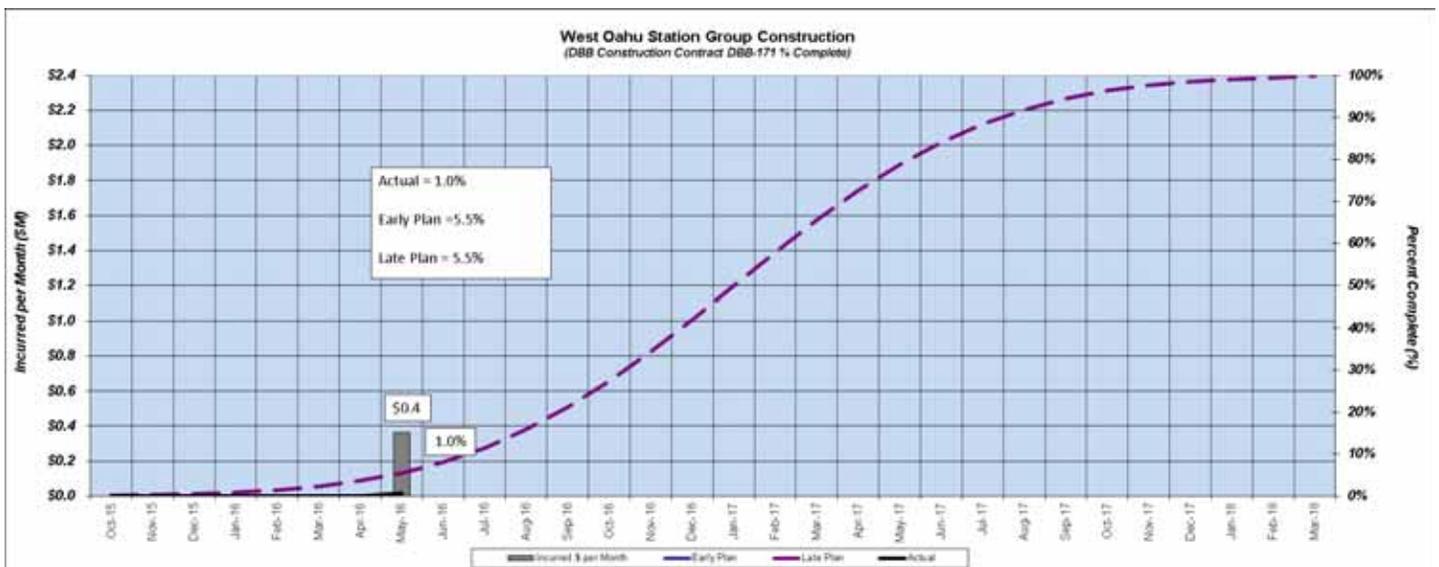
COST INFORMATION:

<u>Original Contract:</u>	<u>\$56,088,470</u>	<u>Incurred-to-Date:</u>	<u>\$361,800</u>
<u>Current Contract Value¹:</u>	<u>\$56,088,470</u>	<u>Incurred in May:</u>	<u>\$361,800</u>

¹Current Contract Value = Original contract value + executed Change Orders

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

May Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



SCHEDULE:

- The accepted schedule requires added details before it can be approved, per contract requirements. Once this occurs, the WOSG schedule will be published in a future Progress Report.

CRITICAL PATH ISSUES:

- Construction access to the Ho’opili platform.
- Construction access from Kiewit to the UH West O’ahu platform and ground access.
- Construction access from Kiewit to East Kapolei.
- Contractor to coordinate for shared access.
- Relocation of the 46kV line at UH West O’ahu Station.
- Construction of TPSS foundation and TCCR room to meet the TCCR CAM date.
- Providing infrastructure for power to Ho’opili.
- Falsework for platform box girders.
- Permits for work in HDOT Right of Way.

WORK PROGRESS:

Activities this Month:

Weighted Value: 1%; Planned Value: 1%

- The 4th iteration of the baseline schedule has been submitted and is currently under review by HART. The accepted schedule requires added details before it can be approved, per contract requirements.
- Contractor has been doing civil work, grading and formwork in preparation of footings and platform girder falsework.
- Cost proposals for RFCR 0001 (high priority changes in the IFC set) and 0002 (low priority changes in the IFC set) have been submitted and are under review. A scoping meeting will be scheduled as part of the evaluation process to ensure both parties understand the nature of the changes to ensure an effective cost analysis can be done.
- Additional changes to Ho’opili TCCR/TPSS, a result of interface, have been issued to the contractor.

Look Ahead:

- Access coordination is on-going to the Ho’opili platform.
- UHWO access to platform and ground to be provided.
- Falsework to be erected for platform box girder formwork.
- Approving the baseline schedule, with updated schedule submittals to the current date.

KEY ISSUES:

- 46 kV relocation at UH West O’ahu. 100% design approval has been given to the Designer/HART. HECO to begin the design of the poles and schedule relocation work.
- Continuing construction access coordination for the remaining station areas to be turned over by the guideway contractor, starting with Ho’opili platform.
- Executing change orders to incorporate the IFC set into the contract.

QUALITY MANAGEMENT:

WOSG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
0	0	0

C. Farrington Highway Station Group (FHSG)

Contract No.: DBB-271

Contractor: Hawaiian Dredging Construction Company, Inc.

Contract Start Date: August 2015

Contract Substantial Completion: January 2018

Projected Substantial Completion: TBD



Project Description: The Farrington Highway Station Group construction contract includes services to build three (3) transit stations along Farrington Highway. The stations are West Loch (WLO), Waipahu Transit Center (WTC) and Leeward Community College (LCC) Station. In addition to the transit stations, operational ancillary buildings, kiss and ride lots, and parking lots servicing the West Loch and LCC stations and adjacent areas are included in this project.

Project Overview: The contractor was issued Notice-to-Proceed (NTP) on Aug. 17, 2015. Hawaiian Dredging Construction Company (HDCC) introduced one (1) Value Engineering (VE) concept– Augercast piles at the Waipahu Transit Station. HDCC has received HART’s feedback regarding the concepts and is evaluating to determine whether to move forward with the effort. HDCC continues construction at WLO, preconstruction work is 75% complete at WTC, and no work has begun at LCC.

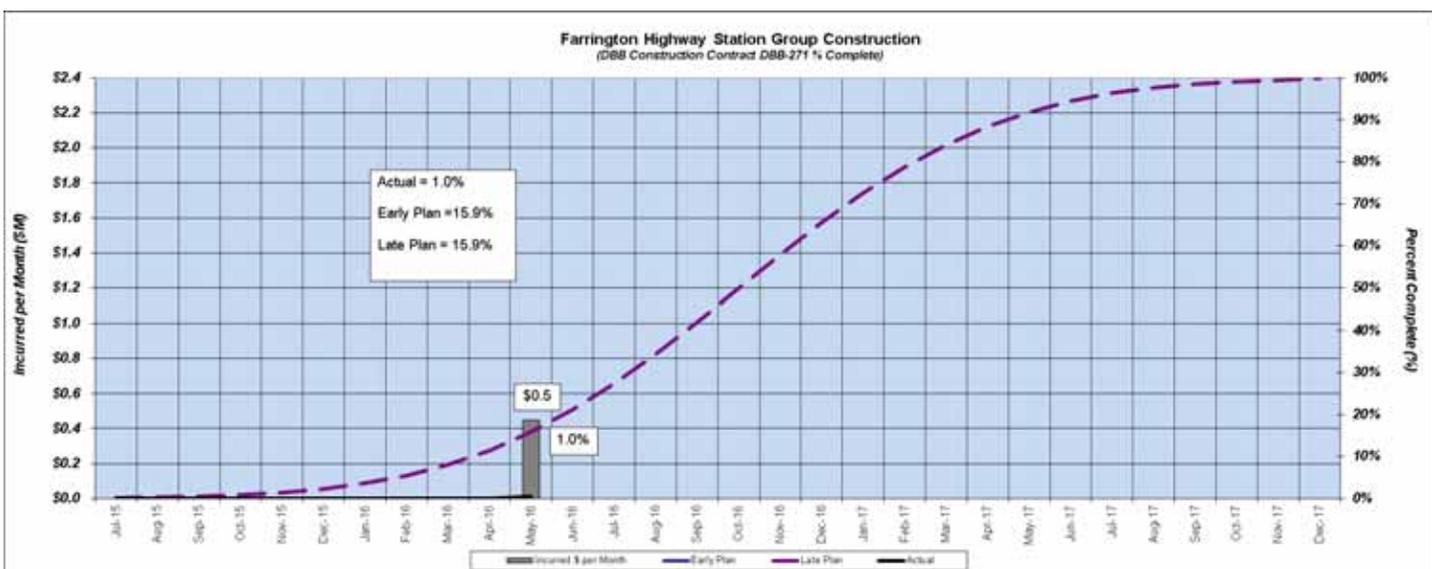
COST INFORMATION:

<u>Original Contract:</u>	<u>\$78,999,000</u>	<u>Incurred-to-Date:</u>	<u>\$450,000</u>
<u>Current Contract Value¹:</u>	<u>\$78,999,000</u>	<u>Incurred in May:</u>	<u>\$450,000</u>

¹Current Contract Value = Original contract value + executed Change Orders

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

May Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



SCHEDULE:

May 2016 Update			Data Date: 27-May-16											
Activity Name	Start	Finish	2016				2017				2018			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2		
Farrington Highway Station Group	31-Aug-15 A	17-Jan-18												
Construction - Farrington Highway Station Group	31-Aug-15 A	17-Jan-18												
West Loch Station	31-Aug-15 A	15-Sep-17												
Waipahu Transit Station	17-Dec-15 A	12-Jan-18												
Leeward Community College Station	17-Apr-16 A	16-Jan-18												
Substantial Completion - Farrington Highway Station Group	17-Jan-18	17-Jan-18												◆

CRITICAL PATH ISSUES:

- Discussions with HDCC are ongoing to re-baseline LCC Station when new access dates to Leeward Community College Station are determined.
- Revisions to the contract construction plans have been provided to the contractor.
- Access to Leeward Community College.

WORK PROGRESS:

Activities this Month:

Weighted Value: 0.57%; **Planned Value:** 25%

- Baseline Schedule accepted.
- Value engineering cost proposal comments returned to HDCC. Several scoping meetings have been held to bring cost differences in line.
- HART is working with CE&I staff to quantify additional scope of work added in the revised set of plans. The contractor continues work at WLO Station with drilled shaft reinforcing steel cages, drilled shaft load and method testing, settlement control markers, and installation of steel piles for shoring.
- Preliminary survey work for WTC station.
- Unilateral Contract Change Order issued for Traction Power Substation (TPSS) work at WLO.

Look Ahead:

- Drilled shaft work at WLO will continue.
- Underground utility work.
- Quantification of changes from the Bid set and addendum compared to the revised set is ongoing.
- Installation of waterline at Zippy's.

KEY ISSUES:

- Quantification of change work included in revised plans versus Issued for Bid (IFB) plus addendum, and how those changes are incorporated into HDCC's contract. Administrative processing time required to identify, quantify, negotiate and incorporate the changes formally into HDCC's contract is the largest concern.
- Access to the site for Leeward Community College Station is pending. HART is working with HDCC to mitigate impacts.
- Review and approval of critical submittals is ongoing.
- Past due monthly schedule updates need to be brought to current data date, so progress payments can be made.

QUALITY MANAGEMENT:

FHSG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
0	0	0

D. Maintenance and Storage Facility (MSF)

Contract No.: DB-200

Contractor: Kiewit/Kobayashi Joint Venture (KKJV)

Contract Start Date: July 2011

Contract Substantial Completion: May 2016

Projected Substantial Completion: New tentative date is July 2016

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



Project Overview: The new proposed date for the MSF Substantial Completion is tentatively set for July 2, 2016.

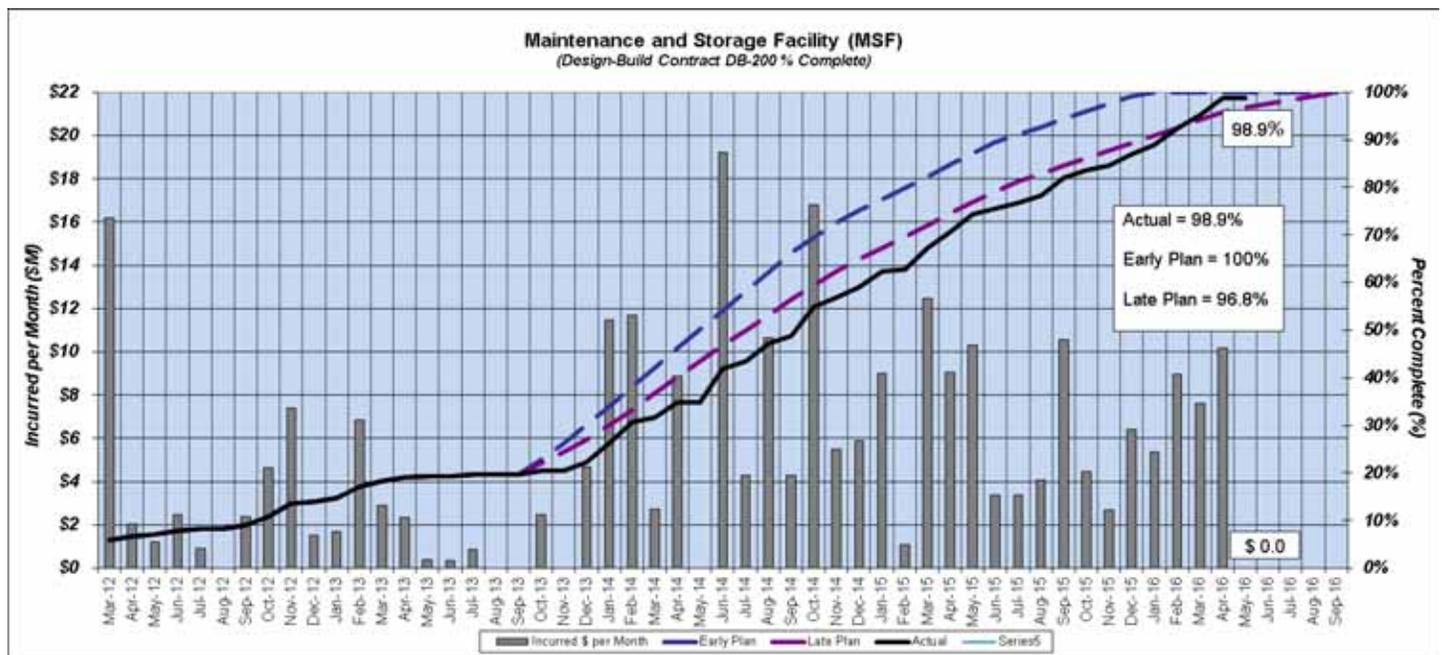
COST INFORMATION:

<u>Original Contract:</u>	<u>\$195,258,000</u>	<u>Incurred-to-Date:</u>	<u>\$271,532,758</u>
<u>Current Contract Value¹:</u>	<u>\$274,850,776</u>	<u>Incurred in May:</u>	<u>\$0</u>

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$551,698
DBE % Attained:	0.28%

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$79,592,776



SCHEDULE:

May 2016 Update		Data Date: 27-May-16				
Activity Name	Start	Finish	2016			
			Q1	Q2	Q3	Q4
Maintenance and Storage Facility (MSF)	29-Aug-11 A	27-Jun-16				
Design	29-Aug-11 A	27-Jan-15 A				
Design & Engineering	29-Aug-11 A	27-Jan-15 A				
Construction	26-Jul-12 A	27-Jun-16				
Site Civil/Utilities	26-Jul-12 A	15-Jun-16				
Operations & Servicing Building	27-Nov-13 A	23-Jun-16				
Maintenance of Way Building	12-May-14 A	19-May-16 A				
Wheel Truing Building	18-Jul-14 A	20-Jun-16				
Yard Trackwork	17-Feb-15 A	29-Apr-16 A				
Train Wash Facility	23-Mar-15 A	20-Jun-16				
Third Rail	25-Sep-15 A	25-Apr-16 A				
Project Facility Commissioning, Closeout & Turnover	28-Mar-16 A	27-Jun-16				

CRITICAL PATH ISSUES:

- Coordinate with the Core Systems for the fire alarm and detection system by the Honolulu Fire Department, and inspections of the elevators by the Hawaii Occupational Safety and Health Division (HIOSH). These final inspections are a requirement for receiving Certificate of Occupancy.

MSF Construction Status 99% Complete Overall as of 6/15/16	
Element	% Complete*
OSB	99%
MOW Building	99%
WTB	99%
TWF	99%
Rail	99%
Paving	100%

*Not including testing and commissioning.

WORK PROGRESS:

Activities this Month:

Weighted Value: 99% [(Total Achieved to May (\$271 million) + Projected June 2016 Period (\$668 thousand))/Total Contract Including Executed Change Orders (\$275 million)]. Planned Value: 99%

Yard/Utilities

- Completed punchlist activities.

Operations and Servicing Building (OSB)

- Installation of the hydraulic lifts is ongoing.
- Punchlist activities are ongoing.
- Elevator installation is complete, pending inspection.

Maintenance of Way (MOW)

- Completed punchlist activities.
- Elevator testing for State Certification completed.
- Building Occupancy Certification issued.

Wheel Truing Building (WTB)

- Completed punchlist activities.

Train Wash Facility (TWF)

- Completed punchlist activities.

Rail Procurement and Installation

- Track drain, sub-ballast, ballast, and contact rail installation for East and West Yard Lead track (Phases 1 and 5) as well as track east and west of the TWF are complete.
- Testing of the running rail is complete.

Look Ahead:

Yard/Utilities

- Complete

OSB

- Installation of hydraulic lifts.
- Complete punchlist activities.

MOW

- Complete

WTB

- Complete

TWF

- Complete

Activities this Month (continued):

Administration

- Continued working with the CSC to resolve design interface issues and performing pre-functional testing.

KEY ISSUES:

- Joint Occupancy with Core Systems Contractor** – Daily meetings are held and details are being worked out for systematic release of areas and infrastructure whereby the Core Systems Contractor (CSC) can commence work. .
- Substantial Completion & Certificate Occupancy (CO)** – KKJV continues to coordinate with CSC to complete the remaining fire detection and alarm systems to achieve Temporary Certificate Occupancy (TCO). Once the TCO is granted, Substantial Completion can be granted. Therefore, it has been proposed to modify the substantial completion date to July 2, 2016. KKJV is continuing to provide training for various equipment and is in the process of submitting warranties and turnover documentation, such as Operation and Maintenance Manuals for CSC.
- LEED Commissioning** – Commissioning of HVAC, domestic water and building lighting controls is in process. The completion requires the fiber optic communication network by CSC.

QUALITY MANAGEMENT:

- Overall quality of the contract is good.

MSF NCR Log		
Total NCRs Issued to Date	CLOSED	OPEN
32	32	0

PROJECT PICTURES:



Signage installation at the MSF entrance gate.



MSF Yard – Dressing the slope along Basin Access Rd.



Yard- Cleaning manholes.



Touch-up painting the fire hydrants.



FDAS raceway installation at the OSB.



TWF – Punchlist activity items.

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

A. Kamehameha Highway Guideway (KHG)



Contract No.: DB-320
Contractor: Kiewit Infrastructure West Company (KIWC)
Contract Start Date: June 2011
Contract Substantial Completion: September 2016
Projected Substantial Completion: September 2017

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

Project Overview: Construction of the remaining drilled shafts continues east of Honomanu Street. Columns have been constructed from the WOFH project limits to the area just before Hehaka Street, and the area between Kanuku Street and Pali Momi Street. Construction of columns in the Aloha Stadium Station area has progressed along with heading 2 truss erecting spans 406 to 421L.

HART and KIWC continue to work at senior management levels to ensure current utility relocation schedules are being maintained.

Per KIWC’s progress schedule, the contract is twelve months behind schedule which includes the guideway structure completion in April 2017 and the remaining roadway/civil work being completed by September 2017.

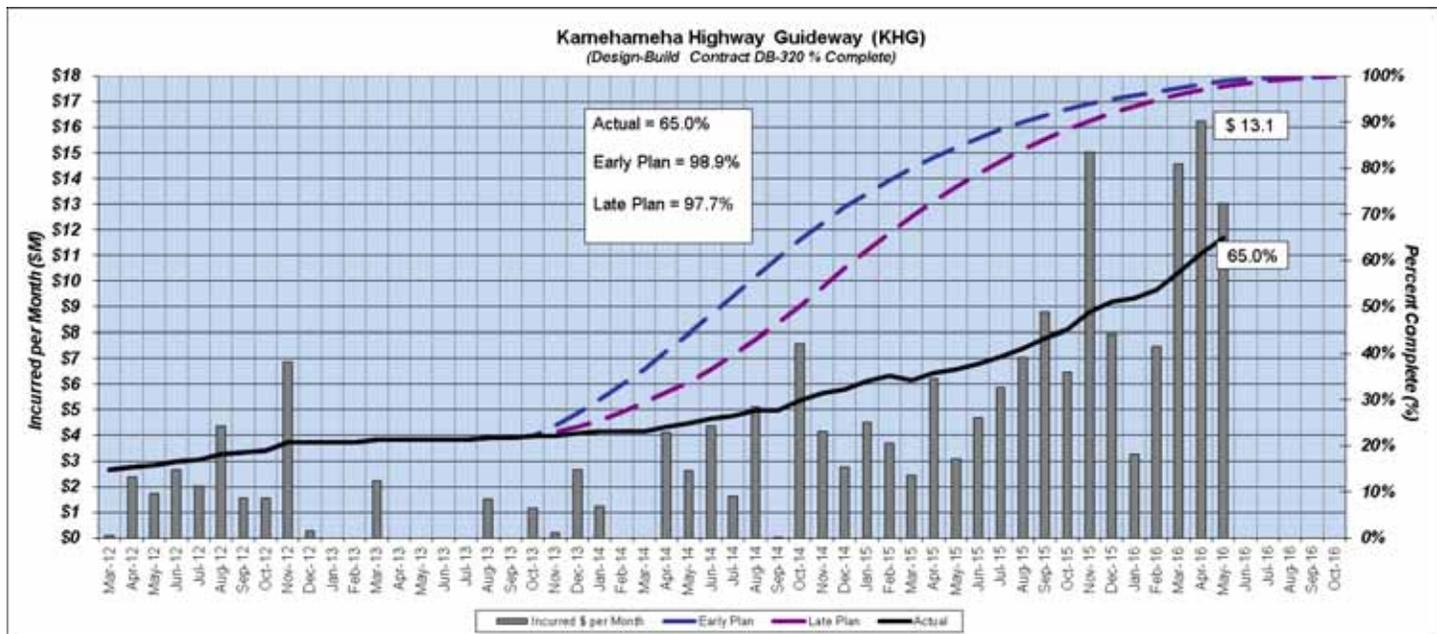
COST INFORMATION:

Original Contract:	\$372,150,000	Incurred-to-Date:	\$252,758,722
Current Contract Value ¹ :	\$389,472,586	Incurred in May:	\$13,051,348

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$308,468
DBE % Attained:	0.08%

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$17,322,586



Pay Application #61 for April 2016 billing has been submitted by KIWC and is in review with HART.

SCHEDULE:

KIWC submitted a schedule revision in December 2014 with a data date of October 2014, which showed a revised Substantial Completion date of April 4, 2017. HART provided review comments to the schedule and has requested re-submittal via Request for Change (RFC) due to the change to the contractual substantial completion date. Until then, the schedule is deemed unaccepted. Subsequently, KIWC submitted a revised schedule in September 2015 via an RFC for contract time extension. The re-sequencing of the guideway and road work contains significant changes in durations, logic, as well as activity modifications, and is currently being reviewed by HART. The revised schedule shows the guideway structure forecasted to be complete in April 2017 with completion of the roadway civil construction and the overall project in September 2017; this reflects a potential 12 month delay to the contractual substantial completion date.

KIWC continues to have challenges meeting schedule due to various factors including lower productivity and resource sharing between the KHG and WOFH projects.



CRITICAL PATH ISSUES:

- HECO schedule forecast at utility conflicts 11-920-M1, 11-923-M1, 12-943-E1 and 12-944-E1 are affecting utility relocation work. HART is tracking these issues and notes that its criticality needs to be established.
- Production rate for truss 3, moving east from Segments 277 through 322, is on the longest critical path.

WORK PROGRESS:

KHG Construction Status as of 6/15/16									
Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	Total to Date	Planned to Date		Total Qty	% Complete
						Accepted Schedule*	Revised Schedule**		
Water Line	4,362	4,362	100%	Shafts	172	186	177	186	92.5%
Gas Line	12,641	12,641	100%	Columns	114	160	116	169	67.5%
Sewer Line	492	492	100%	Segment Casting	1,850	1,955	2,035	2,031	91.1%
Drainage Line	710	1,469	48%	Spans Stressed	68	148	57	166	41.0%
Elec/Telecom	15,961	19,455	82%	Track work	0	93	0	166	0%
System Sites	10%	N/A	10%	Third Rail	0	0	0	166	0%
Signals/ITS/Lights	13,587	18,486	74%	Mill & Overlay Roadway	0	N/A	N/A	N/A	0%

* Accepted Schedule was submitted in 2013.
 • Forecasted delays for track work extended the guideway completion by 3 weeks from prior updates.
 ** These quantities are based on KIWC's pending August 2015 schedule revision dated Sept. 23, 2015. Revised schedule reflects a 12 month delay in completion.

Activities this Month:

Weighted Value: 70.3% [(Total achieved to May 2016 (\$264.9 million) + June 2016 projection (\$15.2 million))/Total contract including executed Change Orders (\$398.5 million)]. Planned Value: 98.4%

Look Ahead:

Design Progress

- KIWC is working to complete final design. To date, 44 of 49 drawing packages have been issued for construction.

Activities this Month (continued):

Shaft/Column/Segments

- 172 of 186 shafts have been installed; 92.5% of all shafts have been completed.
- 114 of 169 columns have been constructed.
- 1,850 of 2,031 segments have been cast.
- Balanced Cantilever superstructure east and west of the H-1 overpass continues.
- Balanced Cantilever travelers have been erected at Piers 306 and 307, heading both east and west. Fourteen (14) of 22 segments cast.
- Obtained east and west bound permits.
- Shaft construction east of Honomanu Street continues.
- Heading #1 is in production erecting Span 358.
- Heading #2 has reached Span 406 and is back launching to Span 421R to set rights.
- Heading #3 is back in production erecting Span 311.

Utility Relocation Progress

- The relocation of HECO electrical lines and Hawaiian Telcom, Oceanic Time Warner and Intelligent Transportation Systems (ITS) duct banks is occurring in various phases along the alignment.
- Systems Site #10 and #24 work is ongoing.

Roadway Widening

- Roadway widening continues to be placed on hold due to crews working on WOFH.
- Shaft construction west of Aiea Access Road is in progress.

Look Ahead (continued):

Shaft/Column/Segments

- Construction of shafts will continue east of Honomanu Street.
- Column construction continues eastbound from Kaahumanu Road towards Aloha Stadium.

Utility Relocation

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

Balanced Cantilever Structure

- Superstructure construction will continue at the BCS Piers 306 and 307.

Precast Yard

- KIWC will continue casting segments. Based on the current rate, the forecasted completion is July 2016.

Roadway Widening

- KIWC initiated design and construction of cast-in-place (CIP) retaining walls 2, 3 and 4 which will facilitate the widening of Kamehameha Highway west of Waimano Home Road. Forecast completion is December 2016.

KEY ISSUES:

- **HECO/HDOT Utility Priorities** – HECO designs for utility conflicts 920-E1 and 943-E1 (Royal) have been completed and approved by HART. HART is awaiting construction schedule from third parties.
- **Access Coordination between Contracts** – Coordination between contractors is ongoing and requiring accelerated turnover of guideway work to follow-on station contractors.
- **Third Party Utility Impacts** – HART and KIWC continue to work at senior and executive management levels to ensure current utility relocation schedules are being maintained.

QUALITY MANAGEMENT:

- **Quality Process** – KIWC continues to follow an established quality process and have not encountered any significant new findings through quality audits.
- **Longitudinal Tendons** – Due to WOFH NCR 509, longitudinal tendons have been monitored for possible indications of rust. HART to inspect tendon anchorage for corrosion prior to grouting.
- **Drilled Shaft Quality** – KIWC currently has 4 open NCRs due to velocity reduction exceeding 20%. KIWC has been reviewing their means and methods for placing concrete to reduce the issue with velocity reduction.

KHG NCR Log		
Total NCRs Issued to Date	CLOSED	OPEN
173	152	21

PROJECT PICTURES:



Heading 3, Setting Span 308, Phase 4.



Setting Joint Use Poles, Phase 6.



Launching Truss to Span 353, Phase 8.



Excavation for Shaft 389, Phase 10.



Extracting Shaft 396, Phase 12.



Stripping forms on Concrete Pier 419R, Phase 13.

B. Ramp H2R2

Contract No.: DBB-385
Contractor: Royal Contracting Co. Ltd.
Contract Start Date: May 2015
Contract Substantial Completion: May 2016
Projected Substantial Completion: April 2017



Project Description: Ramp H2R2 is a loop ramp which connects in-bound Farrington Highway to in-bound Kamehameha Highway. The loop terminates just west of the intersection of Kamehameha Highway and Waihona Street.

Project Overview: Royal Contracting was awarded this project on May 4, 2015, and issued NTP on May 18, 2015. Construction duration is anticipated to be 13 months. Start of construction was delayed due to additional HDOT required soil remediation and submittal of required documentation. The contractor has projected a substantial completion of April 2017. The contractor was formally notified to commence construction on March 21, 2016, however, they commenced construction on March 28, 2016.

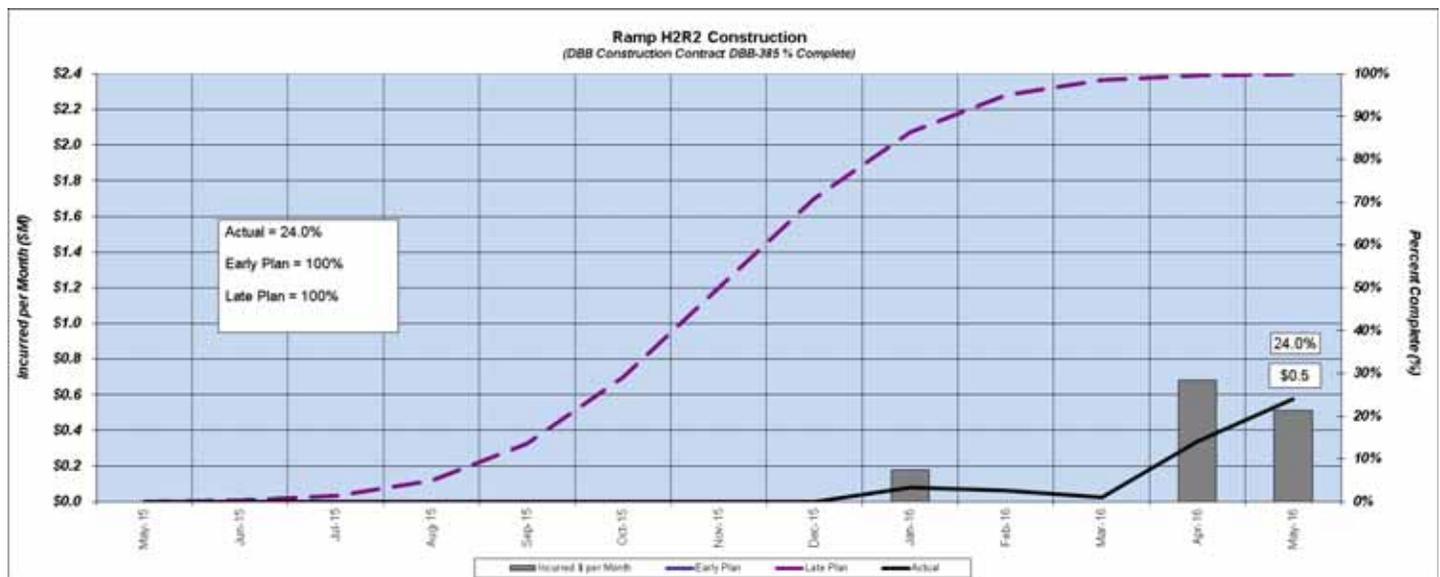
COST INFORMATION:

Original Contract:	\$5,203,646	Incurred-to-Date:	\$1,246,666
Current Contract Value ¹ :	\$5,203,646	Incurred in May:	\$513,816

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$11,408
DBE % Attained:	0.22%

May Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



The progress chart reflects early program expectations. When the overall schedule is rebaselined, the cost curve will be revised.

SCHEDULE:

May 2016 Update			Data Date: 27-May-16							
Activity Name	Start	Finish	2016				2017			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	
West Guideways & Structures	18-May-15 A	10-Apr-17								
Construction - H2R2 Ramp	18-May-15 A	10-Apr-17								
Construction - H2R2 Ramp	18-May-15 A	10-Apr-17								
Substantial Completion - H2R2 Ramp		10-Apr-17								

CRITICAL PATH ISSUES:

- Approval from HDOT on repairs to existing 30-inch corrugated metal storm pipe. Royal was provided direction to proceed with change work by field change notice. No impact to critical path with alternate mechanical compaction method that was approved and implemented.
- Additional time to be added for unforeseen condition at 30-inch corrugated metal pipe (CMP) to extend projected substantial completion to April 2017.
- Change order in process that will extend contract completion 124 days as a result of an approved time impact analysis resulting from an unforeseen condition encountered in the beginning of the project (contaminated soils).

WORK PROGRESS:

Activities this Month:

Weighted Value: 24%; Planned Value: 99%

- Royal continues to provide required submittals for review and acceptance.
- Royal continues to provide project baseline schedule updates as the project progresses.
- Embankment placement.
- Mass excavation and export was completed by the end of the month.
- Surcharge settlement monitoring.

Look Ahead:

- Continue earth moving activities.
- Continue export of fill material.
- Continue surcharge settlement monitoring.

KEY ISSUES:

- Street lighting along H2 being looked at by design engineers to address a potential issue relating to location of existing streetlights.
- Design engineers researching potential issue related to storm drain adjacent to H2.
- Additional MOT barriers require installation to address safety concerns.

QUALITY MANAGEMENT:

Ramp H2R2 NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
0	0	0

C. Kamehameha Highway Stations Group (KHSG)

Contract No.: DBB-371

Contractor: Nan, Inc.

Contract Start Date:

Administrative NTP Issued: April 2016

Full NTP: To be issued

Contract Substantial Completion: NTP+32 months

Projected Substantial Completion: TBD



Project Description: The Kamehameha Highway Station Group construction contract includes services to build three (3) transit stations along Kamehameha Highway. The stations are Pearl Highlands Station, Pearlridge Station, and Aloha Stadium Station. In addition to the transit stations, operational ancillary buildings, bus stops/transit centers, park-and-ride lots, kiss-and-rides, pedestrian crossing improvements, Train Control and Communications Rooms (TCCRs), and landscaping of the station sites are included.

Project Overview: The contractor was issued Administrative NTP on April 1, 2016, and since then has been submitting RFIs as well as management and qualification based technical submittals. Various meetings have been held to introduce the contractor to key HART personnel. A key issue remains the determination of when to officially issue NTP to the contractor. This issuance is contingent on the contractor getting access to the Pearl Highlands, Pearlridge, and Aloha Stadium Station areas. Coordination meetings with the WOFH and KHG Guideway contractor remain ongoing to ensure the proper transfer of site access.

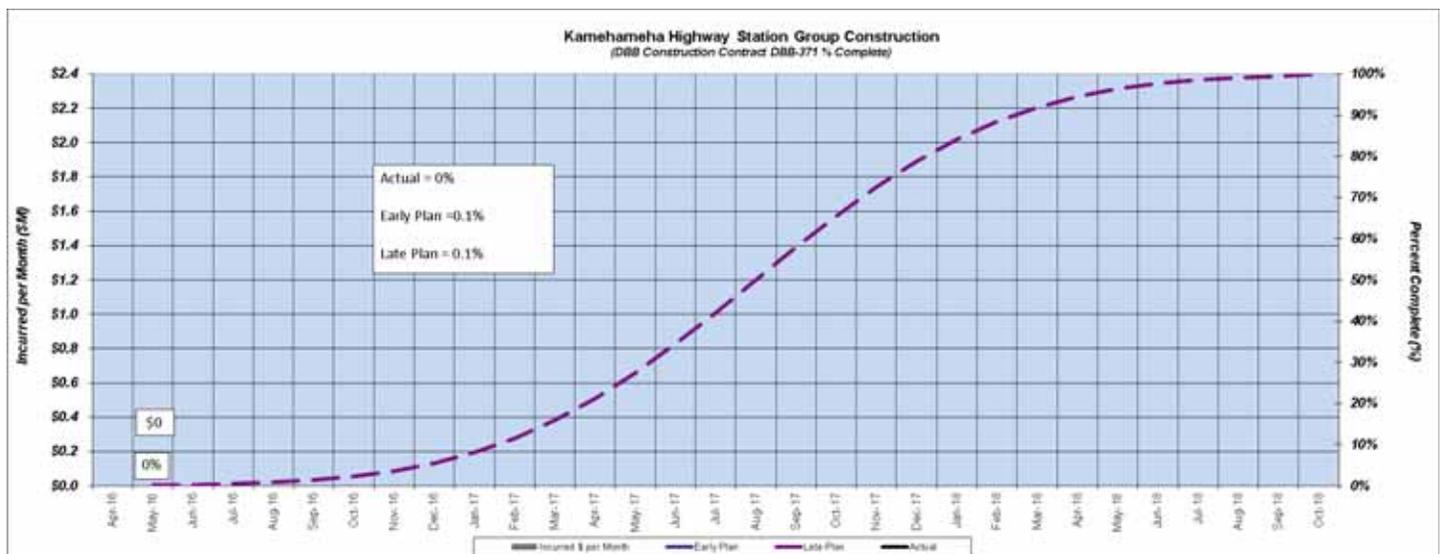
COST INFORMATION:

Original Contract:	\$115,805,845	Incurred-to-Date:	\$0
Current Contract Value ¹ :	\$115,805,845	Incurred in May:	\$0

¹Current Contract Value = Original contract value with Design Allowance + executed Change Orders

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

May Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



SCHEDULE:

- The KHSG schedule will be published once the baseline schedule is accepted.

CRITICAL PATH ISSUES:

- Issuing Formal NTP to begin contractor mobilization onto site.
- Working with the WOFH Guideway contractor to get partial site access to the Pearl Highlands Station area as well as with the KHG Guideway contractor to get full site access to the Pearlridge and Aloha Stadium Station areas.
- Executing a Contractor Change Order to incorporate Issued for Construction drawings and specifications into the contract.

WORK PROGRESS:

Activities this Month:

Weighted Value: 0%, Planned Value: 0%

- Submittals and RFIs have been submitted and are being responded to.
- Held and attended various construction interface meetings with the WOFH and KHG Guideway contractor. Settled on partial site access at the Pearl Highlands Station area in July 2016.
- Progressed the development of a Contractor Change Order (CCO 00001) to incorporate Issued for Construction drawings and specifications.
- Held Project Progress, Environmental, Safety, Maintenance of Traffic Meetings, and Interface Definition Meetings with the guideway contractor, Core Systems contractor and Elevator & Escalator contractor to develop critical interface points.
- Held Value Engineering Meetings to determine the potential for schedule savings and minimal traffic disturbances to the public.

Look Ahead:

- Hold an Interface Definition Meeting with the Fare Collection contractor to develop critical interface points.
- Continuing coordination with the WOFH Guideway contractor for partial site access and survey work at the Pearl Highlands Station area.
- Continuing coordination with the KHG Guideway contractor for full site access to Pearlridge and Aloha Stadium Station areas.
- Begin negotiations for CCO 00001.
- Begin holding Scheduling Meetings and work on the development of a Baseline Schedule.
- Continue Value Engineering discussions and determine if any should be pursued.

KEY ISSUES:

- Guideway contractor turning over station dates at Pearl Highlands, Pearlridge, and Aloha Stadium Station areas.
- Coordination with existing contractors.

QUALITY MANAGEMENT:

KHSG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
0	0	0

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

A. Airport Section Guideway and Utilities

Contract No.: FD-430

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

Contract Start Date: January 2012

Currently in Construction:

- Airport Section Utilities (DBB-505 - Nan Inc.):
 - Contract start date: July 2014

Construction Completed:

- Airport 7-Piers (DBB-525 – Hawaiian Dredging):
 - Project acceptance on May 2, 2015; project closed out in April 2016



Project Description: The Airport Segment Guideway and Utilities contract consists of 5.2 miles of elevated transit guideway serving four (4) passenger stations, in addition to roadway widening, utility relocation, and other improvements to create space for these transit facilities. Two construction contracts have been split out and expedited from the larger Airport Section package. These two contracts are the expedited Airport Section Utilities (ASU) and expedited Airport 7-Piers (A7). For both of these expedited contracts, the design has been completed and construction is in progress (ASU) or completed (A7). The remaining scope of design has been terminated and will be completed under a design-build procurement.

Project Overview: The services under this contract are now limited to engineering support during construction, and support to HART during the design-build procurement.

COST INFORMATION:

<u>Original Contract:</u> \$38,840,960	<u>Incurred-to-Date:</u> \$41,617,484
<u>Current Contract Value¹:</u> \$43,134,472	<u>Incurred in May:</u> \$90,942

¹Current Contract Value = Original contract value with Design Allowance + executed Change Orders

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

May Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$4,293,512



The progress chart reflects early program expectations. When the overall schedule is rebaselined, the cost curve will be revised.

Due to the change in delivery method from DBB to DB, the final design will not be completed under this contract.

SCHEDULE:

Activity Name	Start	Finish	Data Date: 27-May-16																							
			2015			2016			2017			2018			2019			2020			2021			2022		
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Airport Guideway & Stations (AGS)	07-Apr-15 A	01-Apr-21																								
Airport Guideway & Stations - Design Build Procurement Part 1	07-Apr-15 A	11-Aug-15 A	■																							
DB-450 - Airport Guideway & Stations - Design Build Procurement Part 2	01-Sep-15 A	05-Apr-16 A		■	■																					
DB-450 - Airport Guideway & Stations - Design & Construction	01-Nov-16	01-Apr-21																								

CRITICAL PATH ISSUES:

- N/A.

WORK PROGRESS:

Activities this Month:

- Current earned value is approximately 97%.
- Supporting current construction contracts.
- Supporting AGS DB procurement.

Look Ahead:

- N/A.

KEY ISSUES:

- N/A.

B. Airport Section Utilities Construction

Contract No.: DBB-505

Contractor: Nan, Inc.

Contract Start Date: July 2014

Contract Substantial Completion: July 2016

Projected Substantial Completion: November 2016

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



Project Overview: Nan, Inc. continues with utility relocation work along Kamehameha Highway. The current substantial completion date is July 13, 2016, which HART is working on revising due to delay claims by the contractor that are under review. An approval of modified Traffic Control Plans allows the contractor to have more time to perform work during the day. Nan is also working closely with the Navy on utility issues discovered in the field, including unclaimed / unidentified power lines along Kamehameha Highway.

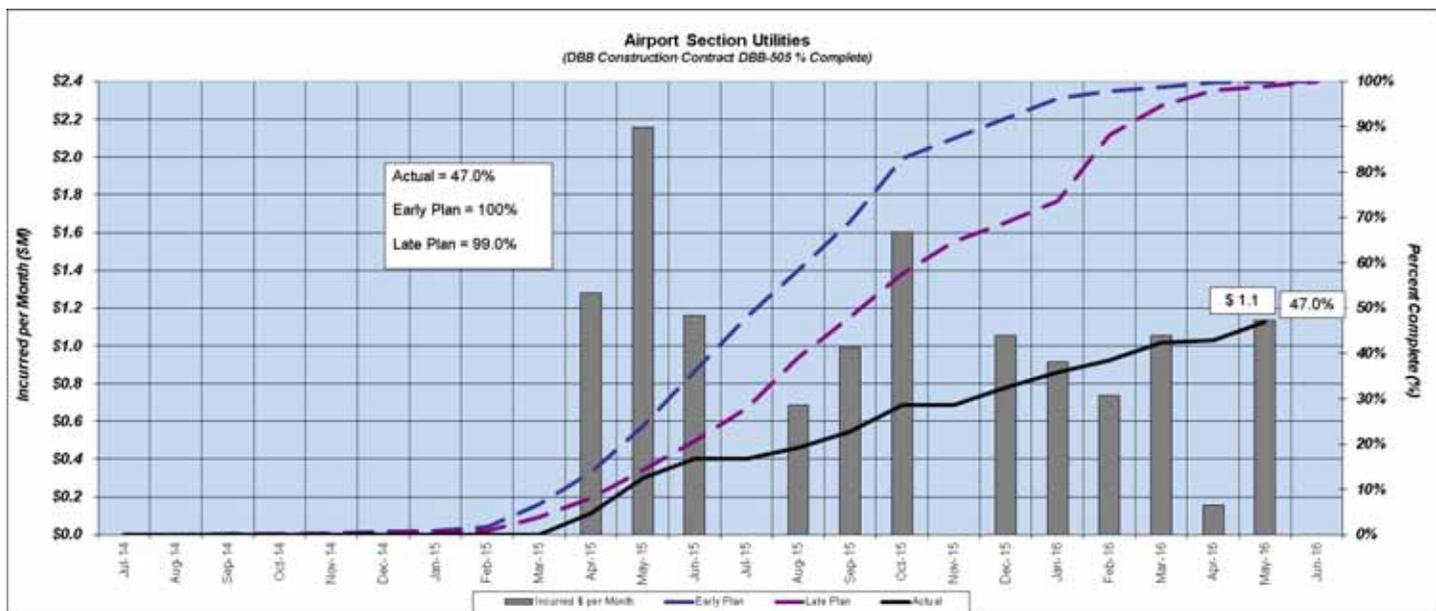
COST INFORMATION:

<u>Original Contract:</u>	<u>\$27,993,290</u>	<u>Incurred-to-Date:</u>	<u>\$12,930,245</u>
<u>Current Contract Value¹:</u>	<u>\$27,514,812</u>	<u>Incurred in May:</u>	<u>\$1,137,033</u>

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$35,989
DBE % Attained:	0.13%

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		(\$478,477)



The progress chart reflects early program expectations. When the overall schedule is rebaselined, the cost curve will be revised.

SCHEDULE:

May 2016			Data Date: 27-May-16																							
Activity Name	Start	Finish	2015			2016			2017			2018			2019			2020			2021			2022		
			Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
Airport Section Utilities Construction	05-Jan-12 A	13-Jul-16																								
FD-430 - Airport Utilities - Design	05-Jan-12 A	16-Dec-13 A																								
Airport Utilities - Bid & Award	17-Dec-13 A	30-Jun-14 A																								
DBB-505 - Airport Section Utilities - Construction	06-Oct-14 A	13-Jul-16																								

CRITICAL PATH ISSUES:

- 8” Navy waterline reconnection.

WORK PROGRESS:

Activities this Month:

Weighted Value: 55%; Planned Value: 60%

- Nan, Inc. has submitted a baseline construction schedule, which has been accepted. A revised baseline schedule, based on the current contract substantial completion and extended work hours, is being reviewed.
- Continued work on utility line relocations along Kamehameha Highway. Work will be performed on waterline manholes, utility box installations, and installation of irrigation lines in the Airport area. Work will also involve the removal of sewer lines that are abandoned.

Look Ahead:

- Ongoing utility work on Kamehameha Highway sewer line removal, Navy 8” waterline reconnection, electrical utility boxes, etc.
- Ongoing drain line and waterline work on Aolele Street in the Airport area.
- CE&I II team continues to review and respond to RFI’s dealing with field conflicts as well as process RFC’s/Change Orders.
- Additional scope of work discovered or unforeseen to this contract, such as the Telecom duct bank work, 24” waterline, and 8” fuel line removal, are planned to be performed under another contract.
- The ASU contract scope to remove a 3-4” Chevron line and relocation of the utility line associated with the Navy Secured Fleet and Industrial Supply Center (FISC) area will be removed from the Nan, Inc. ASU contract and will be addressed in future contracts due to schedule constraints, ROW access, third party stakeholders, or hazardous material abatement issues.

KEY ISSUES:

- Concluding change order agreements and negotiations, and processing a time extension to modify the contract substantial and final completion dates.

QUALITY MANAGEMENT:

- Overall quality of the contract is good.

Airport Utilities NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
18	17	1

C. Airport Station Group (ASG)

Contract No.: FD-440

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

Contract Start Date: November 2012

Construction Docs Bid-Ready: N/A



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

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

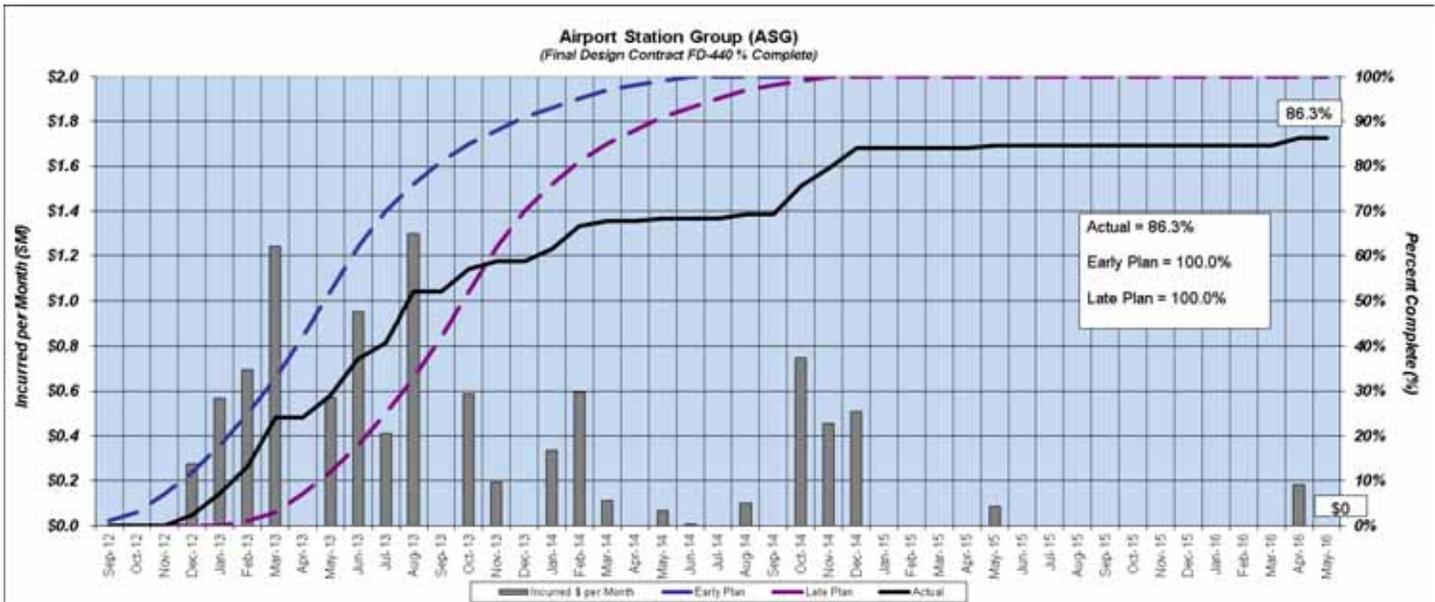
COST INFORMATION:

Original Contract:	\$10,177,365	Incurred-to-Date:	\$9,983,402
Current Contract Value ¹ :	\$11,573,852	Incurred in May:	\$0

¹Current Contract Value = Original contract value with Design Allowance + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$234,762
DBE % Attained:	2.31%

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$1,396,487



The progress chart reflects early program expectations. When the overall schedule is rebaselined, the cost curve will be revised.

Due to the change in procurement strategy from DBB to DB, the design of the Airport Stations Group will not be advanced to completion under this contract.

CRITICAL PATH ISSUES:

- N/A.
-

WORK PROGRESS:

Activities this Month:

- Current earned value is approximately 88% and is not anticipated to increase significantly due to the suspension of design activities.

Look Ahead:

- N/A.
-

KEY ISSUES:

- N/A.

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

A. City Center Section Guideway and Utilities

Contract No.: FD-530

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

Contract Start Date: July 2012

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



Project Overview: This section of the guideway has been combined with eight (8) stations into a single City Center Guideway and Stations (CCGS) Design-Build package. The services remaining under this contract include preparation of early utilities designs, and support to HART during design-build procurement.

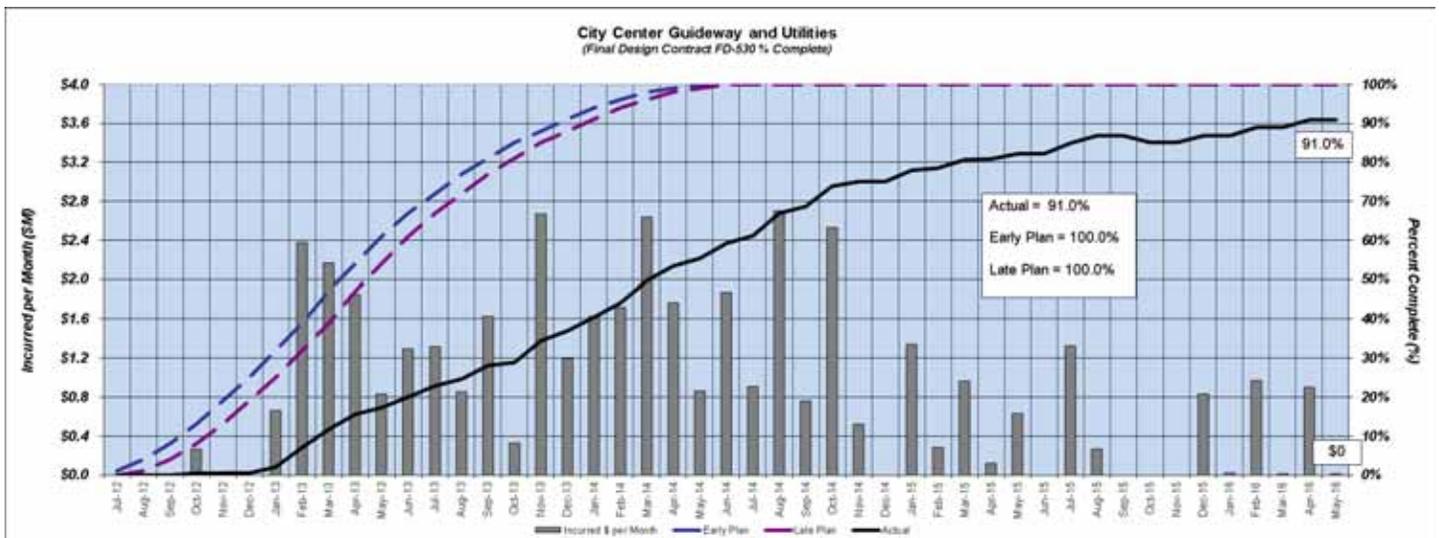
COST INFORMATION:

Original Contract:	\$43,948,220	Incurred-to-Date:	\$42,819,804
Current Contract Value ¹ :	\$47,097,562	Incurred in May:	\$9,910

¹Current Contract Value = Original contract value with Design Allowance + executed Change Orders

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

May Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
Cumulative to Date		\$3,149,342



The progress chart reflects early program expectations. When the overall schedule is rebaselined, the cost curve will be revised.

Due to the change in delivery method from DBB to DB, the final design will not be completed under this contract.

SCHEDULE:

Activity Name	Start	Finish	Data Date: 27-May-16													
			2015	2016	2017	2018	2019	2020	2021	2022	2023					
City Center Guideway & Stations (CCGS)	04-Aug-15 A	24-Apr-23	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
City Center Guideway & Stations - Design Build Procurement Part 1	04-Aug-15 A	18-Nov-15 A														
DB-550 - City Center Guideway & Stations - Design Build Procurement Part 2	02-Feb-16 A	11-Oct-16														
DB-550 - City Center Guideway & Stations - Construction	15-Feb-17	24-Apr-23														

CRITICAL PATH ISSUES:

- N/A.

WORK PROGRESS:

Activities this Month:

- Current earned value is approximately 92%.
- Supporting HART on DB procurement.

Look Ahead:

- N/A.

KEY ISSUES:

- N/A.

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

Contract No.: FD-550

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

Contract Start Date: August 2013

Construction Docs Bid-Ready: N/A

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



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

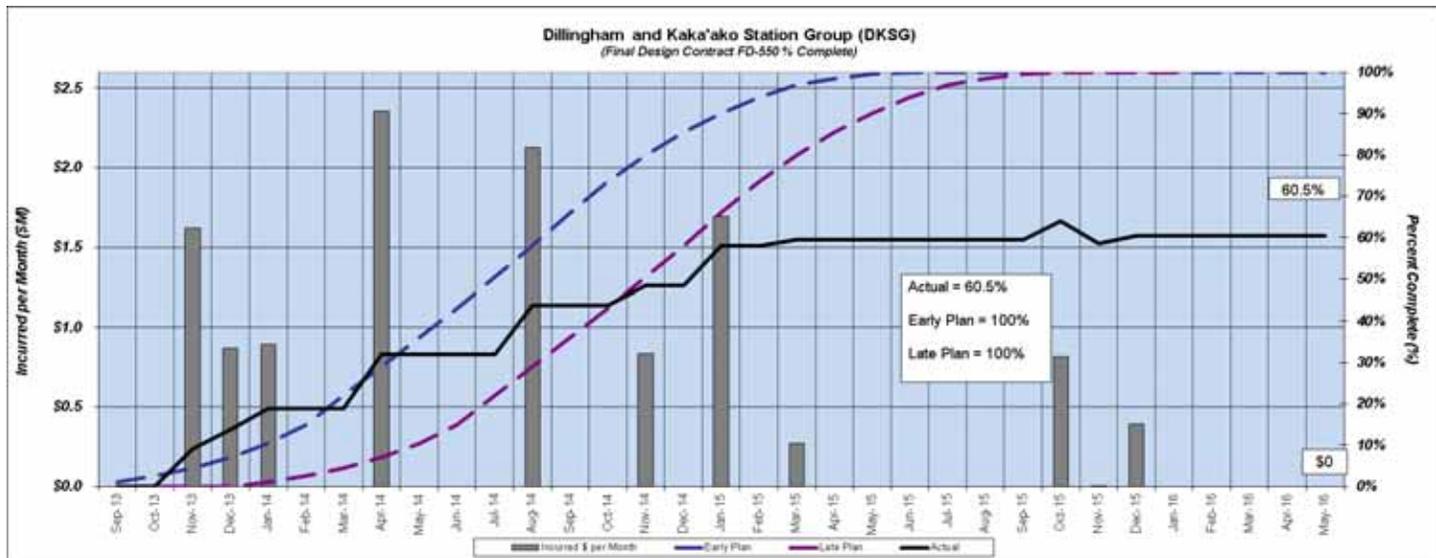
COST INFORMATION:

Original Contract:	\$18,321,918	Incurred-to-Date:	\$11,875,668
Current Contract Value ¹ :	\$19,631,717	Incurred in May:	\$0

¹Current Contract Value = Original contract value with Design Allowance + executed Change Orders

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

May Change Orders		
Change No.	Description	Amount (\$)
CA0006	DB Compliance	\$323,675
Cumulative to Date		\$1,309,799



The progress chart reflects early program expectations. When the overall schedule is rebaselined, the cost curve will be revised.

Due to the change from a DBB to a DB delivery method, the design for these stations has been suspended and will not be completed under this contract.

CRITICAL PATH ISSUES:

- N/A.
-

WORK PROGRESS:

Activities this Month:

- Current earned value is approximately 68% and is not expected to increase significantly due to the suspension of design activities on this contract.

Look Ahead:

- N/A.
-

KEY ISSUES:

- N/A.

4.6 Project-Wide

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

Contract No.: MM-901

Contractor: InfraConsult LLC

Contract Start Date: March 8, 2012

Contract Completion: March 7, 2017

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

COST INFORMATION:

Original Contract:	\$33,376,897	Incurred-to-Date:	\$41,717,229
Current Contract Value ¹ :	\$51,820,920	Incurred in May:	\$541,202

¹Current Contract Value = Original contract value + executed Change Orders

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

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$18,444,022



KEY ISSUES:

- HART exercised its option to extend the PMSC contract for the remaining option year, effective March 8, 2016. The current contract will terminate upon award of contract to the successful offeror of the new Request for Qualifications or one year from March 8, 2016, whichever is earlier.

B. General Engineering Consultant III (GEC-3)

Contract No.: MM-913

Contractor: CH2M HILL

Contract Start Date: December 2013

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

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

Project Overview: The GEC III is supporting HART with procurement packages, review of independent cost estimates, evaluation of east segment schedules, and developing Hawaiian Electric Facility avoidance and minimization impact alternatives.

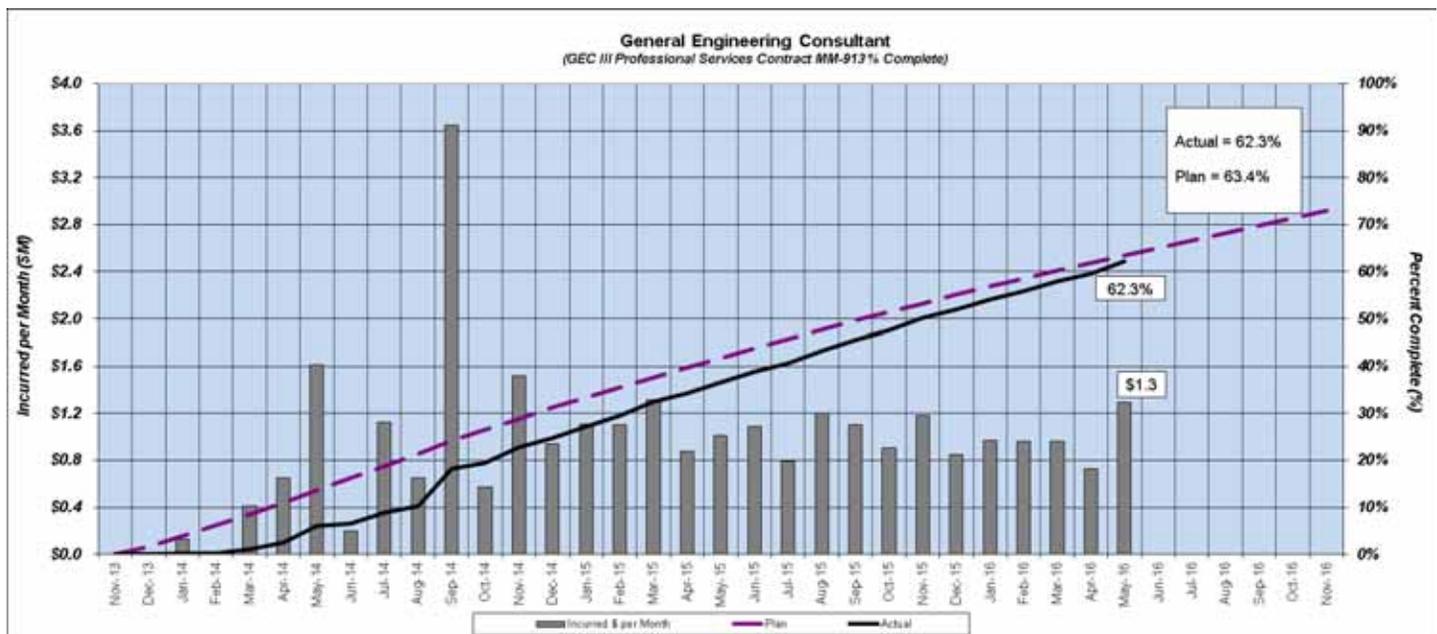
COST INFORMATION:

<u>Original Contract:</u>	<u>\$46,143,277</u>	<u>Incurred-to-Date:</u>	<u>\$28,897,965</u>
<u>Current Contract Value¹:</u>	<u>\$46,541,728</u>	<u>Incurred in May:</u>	<u>\$1,291,430</u>

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$3,205,649
DBE % Attained:	6.95%

May Change Orders		
Change No.	Description	Amount (\$)
CA 002	Fare Modeling Work	\$130,000
Cumulative to Date		\$398,451



KEY ISSUES:

- Integrating schedule estimates for interim opening and revenue service opening with financial forecast and estimate to complete of contracted work.
- Participate in task force to develop alternatives to meet clearance requirements for Hawaiian Electric facilities.
- Continue progress on Historic Context Studies and permits.
- Provide support to procurement for Airport Guideway and Stations (AGS), and City Center Guideway and Stations (CCGS).

C. Construction Engineering & Inspection West Side Sections

Contract No.: MM-290
Contractor: PGH Wong Engineering, Inc.
Contract Start Date: January 2014
Contract Completion: January 2020
Projected Substantial Completion: December 2018

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

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

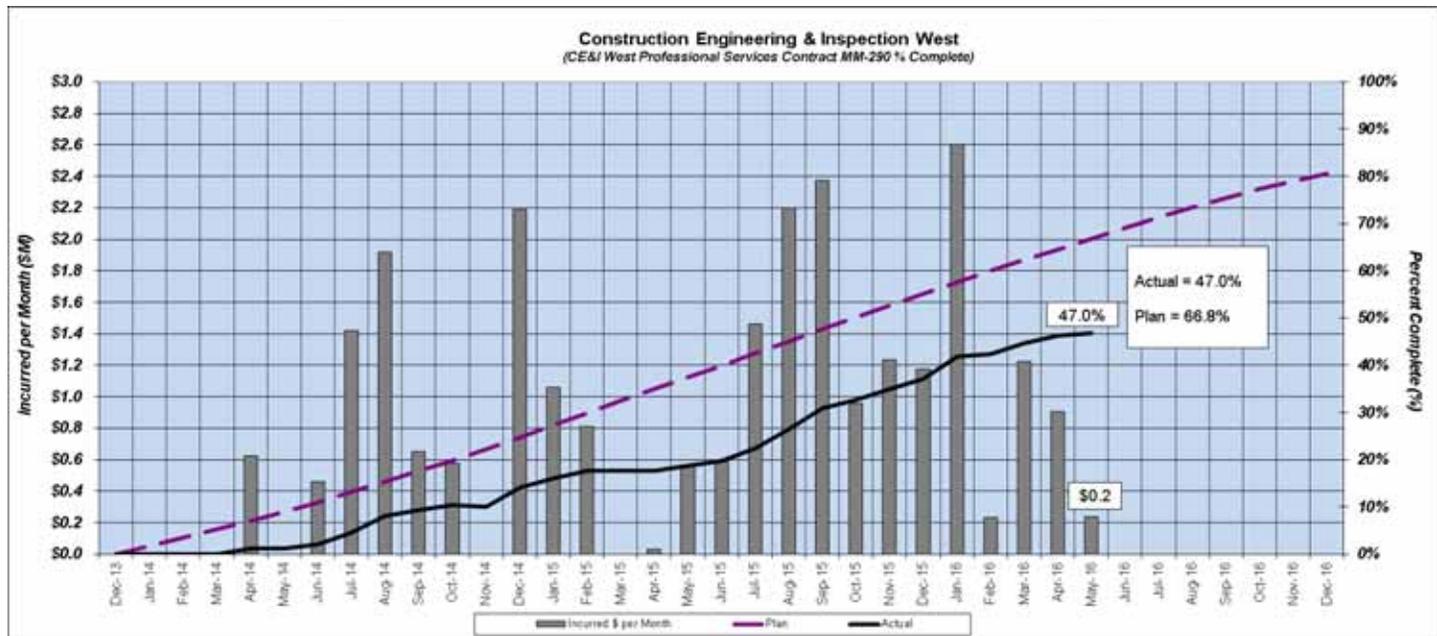
COST INFORMATION:

Original Contract:	\$54,232,480	Incurred-to-Date:	\$25,332,027
Current Contract Value ¹ :	\$54,232,480	Incurred in May:	\$ 234,920

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$2,676,445
DBE % Attained:	4.94%

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



KEY ISSUES:

- In June, the CE&I West Side stations staff relocated to a combined field office space in the MOW building at MSF. Management of the stations contracts will now occur from these facilities.
- Continued to provide management of and coordination between various west side contracts.
- Continuing toward substantial completion of MSF.
- Continuing toward substantial completion of WOFH.
- Provided additional staffing to support West CE&I efforts.

D. Construction Engineering & Inspection East Side Sections

Contract No.: MM-595

Contractor: URS Corporation

Contract Start Date: January 2014

Contract Completion: December 2015 (MOD no. 1)

Substantial Completion: October 2015

Project Description: The URS team provided Construction Engineering and Inspection Services (CE&I) for the east section of the Honolulu Rail Transit Project (H RTP) for the Honolulu Authority for Rapid Transportation (HART).

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

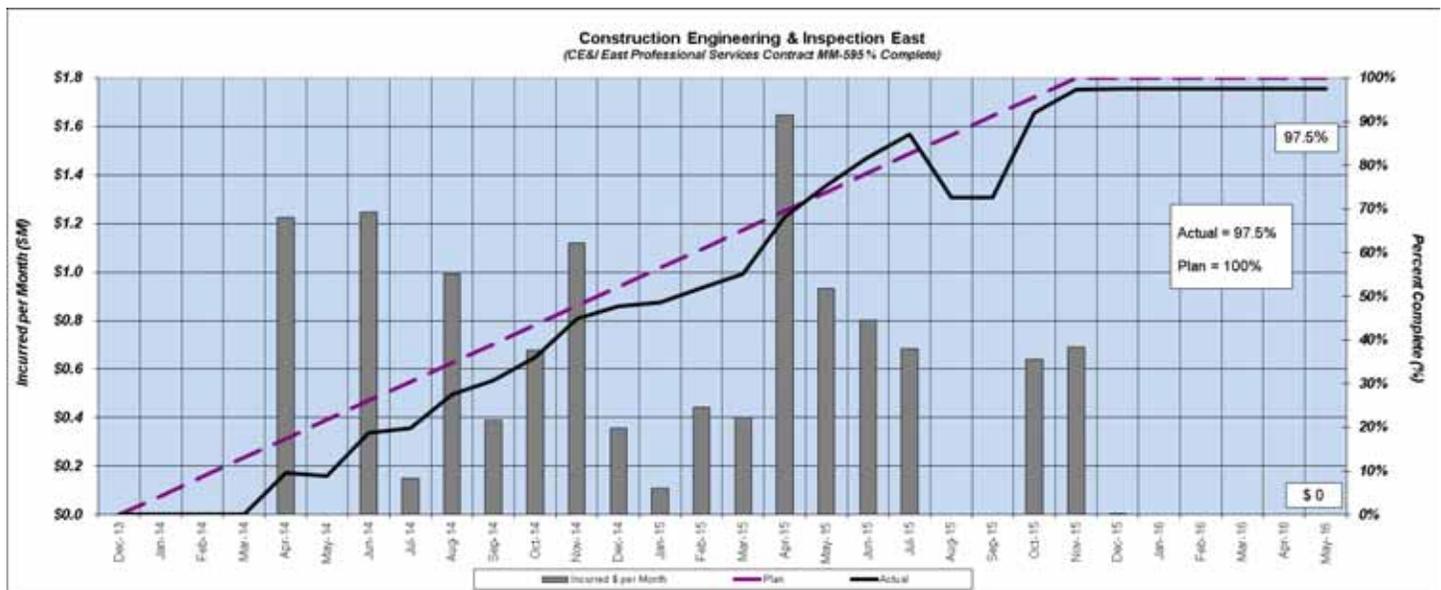
COST INFORMATION:

<u>Original Contract:</u>	<u>\$63,083,417</u>	<u>Incurred-to-Date:</u>	<u>\$12,382,150</u>
<u>Current Contract Value¹:</u>	<u>\$12,706,100</u>	<u>Incurred in May:</u>	<u>\$0</u>

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$1,580,725
DBE % Attained:	10.36%

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		(\$50,377,318)



KEY ISSUES:

- The new CE&I consultant for the East Section was issued NTP in September 2015. All URS field staff was successfully transitioned off of the project in October 2015. The URS contract was administratively closed out in April. Final cost information will be reflected in a future Progress Report. Subsequently, this contract page will be removed from future Progress Reports.

E. Construction Engineering & Inspection (CE&I) II Contract

Contract No.: MM-596

Contractor: Stantec Consulting Services Inc.

Contract Start Date: September 2015

Contract Completion: December 2019

Projected Substantial Completion: December 2019

Project Description: The Stantec team is responsible for the Construction, Engineering and Inspection (CE&I) services for the East Section of the Honolulu Rail Transit Project (H RTP) for the Honolulu Authority for Rapid Transportation (HART). The Stantec team is providing services from the preconstruction phase through construction closeout. HART East Section CE&I II services include: constructability review, resident engineering, construction observation, project controls, scheduling, change management, cost control, document controls, contract administration, estimating, environmental monitoring, surveying, material testing, interface coordination, geographic information system (GIS) support, and claims analysis for the Airport Guideway and Stations design-build contract, City Center Guideway and Stations design-build contract, Airport Section Utilities Construction contract, Elevators and Escalators Design-Furnish-Install-Maintain contract (construction phase only) and construction observation for the On-Call II and III work. The primary role of the Stantec team is to inform the HART Project Manager of any significant omissions, substitutions, defects, and deficiencies noted in the work of the contractor and the corrective action that has been directed by HART to be performed by the contractor.

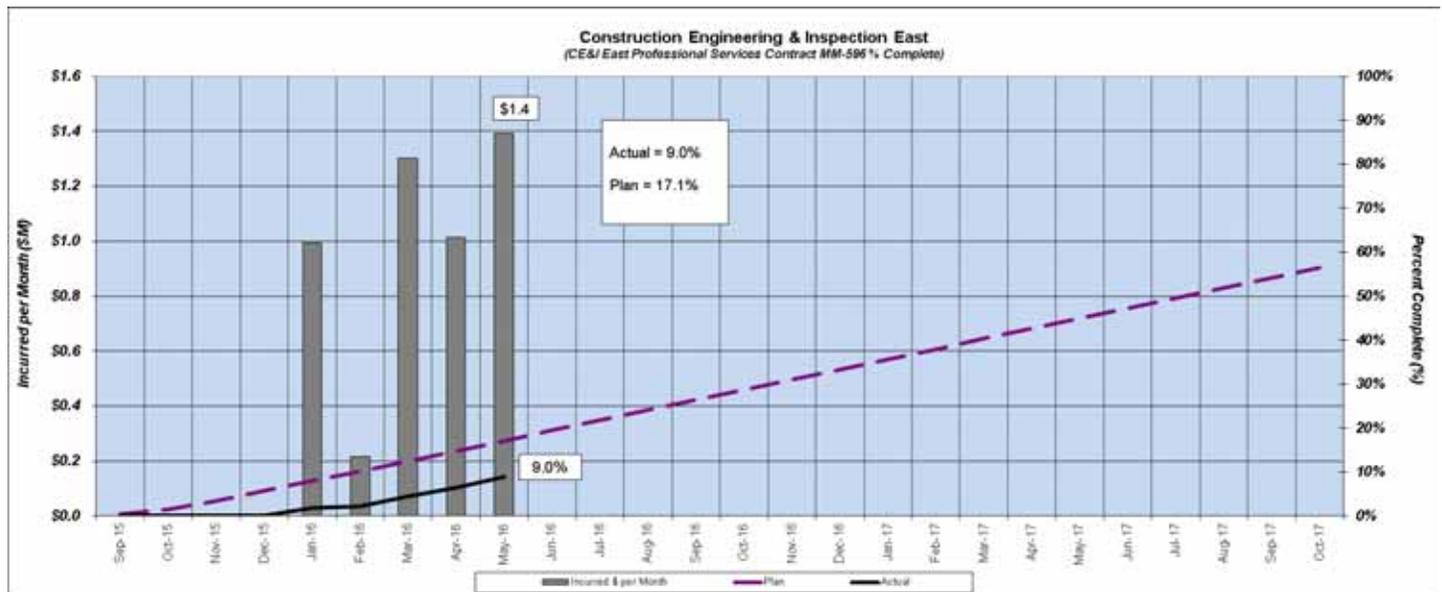
COST INFORMATION:

Original Contract:	\$55,036,130	Incurred-to-Date:	\$4,917,370
Current Contract Value ¹ :	\$55,036,130	Incurred in May:	\$1,393,665

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$919,058
DBE % Attained:	1.68%

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



KEY ISSUES:

- The Independent Cost Estimate (ICE) for the City Center Guideway and Stations DB contract is in progress. The City Center Guideway and Stations DB contract ICE analysis is scheduled to be delivered by July 5, 2016.
- The project team continues to provide schedule analysis of the HECO 138KV impact and overall utility trenching production levels in an effort to identify efficiencies and improvements that can be recognized on the East Section.
- Ongoing support continues with a review of the Airport Guideway and Stations DB alternative technical concepts, as part of the ongoing procurement.

F. Core Systems Contract Oversight Consultant

Contract No.: MM-962

Contractor: Lea+Elliott, Inc.

Contract Start Date: February 2014

Contract Completion: September 2019

Projected Substantial Completion: N/A

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

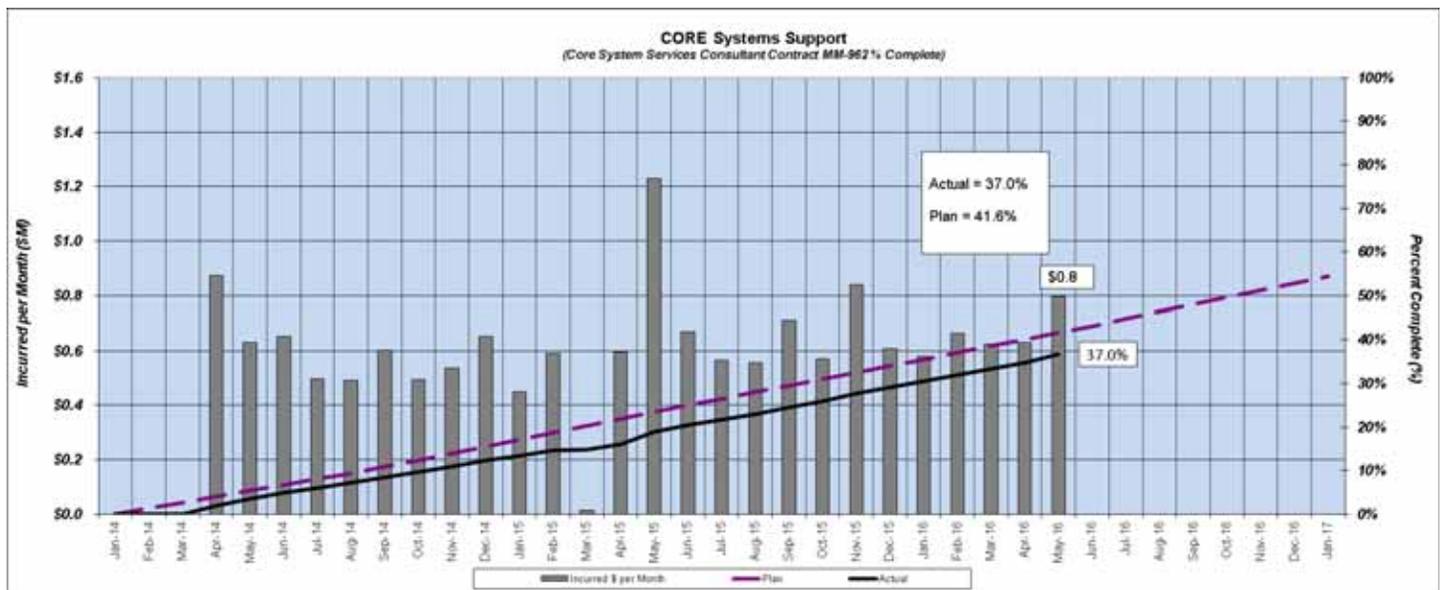
COST INFORMATION:

<u>Original Contract:</u>	<u>\$43,988,989</u>	<u>Incurred-to-Date:</u>	<u>\$16,123,918</u>
<u>Current Contract Value¹:</u>	<u>\$43,988,989</u>	<u>Incurred in May:</u>	<u>\$795,736</u>

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$377,608
DBE % Attained:	0.86%

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$0



KEY ISSUES:

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

G. On-Call Construction Contractor

Contract No.: MM-945

Contractor: Royal Contracting Co. Ltd.

Contract Start Date: August 2014

Contract Completion: July 2019

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

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

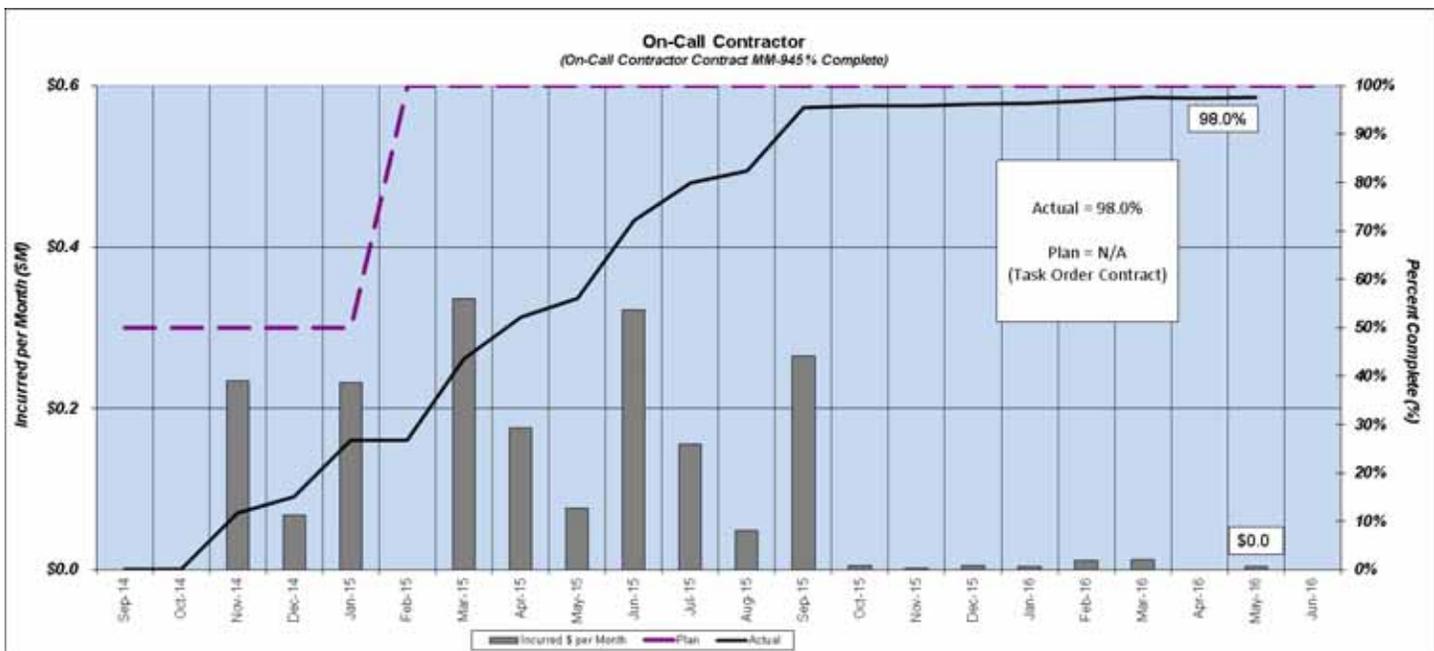
COST INFORMATION:

Original Contract:	\$1,000,000	Incurred-to-Date:	\$1,952,468
Current Contract Value ¹ :	\$2,000,000	Incurred in May:	\$3,744

¹Current Contract Value = Original contract value + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$460,025
DBE % Attained:	23%

May Change Orders		
Change No.	Description	Amount (\$)
None	---	---
Cumulative to Date		\$1,000,000



KEY ISSUES:

- The On-Call Contractor has successfully completed nearly all authorized work.
- The On-Call Contractor is in the process of completing the last remaining work authorized under this contract. Close out of this contract is targeted for July 2016.

5 OVERALL PROJECT-WIDE ACTIVITIES

5.1 Permits

- **Permits Submitted and In-Progress**
 - HART submitted the Essential Fish Habitat Assessment for National Oceanic Atmospheric Administration Fisheries' concurrence.
 - HART submitted the Kamehameha Highway section (KHG) Community Noise Variance for continued construction from Pearl Highlands to Aloha Stadium.
 - HART submitted the extension for the Coast Guard Bridge Permit advanced approval.
 - HART submitted a letter to the Department of Health (DOH) to authorize Nan Inc. to submit their National Pollutant Discharge Elimination System (NPDES) Construction permit on behalf of HART.
- **Permits and Approvals Granted**
 - HART received an approved extension of Stream Channel Alteration Permit (SCAP 3854.3) for Waiawa Stream and Tributary.
- **Look Ahead**
 - Upcoming significant permit activity:
 - HART will begin preparing the Community Noise Permit continuance application for the West O'ahu Farrington Highway (WOFH) construction activities.
 - HART will begin preparing the Community Noise Permit continuance application for the Rail Operations Center (ROC) construction activities.
 - HART will begin preparing the Community Noise Variance application for construction activities in the City Center section.

5.2 Hawai'i Department of Transportation (HDOT) Agreements

- **Activities this Month**
 - Continuing to work through the process of fund transfer for the HDOT highway improvements. Transfer of funds for a portion of the MOU has been included in the Transportation Improvement Program (TIP) Amendment #9 for FY16. Transfer of funds for the full MOU amount has been included in the draft TIP Amendment #10, 11, 12 split between FY16 through FY18.
 - A draft amendment to the WOFH Master Agreement and Joint Use and Occupancy agreement has been sent to HDOT for review and comment. The amendment addresses maintenance responsibilities and reimbursements.
- **Look Ahead**
 - Execution of the Airport and City Center Joint Use and Occupancy Agreements.
 - Execution of the West O'ahu Farrington Highway Master Agreement and Joint Use and Occupancy Agreement Amendment 1.

5.3 Utility Agreements

Utility Agreements Status Matrix

Utility Owner	Status	WOFH		KHG		Airport		City Center		
		ESA	UCA	ESA	UCA	UCA	COMBINED ESA	UCA		
AT&T (Corporation)	Executed	5/11/11	12/20/11	5/18/12	Including with Airport	KHG, AP & City Center – Temp OH Draft sent to AT&T	12/26/13	Including with Airport		
	NTP	5/12/11	12/21/11							
	Amd 01	7/1/11	HRS Ch 104							
AT&T (Government Solutions)	Executed			12/26/13	Clarified to N/A	Combined with AT&T Corp	12/26/13	Combined with AT&T Corp		
	NTP									
Chevron	Executed	12/4/09		11/4/11						
	NTP	12/22/09		11/15/11						
	Amd 01	7/1/11								
Hawaiian Telcom	Executed	5/20/10	11/17/14	5/10/12	12/31/14	5/28/15	9/27/13	Draft sent to HTI for review		
	NTP	6/14/10	11/18/14							
	Amd 01	7/1/11		4/13/15		Drafted for add'l scope and HRS Ch 104 under review				
	Amd 02	5/10/12								
	Executed							Temp OH Pending Signature		
	NTP									
HECO		Design Services	Construction Services	Design Services	Construction Services	Design Services	Construction Services	Design Services	Construction Services	
	Executed	11/20/13	11/29/13	11/20/13	11/29/13	11/20/13	HECO draft sent to HECO for review	11/25/13	HECO revision to include Temp Poles	
	NTP	11/20/13	11/29/13	11/20/13	11/29/13	11/20/13		11/25/13		
	Amd 01									
	Memorandums of Understanding	8/7/14 – Construction Drawings								
		5/1/15 - Access								
		5/15/15 - Derrick Truck								
		6/23/15 - Master Agreement								
		6/9/15 - MSF Advanced Construction								
		9/16/15 - Right of Entry								
10/12/15 – Clearance (West)				11/10/15 - Dillingham Blvd Materials						
Power Quality Pending										
Oceanic Time Warner Cable	Executed	12/8/09	12/21/11	1/9/12	6/2/14	12/19/14	4/3/13	Draft sent to OTWC for review		
	NTP	12/22/09					4/4/13			
	Amd 01	7/1/11	2/27/14		HRS Ch 104	HRS Ch 104				
	Amd 02	10/7/13	HRS Ch 104							
	Executed							Temp OH Pending Signature		
	NTP									
Pacific Lightnet/Wavecom	Executed	4/28/10	3/12/12	2/15/12						
	NTP	4/29/10	3/13/12	2/16/12						
	Amd 01	7/1/11	HRS Ch 104							
Sandwich Isle Communications	Executed	5/20/10		4/20/12						
	NTP	6/8/10								
	Amd 01	7/1/11								
Hawai'i GAS	Executed	12/18/09	6/30/11	6/1/12	4/14/14	8/19/14	9/27/13	5/8/15		
	NTP	12/22/09	7/12/11			8/20/14		5/11/15		
	Amd 01	7/1/11	10/17/14		8/28/14	HRS Ch 104		HRS Ch 104		
	Amd 02		5/9/16		10/23/15					
	Amd 03				HRS Ch 104					

Utility Agreements Status Matrix

Utility Owner	Status	WOFH		KHG		Airport		City Center	
		ESA	UCA	ESA	UCA	UCA	COMBINED ESA	UCA	
Level 3/TW telecom	Executed	12/2/09		2/14/12	Oceanic to relocate for TW telecom		10/11/12		Draft sent to TW telecom
	NTP	12/22/09		2/16/12					
	Amd 01	7/1/11							
	Amd 02								
Tesoro	Executed			2/15/12	9/12/13		8/27/13		
	NTP			2/16/12			9/3/13		
	Amd 01				9/12/14				
	Amd 02				5/13/15				
	Amd 03				HRS Ch 104				

Legend: = Action this month COR = Corporation Counsel UCA = Utility Construction Agreement
 = Not applicable ESA = Engineering Services Agreement UFR CRA = Combined Engineering and Construction Utility Agreement

General

- Coordinating with Board of Water Supply to provide stray current information and maintenance plans.

WOFH

- All WOFH agreements have been executed.

KHG

- All KHG agreements have been executed.

AIRPORT

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

CITY CENTER

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

HECO

- **Davis-Bacon requirements** – HECO has an established collective bargaining agreement – which does not align with Davis-Bacon requirements – for which HART on behalf of HECO has submitted a conformance request to the U.S. Department of Labor; awaiting DOL decision.
- **HECO 46kV Substation near MSF area** – HECO indicates a need in the 2018-2019 timeframe for a new 46kV substation to feed the MSF area due to requirements in HECO Rule 13. Initial planning indicates that a currently un-used location near the MSF area may be suitable for this facility.
- **Additional Clearances** – HECO requires the need for additional horizontal working clearances from overhead line conductors to the guideway for their 138kV and 46kV overhead lines along portions of all guideway segments.
 - **Horizontal Working Clearances Analysis** – For Airport and City Center, HART and HECO have agreed to relocate the overhead 138kV lines to underground, and together are progressing to a preliminary engineering design. For WOFH and KHG, HECO has completed a pole-by pole review of the current overhead 138kV and 46kV pole and line locations and have identified areas where alternative access may be used for future pole and line maintenance. HART’s Task Force continues to meet bi-weekly with HECO staff to identify and analyze all potential solutions to the working clearance issue including relocating to new overhead alignments, underground alignments, or attach to the guideway, and alternative equipment.

- **Alternative Equipment** – HECO has stated that the telescoping Bronto manlift will not completely resolve the horizontal working clearance issue. HECO and HART are now researching with other equipment manufacturers to see if there is equipment (bucket trucks and cranes) that can work with less than the desired working clearance requirements.
- **New Service Connections** – HECO service requests are required for new electrical services for the MSF, Passenger Stations and Systems Sites (traction power facilities). The Passenger Station designers are providing the service request for the stations, and the Core Systems Contractor is providing the service request for the systems sites.
 - **MSF** – Installation of the MSF service is complete; buildings are energized.
 - **Passenger Stations and Systems Sites** – HECO service request reviews are complete and HART has not received additional comments for the west side stations and systems sites. HECO is working to finalize its designs.

5.4 Right-of-Way (data as of June 9, 2016)

BUDGET

	Baseline Budget	Expended	Remaining Budget Balance	Estimate to Completion	Forecast Variance
Acquisition	\$ 201.70	\$ 91.20	\$ 110.50	\$ 97.40	\$ 13.10
Relocation	\$ 20.50	\$ 12.10	\$ 8.40	\$ 14.40	\$ (6.00)
Total (Million)	\$ 222.20	\$ 103.30	\$ 118.90	\$ 111.80	\$ 7.10

Note

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

ACQUISITIONS

Figure 13. Right-of-Way Status for the Parcels [data provided by Real Estate Acquisition database (READ)]

	Current No. of Parcels Needed (a)	Current Square Feet Needed (b)	No. of Completed Acquisitions (c)	Square Feet of Completed Acquisitions (d)	No. of Acquisitions Not Completed & Site Access Obtained (e)	Square Feet of Acquisitions Not Completed & Site Access Obtained (f)
W.Oahu/Farrington	35	9,808,840	24	7,428,687	11	2,380,153
Kamehameha	13	3,027,319	5	2,530,534	7	493,317
Airport	50	1,007,392	12	246,305	28	649,631
City Center	121	841,641	29	187,266	8	23,925
GRAND TOTAL	219	14,685,192	70	10,392,792	54	3,547,026

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

Footnotes :

- (a) & (b) Current No. of Parcels Needed, Square Feet Needed - Parcels identified as needed by the project.
- (c) & (d) No. of Completed Acquisitions, Square Feet of Completed Acquisitions - Acquisitions are closed and the right to access and construct is obtained for 50 private owners and agreements on 16 government parcels.
- (e) & (f) No. of Acquisitions Not Completed & Site Access Obtained, Square Feet of Acquisitions Not Completed & Site Access Obtained - Acquisitions may not be completed, but the right to access and construct has been obtained.

KAMEHAMEHA

- **Priorities:**
 - On-going support for negotiations with Aloha Stadium Authority to obtain right of entry for the construction of the station park-and-ride. HART has obtained the right of entry to construct the guideway.

AIRPORT

- **Priorities:**
 - On-going negotiations with TMKs 1-1-002-001 and 1-1-016-020.

- Continue working with the Federal government to complete documentation for easements.
- In order to support the upcoming procurement for the Airport Guideway and Stations Design-Build contract and to maintain the project schedule, eminent domain proceedings were authorized by the HART Board and the Honolulu City Council for several parcels. However, negotiations are still continuing with all private property owners in the Airport section in an attempt to reach mutual agreement.
- Look Ahead:
 - Finalize appraisal review for TMK 1-1-002-001.

CITY CENTER

At the direction of the HART Board in executive session at its regular June 16, 2016 meeting, the Right-of-Way Section is temporarily suspending certain acquisition transactions beyond the planned Middle Street Station, including any new eminent domain actions and negotiations that have not resulted in a signed agreement amongst the parties. The foregoing status is as of June 9, 2016.

- Priorities:
 - On-going support for negotiations with UH Honolulu Community College to secure construction right of entry.
 - Working to resolve issues with TMKs 1-5-015-010, 1-2-009-011, 1-2-009-098, 1-5-027-028, and 1-2-010-069.
 - Continuing negotiations with the owner of fifteen parcels which have complex issues, as well as TMK 2-1-031-030.
 - In order to support the upcoming procurement for the City Center Guideway and Stations Design-Build contract and to maintain the project schedule, eminent domain proceedings were authorized by the HART Board and the Honolulu City Council for several parcels. However, negotiations are continuing with all private property owners in the City Center section in an attempt to reach mutual agreement.

RELOCATIONS

Figure 14. Relocation Status for the Occupants (data provided by READ)

	Active Relocations	Relocations Completed	Total Relocations
W.Oahu/Farrington	0	25	25
Kamehameha	0	4	4
Airport	6	7	13
City Center	21	58	79
Grand Total:	27	94	121
○ Relocations are pursuant to the Uniform Relocation Act. ○ Relocations are reported by displacees. ○ During design development, the relocation requirements have been adjusted to accommodate the design refinements. Relocation requirements are adjusted as design is finalized.			

AIRPORT

- Priority:
 - Monitoring on-going relocation for TMK 1-1-016-016.
- Look Ahead:
 - Anticipate completion of relocation for TMK 1-1-016-006.

CITY CENTER

At the direction of the HART Board in executive session at its regular June 16, 2016 meeting, the Right-of-Way Section is temporarily suspending certain acquisition transactions beyond the planned Middle Street Station, including any new eminent domain actions and negotiations that have not resulted in a signed agreement amongst the parties. However, relocations are continuing at the option of the displacee, if the suspended relocation will result in harm to the displacee. The foregoing status is as of June 9, 2016.

- Priorities:
 - Continuing to vacate TMK 2-3-007-045 through the judicial process.
- Look Ahead:
 - Anticipate completion of relocation for TMKs 2-1-050-001, 2-1-050-062, 1-2-003-101 and 2-3-007-027.

THIRD-PARTY AGREEMENTS

Figure 15. Third-Party Agreement Status – Third-Party Agreements include agreements between HART and other government entities, with the exception of D.R. Horton. Completed agreements are in grey, agreements to be executed are in white.

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
City Agreements				
DFM – Dept. of Facility & Maintenance (Kamehameha Hwy/Makalapa Manor)	Executed		Airport	Jurisdictional transfer from DFM to HART in place.
DPR - Dept. of Parks & Recreation (MSF drainage)	Executed		WOFH	Consent to construct in place.
State Agreements				
UH - University of Hawai'i Master Agreement	On Hold		WOFH, KHG, City Center	Construction is not impacted as the ROE for right to access and construct will be executed for each campus.
UH - West O'ahu (UHWO) Pre-Construction Right of Entry	Executed		WOFH	Consent to construct in place.
UH - West O'ahu (UHWO) Construction Right of Entry for Station	Executed		WOFH	Consent to construct in place.
UH - West O'ahu (UHWO) Construction Right of Entry for Nan, Inc.	Executed		WOFH	Consent to construct in place.
UH - West O'ahu (UHWO) Memorandum of Agreement to Construct Road B	Executed		WOFH	MOU in place.
UH - Leeward Community College (LCC) Pre-Construction Right of Entry	Executed		WOFH	Consent to construct in place.
UH - Leeward Community College (LCC) Construction Right of Entry for Guideway	Executed		WOFH	Consent to construct in place.
UH – Leeward Community College (LCC) Construction Right of Entry for Hawaiian Dredging	Executed		WOFH	Consent to construct in place.
UH – Leeward Community College (LCC) Construction Right of Entry for Kiewit	Executed		WOFH	Consent to construct in place.
UH – Leeward Community College (LCC) Construction Right of Entry for Royal Contracting	Executed		WOFH	Consent to construct in place.
UH - Leeward Community College (LCC) Construction Right of Entry for Station	Executed		WOFH	Consent to construct in place.
UH - Urban Gardens Pre-Construction Right of Entry	Executed		KHG	Consent to construct in place.
UH - Urban Gardens Construction Right of Entry	Executed		KHG	Consent to construct in place.
UH - Urban Gardens Construction Right of Entry for Kiewit	Executed		KHG	Consent to construct in place.
UH – Urban Gardens Conveyance to HDOT (H)	Pending	Oct 2016	KHG	In process.
UH - Honolulu Community College (HCC) Pre-Construction Right of Entry	Executed		City Center	Consent to construct in place.
UH - Honolulu Community College (HCC) Construction Right of Entry for Guideway & Station	Pending	May 2017	City Center	In negotiations. Concerted effort is being made to finalize.
DLNR – Dept. of Land and Natural Resources Kapolei Right of Entry	Executed		WOFH	Consent to construct in place to be followed by execution of the easement agreement.
DLNR – Kapolei Easement Agreement	Pending	Jan 2017	WOFH	Easement agreement in process. Construction not impacted.
DLNR – Keehi Lagoon Right of Entry	Executed		Airport	Consent to construct in place to be followed by execution of the easement agreement.

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
DLNR – Keehi Lagoon Easement Agreement	Pending	Jan 2017	Airport	Easement Agreement in process. Construction not impacted.
DOE – Dept. of Education Master/Construction Agreement for Waipahu H.S.	Executed		WOFH	Set-aside from DLNR to HART in process.
DOE/DLNR Right of Entry for Waipahu High School	Executed		WOFH	DLNR Consent to construct in place with DOE concurrence.
Aloha Stadium / Department of Accounting & General Services (DAGS) MOU for guideway & station	Executed		KHG	MOU in place.
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry for guideway for Kiewit	Executed		KHG	Limited ROE granted for staging for Kiewit for KHG contract.
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry for guideway	Executed		KHG	Consent to construct in place to be followed by execution of the easement agreement.
Aloha Stadium / Department of Accounting & General Services (DAGS) Easement for guideway	Pending	Jan 2017	KHG	Easement Agreement in process.
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry for station park and ride	Pending	Aug 2016	KHG	In negotiations.
Aloha Stadium / Department of Accounting & General Services (DAGS) Easement for station park and ride	Pending	Jan 2017	KHG	Process Easement Agreement.
HDOT(H) – Dept. of Transportation Highways Master Agreement	Executed		WOFH	Master Agreement in place.
HDOT(H) – Dept. of Transportation Highways Master Agreement - Amendment	Pending	Aug 2016	WOFH	In process
HDOT(H) (A) - Master Agreement for KHG, Airport and City Center	Executed		KHG, Airport, City Center	Master Agreement in place.
HDOT(H) – Joint Use & Occupancy (JU&O) Sub-agreement	Executed		WOFH	Consent to construct in place.
HDOT(H) – Joint Use & Occupancy (JU&O) Sub-agreement	Executed		KHG	Consent to construct in place.
HDOT(H) – Joint Use & Occupancy (JU&O) Sub-agreement	Pending	Jan 2017	Airport	In process
HDOT(H) – Joint Use & Occupancy (JU&O) Sub-agreement	Pending	May 2017	City Center	In process
HDOT(A) – Dept. of Transportation Airports Joint Use & Occupancy (JU&O) Sub-agreement for Airport Division parcels	Executed		Airport	Consent to construct in place.
HDOT(A) - Easement Agreement for Airport Division parcel	Pending	Jan 2017	Airport	Process Easement Agreement.
HDOT(Har) – Dept. of Transportation Harbors Easement Agreement	Pending	May 2017	City Center	In process.
HDOT(Har) – Dept. of Transportation Harbors Right of Entry	Pending	May 2017	City Center	In process.
DHHL - Dept. of Hawaiian Home Lands Master Agreement	Executed		WOFH, MSF	Master Agreement in place.
DHHL – Dept. of Hawaiian Home Lands License	Executed		WOFH, MSF	Consent to construct in place.
OCCC - Dept. of Public Safety, Oahu Community Correctional Center, Dillingham Blvd., Easement Agreement	Pending	May 2017	City Center	In process.
OCCC - Dept. of Public Safety, Oahu Community Correctional Center, Dillingham Blvd., Right of Entry	Pending	May 2017	City Center	Draft Right of entry under review.

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
HCDA -HI Community Development Agreement	Pending	May 2017	City Center	Coordination is ongoing.
HCDA -HI Community Development Agreement Pre-construction Right of Entry	Approved		City Center	Verbal approval granted by the HCDA Board in 6/2016.
DAGS – Dept. of Accounting & General Services / HHFDC Right of Entry	Pending	May 2017	City Center	Consent to construct in process to be followed by execution of the Easement Agreement.
DAGS – Dept. of Accounting & General Services / HHFDC Easement Agreement	Pending	May 2017	City Center	Process Easement Agreement.
Federal Agreements				
U.S. Navy Licenses	Executed		WOFH, KHG, Airport	Consent to construct in place. Formal notification is forthcoming, however, immediate access is granted.
U.S. Navy Easement Agreements	Pending	August 2016	WOFH, KHG, Airport	Navy completing documentation.
U.S. Navy Pearl Harbor Station Acquisition of Fee Transfer	Executed		Airport	Quitclaim deed received.
U.S. Post Office Honolulu Processing Center acquisition	Pending	Jan 2017	Airport	In negotiations.
U.S. Gov't/GSA/Federal Courthouse Master Agreement to include Security & Landscape Plan	Pending	May 2017	City Center	Master agreement under review and discussions are ongoing.
U.S. Gov't/GSA/Federal Courthouse License (Right of Entry) & Temporary Construction Easement Agreements	Pending	May 2017	City Center	ROE & TCE in final review.
U.S. Gov't/GSA/Federal Courthouse Easement Document	Pending	May 2017	City Center	Easement document under review.
Other Agreements				
D.R. Horton Agreement for Construction	Executed		WOFH	Consent to construct in place to be followed by execution of the easement agreement.
D.R. Horton Final Easement Agreement	Pending	Jan 2018	WOFH	Easement Agreement in process and subject to owner's development plans.

6 MANAGEMENT AND ADMINISTRATIVE UPDATES

6.1 Safety and Security

6.1.1 S&S Certification Documents

Key HART S&S Certification Documents Update & Approval Status			
S&S Project Plans, PHAs, Core Systems SSHA and O&SHA, and TVA			
Documents	REV #	Date Approved	Comments
Documents Approved			
HART SAFETY			
1. Safety & Security Management Plan (SSMP)	Rev 5	10/16/2015	SSRC approved and signed, update underway
2. Safety & Security Certification Plan (SSCP)	Rev 4. B	12/14/2015	SSRC approved and signed, update underway
3. WOFH SSCP	Rev 0	10/22/2014	SSRC approved - No future updates: HART SSCP is in affect
4. Construction S&S Plan (CSP)	Rev 3	10/06/2015	SSRC approved and signed
5. Security Sensitive Information (SSI) Plan	Rev 0	12/15/2015	SSRC approved and signed
6. Project Preliminary Hazard Analysis (PHAs)	Rev 2. A	9/3/2015	Rev 2A - DRAFT annual update completed 9/3/2015
a. MSF – Yard and Shop	Rev 2. A	2/24/2016	SSRC approved
b. Alignment	Rev 2. A	3/23/2016	SSRC approved
c. Tracks	Rev 2. A	2/24/2016	SSRC approved
d. Stations	Rev 2. A	3/23/2016	SSRC approved
7. TES Back-Up Generator System HA	Rev A	5/25/2016	SSRC Approved
8. Threat & Vulnerability Assessments (TVAs)	Rev 1	1/16/2015	Update on hold - pending East Alignments re-design
HART CORE SYSTEMS			
9. Central ATC O&SHA	Rev C	9/23/2015	SSRC approved (CMS # 874)
10. Wayside/ATC System HA	Rev C	6/22/2016	SSRC approved (CMS# 835)
11. Wayside ATC SSHA	Rev B	6/22/2016	SSRC approved (CMS# 836)
12. Wayside ATC O&SHA	Rev D	9/23/2015	SSRC approved (CMS # 850)
13. Passenger Train ATC SSHA	Rev E	2/24/2016	SSRC approved (CMS # 853)
14. Passenger Train ATC O&SHA	Rev F	2/24/2016	SSRC approved (CMS # 873)
15. UPS O&SHA	Rev C	2/24/2016	SSRC approved (CMS # 1092)
16. FDAS SSHA	Rev C	4/27/2016	SSRC approved (CMS # 1216)
17. FDAS O&SHA	Rev B	2/24/2016	SSRC approved (CMS # 1217)
18. SCADA SSHA	Rev C	6/22/2016	SSRC approved (CMS# 854)
19. SCADA O&SHA	Rev E	5/25/2016	SSRC Approved (CMS # 887)
Documents not Approved			
HART SAFETY			
20. Project Preliminary Hazard Analysis (PHAs)	Rev 2. A	-	Rev 2A - DRAFT annual update completed 9/3/2015
e. Traction Power	Rev 2. A	-	Update on-hold - pending approval of TES SSHA and O&SHA
f. Train Control	Rev 2. A	-	Update on-hold - pending approval of ATC SSHA & O&SHA
g. Vehicles	Rev 2. A	-	Update on-hold - pending approval of PT SSHA & O&SHA
h. Communications	Rev 2. A	-	Update on-hold - pending approval of Comms SSHA and O&SHA
21. Elevator/Escalators System HA	Rev A	-	Under Development
22. Project OHAs	Rev A	-	Under development
HART CORE SYSTEMS			
23. Core Systems Contract (CSC) PHAs (DBOM)	Rev G	-	5/20/2016 - HART AAN Re-submit (CMS # 575)
24. Technologies PHAs	Rev D	-	12/2/2015 – Under HART review (CMS # 545)
25. Passenger Train ATC System HA	Rev C	-	3/18/2015 – HART Accept, ready for SSRC approval (CMS # 751)
26. Passenger Train Fire Hazard Analysis (FHA)	Rev C	-	6/22/2016 – CSC R&R (CMS# 749)
27. Passenger Train SSHA	Rev A	-	8/31/2015 - CSC R&R (CMS # 1273)
28. Passenger Train O&SHA	Rev A	-	10/26/2015 - CSC R&R (CMS # 1320)
29. TES SSHA	Rev B	-	11/03/2015 - CSC R&R (CMS # 884)
30. TES O&SHA	Rev B	-	11/03/2015 - CSC R&R (CMS # 1099)
31. PSGS SSHA	Rev B	-	10/05/2015 - CSC R&R (CMS # 938)
32. PSGS O&SHA	Rev B	-	3/3/2016 - AAN Re-submit, (CMS # 880)
33. Communications SSHA	Rev B	-	01/7/2016 - CSC R&R, (CMS # 1205)
34. Communications O&SHA	Rec C	-	1/27/2016 - CSC R&R (CMS # 1206)
35. MOW Support Vehicles O&SHA	Rev A	-	Under development

6.1.2 S&S Design Criteria Conformance Checklist (DCCC) – Civil Contracts

<i>S & S Design Criteria Conformance Checklist (DCCC)</i>						
<i>Civil Contracts</i>						
<i>Verification Status</i>						
Design Phase				Construction / Installation /Testing		
Contracts: FD, DB, DBOM	% Verified	+ / - % Change	Comments: Design SSRC Approval Date	% Verified	+ / - % Change	Comments: C/I/T SSRC Approval Date
Interim Revenue Service Date						
Civil Contracts Under Construction						
DB-200, MSF	97%	-	1/28/2015	61%	+33%	Verification underway
DB-120, WOFH Guideway - 38 total - Sub CEL/CIL Packages	99%	-	36 Sub - CELs/CILs SSRC approved	49%	+5%	Verification underway
DB-320, KHG Guideway - 40 total - Sub CEL/CIL Packages	98%	-	36 - Sub CELs/CILs, SSRC approved	27%	+18%	Verification underway
FD-140, West Oahu Station Group	99%	-	3 stations - 12/09/2015	-	-	Pre-construction activities
FD-240, Farrington Hwy Station Group	100%	N/A	3- station - 12/09/2015	-	-	Pre-construction activities
FD-340, Kamehameha Highway Station Grp	100%	N/A	3 Stations - 8/26/2015	-	-	Pre-construction activities
FD-340, H2R2 Ramps	100%	N/A	5/27/2015	-	-	Pre-construction activities
MI-930, Elevators & Escalators (Stations)	-	-	Verification underway	-	-	
Civil Contracts Under Design / in Pre-bidding or Pre-Award Phases						
DB-275, Pearl Highlands PS/BTC	-	-	Base DCCC under review	-	-	
FD-600, West Oahu Park & Ride	-	-	Base DCCC under review	-	-	
AP00 Art-in-Transit, 12 artists/contracts	-	-	SSRC approved 5/25/16	-	-	
MI-900 Fare Collection System	N/A	N/A	N/A	N/A	N/A	N/A
Airport & City Center Final Revenue Service Date						
Civil Contracts Under Construction						
FD-430, Airport Section 7-Piers	100%	N/A	6/17/2015	100%	N/A	8/26/2015
FD-430, Airport Utilities	100%	N/A	6/25/2014	51%	-	Verification underway
Civil Contracts Under Design / in Pre-bidding or Pre-Award Phases						
DB-450, Airport Guideway	-	-	DCCC update underway	-	-	
DB-450, Stations Group	-	-	DCCC update underway	-	-	
DB-550, City Center Guideway	-	-	DCCC update underway	-	-	
DB-550, CCG & Stations Group	-	-	DCCC update underway	-	-	

6.1.3 S&S Design Criteria Conformance Checklist (DCCC) – Core Systems Contracts

<i>S & S Design Criteria Conformance Checklist (DCCC)</i>						
<i>Core Systems Contracts</i>						
<i>Verification Status</i>						
Design Phase				Construction / Installation /Testing		
Contracts: FD, DB, DBOM	% Verified	+ / - % Change	Comments: Design SSRC Approval Date	% Verified	+ / - % Change	Comments: C/I/T SSRC Approval Date
Interim Revenue Service Date						
DBOM-920 Core Systems Contracts Under Design Procurement - Production - Manufacture - Installation						
Yard Control Bungalow (YCB) CSC - Civil	86%	-	Verification underway	-	-	
Passenger Trains (PT)	79%	+3%	Verification underway	-	-	
Traction Electrification System (TES)	97%	+4%	Ready for SSRC approval	-	-	
MOW Vehicles – 8 support vehicles	-	-	Designer input underway	-	-	
Fire Detection Alarm System (FDAS)	-	-	Designer input underway	-	-	
Communication System	-	-	Designer input underway	-	-	
Automatic Train Control (ATC)	96%	-	SSRC approved 4/27/2016	-	-	
Supervisory C & D Acquisition (SCADA)	96%	-	SSRC approved 4/27/2016	-	-	
Platform Screen Gate System (PSGS)	-	-	Designer input underway	-	-	
TES-Back-up Generator (BUG)	N/A	N/A	No CDC Requirements	N/A	N/A	N/A
Airport & City Center Final Revenue Service Date - All above applies – Design changes are as needed						

6.1.4 S&S Certification “Open Items List” Status

<i>HART S&S Certification “Open Items List”</i>						
<i>Last 4 Months Status</i>						
“Open Items” - Design/Construction and Verification Issues						
Month - 2016	Total #	Total # Open	Total # Closed	% Closed Overall	# closed In Month	% Closed In Month
March	215	24	191	89%	4	2%
April	227	35	192	85%	1	1%
May	242	44	193	80%	1	1%
June	248	41	207	84%	12	5%

Note: Total #s are carried over from month to month

6.1.5 S&S Construction Specification Conformance Checklists (CSCC) - Civil Contracts

<i>S & S Construction Specification Conformance Checklists (CSCC)</i>			
<i>Civil - Contracts</i>			
<i>Verification Status</i>			
Construction - Installation – Start-up & Testing Phases			
Contracts	% Verified	+ / - % Change	Comments
Interim Revenue Service Date			
Civil Contracts Under Construction			
DB-200, MSF and Rail Yard	73%	+19%	Verification underway
DB-120, WOFH Guideway	68%	+5%	Verification underway
DB-320, KHG Guideway	36%	+7%	Verification underway
DBB-171, West O’ahu Station Group (WOSG)	-	-	Pre-construction activities
DBB-271, Farrington Hwy Station Group (FHSG)	-	-	Pre-construction activities
DBB-385, H2R2 Ramps	-	-	Pre-construction activities
DBB-371, Kamehameha Hwy Stations Grp (KHSG)	-	-	Pre-construction activities
MI-930, Elevators & Escalators, WOSG	-	-	Pre-install activities
MI-930, Elevators & Escalators, FHSG	-	-	Pre-install activities
MI-930, Elevators & Escalators, KHSG	-	-	Pre-install activities
Civil Contracts Under Design or in Pre-bidding or Pre-Award Phases			
AP00 Art-in-Transit, 12 Artists/contracts	-	-	Draft Base CSCC under PM review
DB-275, Pearl Highlands PS/ Bus Transit Center	-	-	TBD – waiting for 100% conformed specifications
MI-900 Fare Collection System	-	-	Base CSCC SSRC approved 4/27/2016
DBB-600, West O’ahu Park & Ride	-	-	TBD – waiting for 100% conformed specifications
Airport & City Center Final Revenue Service Date			
Civil Contracts Under Construction			
DBB-525, Airport Section, 7 - Drilled Shafts	100%	N/A	8/26/2015 SSRC approved –Certification Completed
DBB-505, Airport Utilities - Construction	63%	+1%	Verification underway
Civil Contracts Under Design or in Pre-bidding or Pre-Award Phases			
DBB-511, Dillingham Utilities & Road Widening	-	-	Draft Base CSCC update - pending re-design
DB-450, Airport Guideway	-	-	Draft Base CSCC update - pending re-design
DB-450, Airport Stations	-	-	Draft Base CSCC update - pending re-design
DB-550, City Center Guideway	-	-	Draft Base CSCC update - pending re-design
DB-550, City Center Stations	-	-	Draft Base CSCC update - pending re-design
MI-930, Elevators & Escalators, Airport Stations	-	-	Base CSCC - SSRC approved, 8/26/2015
MI-930, Elevators & Escalators, City Center Stations	-	-	Base CSCC - SSRC approved, 8/26/2015
AP00 Art-in-Transit, 11 Artists/contracts	-	-	Draft Base CSCC under PM review
MI-900 Fare Collection System	-	-	Base CSCC SSRC approved 4/27/2016

6.1.6 S&S Specification / Testing Conformance Checklists (STCC) - Core Systems

<i>S & S Specification / Testing Conformance Checklists (STCC)</i>			
<i>Core Systems – Contracts</i>			
<i>Verification Status</i>			
Procurement - Production - Manufacture - Installation - Start-up & Testing Phases			
Contracts	% Verified	+ / - % Change	Comments
Interim Revenue Service Date			
DBOM-920 Core System Contracts under Design / Procurement - Production - Manufacture - Installation - STCC			
Yard Control Bungalow (YCB) CSC Civil - Contract	59%	+5%	Verification underway
MOW Vehicles (8-support vehicles)	43%	-	Verification underway
Passenger Trains (PT)/Cars		-	
1) General Requirements - Applies to all PTs	4%	-	Verification underway
2) PT-001- Certification (E-1, E-2, M-1, M-2 Cars)	-	-	Verification on hold pending delivery of trucks
3) PT-001- Interim Cert - for Dynamic Testing	-	-	
4) PT-002 – Certification (E-1, E-2, M-1, M-2 Cars)	-	-	
5) PT-002- Interim Cert – for Dynamic Testing	-	-	
6) PT Certification for Pre-Revenue Service (STCC)	-	-	Base STCC under development
Traction Electrification System (TES)	-	-	
1) General Requirements - Project Wide	34%	-	Base STCC pending July SSRC approval, verification underway
2) MSF - Rail Yard	31%	-	Base STCC pending July SSRC approval, verification underway
3) Functional Track - WOFH Guideway	-	-	Base STCC pending July SSRC approval
4) WOFH and KHG Guideways	-	-	Base STCC pending July SSRC approval
System Integration Testing (SIT)	-	-	Draft base SIT STCCs on hold – SIT Plan being revised
Uninterrupted Power Supply (UPS)	13%	-	Base STCC pending July SSRC approval, verification underway
Traction Power Generators Back-up System	-	-	SSRC approved 3/23/2016
Communication Systems	-	-	
1) Project Wide Communication Requirements	50%	-	SSRC approved 6/22/2016
2) MSF and Rail Yard Communications	-	-	SSRC approved 6/22/2016
3) KHG and WOFH Communications	-	-	SSRC approved 6/22/2016
Fire Detection Alarm System (FDAS)	15%	-	Base STCC pending July SSRC approval
Train Control System (TCS)	-	-	Base STCCs under development
Supervisory Control & Data Acquisition (SCADA)	-	-	Base STCCs under development
Platform Screen Gate System (PSGS)	10%	-	Base STCC pending July SSRC approval
Operational Requirements			
Ops Readiness Conform Checklists (ORCC)	15%	+4%	Base ORCC - SSRC approved 12/09/2015, verification underway
Pre-revenue Testing Conform Checklist (PRTCC)	-	-	Under development
Airport & City Center Final Revenue Service Date			
Passenger Trains (PT)/Cars	-	-	
1) PT-011-20 Certification (E-1, E-2, M-1, M-2 Cars)	-	-	Base STCC - SSRC approved 12/09/2015
2) PT-011-20- Interim Cert - for Dynamic Testing	-	-	Base STCC - SSRC approved 12/09/2015
3) PT-011-20 Cert for Pre-Revenue Service	-	-	Base STCC under development
Traction Electrification System (TES)			
1) Airport and City Center Guideways	-	-	Base STCC pending July SSRC approval
System Integration Testing (SIT)	-	-	Draft base SIT STCCs on hold – SIT Plan being revised
Uninterrupted Power Supply (UPS)	-	-	Base STCC pending July SSRC approval
Traction Power Generators Back-up System	-	-	SSRC approved Base STCC 3/23/2016
Communication Systems			
1) Airport Communications	-	-	Base STCC SSRC approved 6/22/2016
2) City Center Communications	-	-	Base STCC SSRC approved 6/22/2016
Fire Detection Alarm System (FDAS)	-	-	Base STCC pending July SSRC approval
Train Control System (TCS)	-	-	Base STCCs under development
Supervisory Control & Data Acquisition (SCADA)	-	-	Base STCCs under development
Platform Screen Gate System (PSGS)	-	-	Base STCC pending July SSRC approval
Operational Requirements			
Ops Readiness Conform Checklists (ORCC)	-	-	Base ORCC - SSRC approved 12/09/2015
Pre-revenue Testing Conform Checklist (PRTCC)	-	-	Base PRTCC under development

6.1.7 Interim Certification Verification Status

<i>Interim Certification - Verification Status</i>			
Construction - Installation – Start-up & Testing Phases			
Contracts	% Verified	+ / - % Change	Comments
Interim Certification Requirements			
1. 3 – MOW Veh Delivery & M-7, M-2, M-1 MSF Tracks	100%	N/A	Interim Cert Certificated Issued – no open items
2. MSF Yard M-4 and M-6 Tracks – IC	100%	N/A	Interim Cert Certificated Issued – no open items
3. PT-001 Delivery - OSB, M-5 Track, ORCC, MOW-V	96%	+16%	Interim Cert Certificate issued – 4 open items
4. Five (5) – MOW Vehicles Delivery – Vehicles Only	100%	N/A	Interim Cert Certificated Issued – no open items
5. MOW Building Early Occupancy	96%	+44%	Interim Cert Certificate issued – 1 open item
6. MSF - S-tracks, West/East Yard Leads	100%	+100%	Interim Cert Certificate issued – no open items
Verification yet to Start			
7. PT-001 Truck (Bogies) Delivery	-	-	IC checklist SSRC approved 1/27/2016
8. Test Track – Rail Yard, TES/IT/ORCC	-	-	IC checklists under review
9. PT-002 Delivery	-	-	PT-002 IC checklist SSRC approved 1/27/2016
10. Functional Track – WOFH, PT-001, TES, ORCC, & IT	-	-	Interim Cert checklists under development

6.1.8 Twelve (12) Month Certification Projected Milestones and Work Priority

<i>12 Month Certification Projected Milestones</i>		
Milestones	Projected Contract and Interim Certifications	Comments
Jul 2016	1. DB-200, MSF Contract Certification (Civil Only)	Limited systems
Jul 2016	2. YCB Civil Contract CSC Certification	Civil only
Sept 2016	3. PT-001 Truck (Bogies) Delivery Interim Cert	Track Interface
Sept 2016	4. FD-430 and DBB-505, Airport Utilities Contract Certification	Civil only
Dec 2016	5. Test Track – Rail Yard – TES Interim Certification	Systems
Dec 2016	6. FD-340 and DBB-385, H2R2 Contract Certification	Civil only
Dec 2016	7. DB-120, WOFH Guideway Contract Certification	Civil only
Dec 2016	8. Eight (8) MOW Vehicles Final Certification	All MOW Vehicles
Jan 2017	9. PT-002 Delivery – Interim Cert – Delivery	Vehicle only
Jan 2017	10. Functional Track – Interim Certification – Test Track	IC – TES - SIT
Apr 2017	11. PT-002, Interim Certification to enter Dynamic Testing	Vehicle only
Apr 2017	12. DB-320, KHG Guideway Certification	Civil Only

6.1.9 S&S Certification Certificates Issued to Date

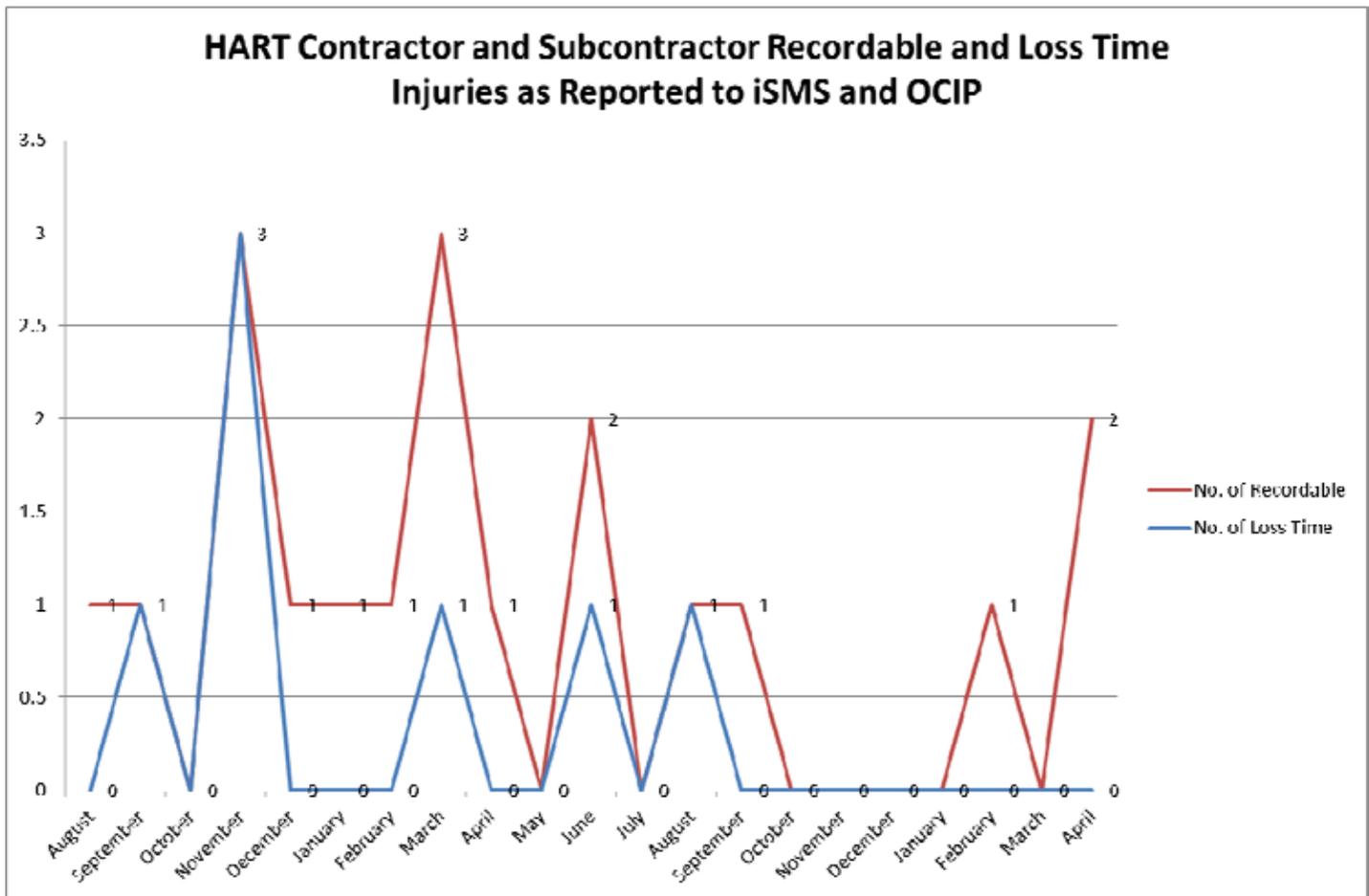
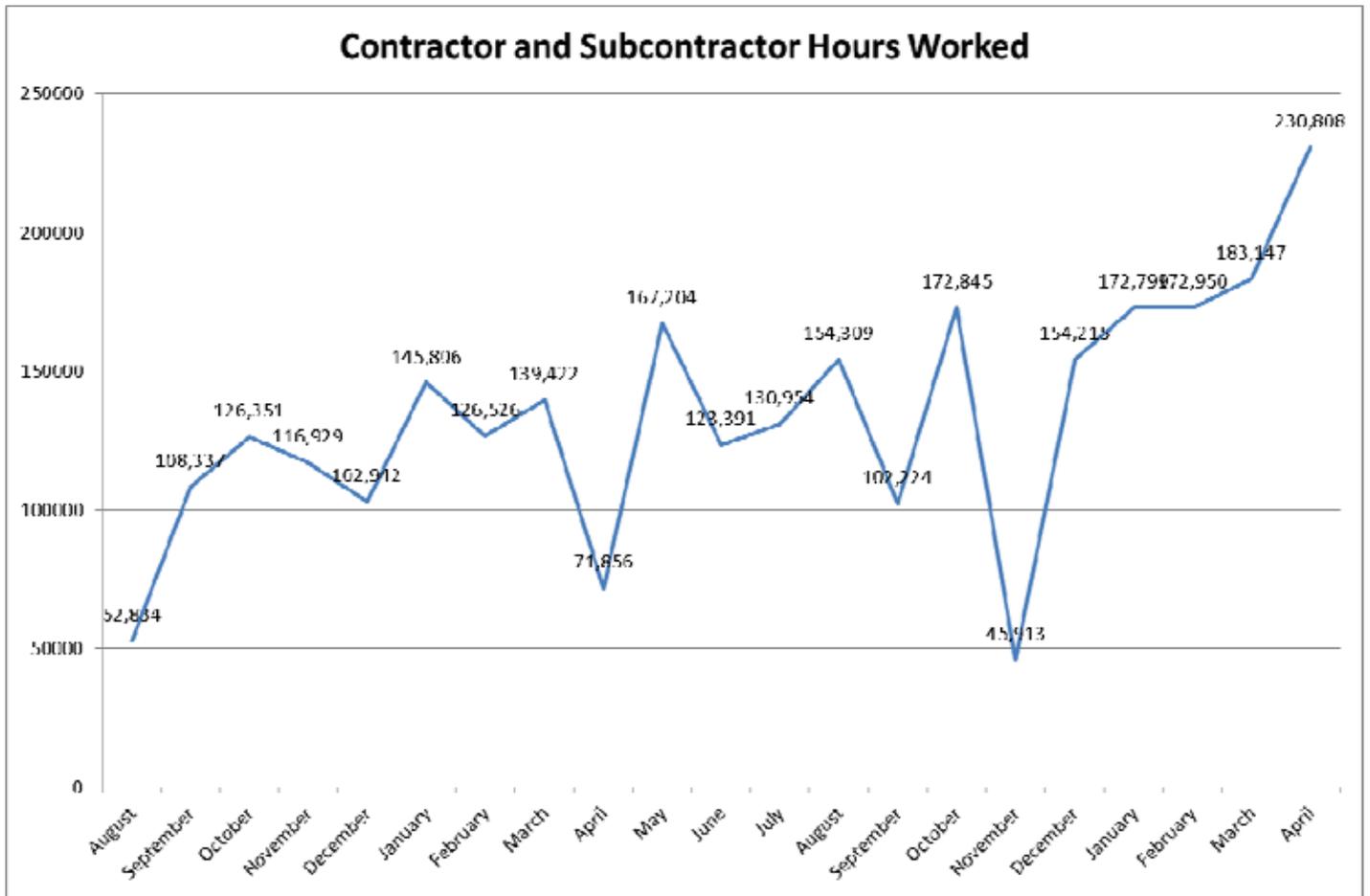
<i>S&S Certification Certificates Issued to Date</i>		
Contracts / Interim Certification Certificates Issued	Date Signed	Comments
1. FD-430 / DBB-525 Airport 7-Piers Certifiable Element "Guideway" Cert Certificate	9/21/2015	SSRC approved
2. 3 – MOW Vehicles Delivery & M-7, M-2, M-1 MSF Tracks – Interim Cert Certificate	2/4/2016	SSRC approved
3. MSF Yard M-4 and M-6 Tracks – Interim Cert Certificate	3/10/2016	SSRC approved
4. PT-001 Delivery, OSB, M-5/M-4 Tracks, ORCC, MOV MPV - Interim Cert Certificate	3/29/2016	SSRC approved
5. Five (5) – MOW Vehicles Delivery – Interim Cert Certificate (Vehicles Only)	5/20/2016	SSRC approved
6. MOW Facility Early Occupancy – Interim Cert Certificate (Admin Areas Only)	5/23/2016	SSRC approved
7. MSF S-Tracks & West/East Yard Leads Interim Cert Certificate		

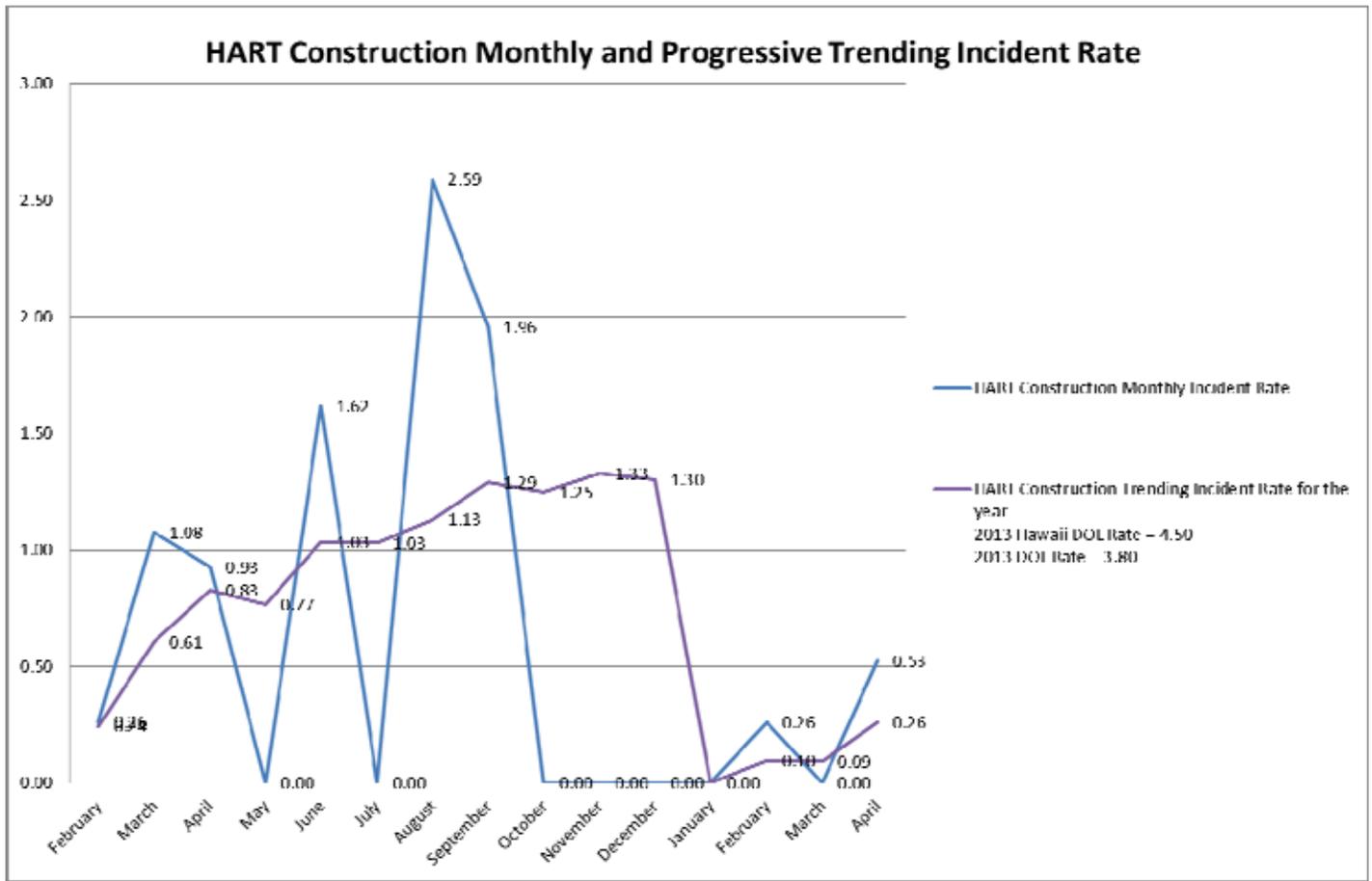
6.1.10 Construction Safety and Security

Project-Wide Incident Activity					
Event Type	Total Number of Events since 1/1/2007	Total Number of Events for May 27, 2016-June 24, 2016	Loss Type	Date	Event Description
Environment	15	0			
Loss or Damage	40	2	a) Minor Loss b) Minor Loss	a) 5/27/2016 b) 5/27/2016	a) FHSG: Forklift struck a light pole. b) ASU: Vehicle sprayed with ruptured paint can.
*Reportable Occupational Injury/Illness	0	0			
Security	62	2	a) Minor Loss b) Undetermined	a) 5/31/16 b) 6/23/16	a) Core: Copper wire stolen from Waipahu TPSS site. b) MSF / Core: Security incident, vandalism, graffiti on train. Under investigation.
**Loss Time Occupational Injury/Illness	7	0			
Road/Vehicle - Driving	84	0			
Service Strike	86	1	a) Minor Loss	a) 5/31/16	a) ASU: DTS conduit damaged during excavation.

*Reportable incidents: Requires OSHA to be notified within 8 hours, and includes the death of an employee or hospitalization of three or more employees.
 **Loss Time Injury: Time away from work due to injury.

	2014			2015			2016		
	Hours worked	No. of Recordable	No. of Loss Time	Hours worked	No. of Recordable	No. of Loss Time	Hours worked	No. of Recordable	No. of Loss Time
January				145,806	1	0	172,799	0	0
February				126,526	1	0	172,950	1	0
March				139,422	3	1	183,147	0	0
April				71,856	1	0	230,808	2	0
May				167,204	0	0			
June				123,391	2	1			
July				130,954	0	0			
August	52,834	1	0	154,381	1	1			
September	108,337	1	1	102,224	1	0			
October	126,351	0	0	172,845	0	0			
November	116,929	3	3	45,913	0	0			
December	102,942	1	0	154,215	0	0			
Total	507,393	6	4	1,534,735	10	3	759,704	3	0
OSHA Annual Incident Rate				1.3					
Work Hours for WOFH, KHG, MSF, Air Port, CORE System as reported to OCIP and certified.									





KEY ISSUES

- Core Systems lost their full-time Ansaldo/H-JV Safety and Security Certification point of contact in Honolulu that poses a concern of certification expertise and experience at the Core Systems contactor level and will impose a hardship to the HART Safety and Security Department efforts until a full-time, qualified/certified replacement is on AHJV staff. A discussion will occur in September on status of the replacement manager.
- The rail shims remain an outstanding issue. A proposed plan by the contractor was reviewed by HART Engineering. The contractor will proceed at risk for the work. The extended fasteners beyond the Compendium of Design Criteria (CDC) requirement must be approved and signed off by the RE’s prior to HART Safety and Security review.
- DB and DBOM contracts pose a significant challenge for the certification process where 100% design verification is not realized until sometime during or at the end of the construction phase. This delay is not consistent from one contract to another and is based on the complexity of the designs and contract submittal requirements.
- The specification and testing conformance checklist verification effort (% verified) will naturally lag behind construction completion percentage due to the fact that a significant percentage of the needed submittals are submitted at the end of the project; such as test reports, O&M manuals, training, and as-built drawings.
- Safety and Security is presently lacking one (1) position (Safety Specialist, OSHA). Staff has divided the work in the interim. Final 3 persons have been identified to fill this (one) position.

6.2 Quality Management

- **Overview**

- The HART QMP and HART-approved QAPs of contractors, consultants and suppliers have been assimilated by their respective employees and are being implemented as standard operating procedures. Therefore, less and less Nonconformance Reports (NCR) are reported or encountered internally and on existing contracts.
- Overall quality of the Project is good.
- Review and approve contractors, consultants and suppliers new and updated QAPs, including Inspection and Test Plans (ITP).
- Conducted biweekly Quality Task Force (QTF) meetings with CE&I, contractors and consultants QA teams to discuss the status of: design and construction activities; procurement activities; inspection and testing; NCRs; Corrective Actions (CARs) and Preventative Actions (PARs); quality compliance audits; various process improvements; quality economics, and Buy America compliance.
- Participated in Pre-Activity Meetings for scheduled construction activities: CSC/MSF, ASU, WOFH and KHG.
- Issued Audit Report on Combined QA, Buy America and Environmental Compliance Audit of KIWC for WOFH and KHG contracts held on April 14-15, 2016.
- Performed Final Inspection of: MSF OSB Offices, MOW, WTB, TWF and Site Civil Work; repair of 276 (NCR 113); removal, replacement, stressing and grouting of Tendon T1L of Span 258 (NCR 509) and Tendon T3 of Span 249 (NCR 525); and WOFH TPSS Site 8 (Columns 246-251), Ho'opili Station (Column 95), and LCC Portables and Parking Lot.
- Updated Management System Audits (QA, Environmental and Buy America) Schedule for 2016, as shown on the following pages:



HONOLULU AUTHORITY for RAPID TRANSPORTATION

COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: 2016 Rev 5

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
SC-HRT-1400049	CSC Support Services	L + E	16-001 QA	2/9 - 2/10	2/9/16	2/19/16
CH-HRT-10HO449	Maintenance and Storage Facility Design-Build (MSF)	KKJV - HI	16-002 QA/BA/E	3/15 - 3/17	3/15-17/16	4/15/16
CT-HRT-1200106	Core Systems Contract (CSC) & Hitachi Rail Design-Build-Operate-Maintain	Hitachi Rail USA	16-003 QA	6/28 -6/30	6/28-30/16	
CT-HRT-10HO137	West O'ahu/Farrington Highway Guideway Design-Build (WOFH)	KIVC - HI	16-004 QA/BA/E	4/12 - 4/14	4/14-15/16	6/7/16
CT-HRT-11HO195	Kamehameha Highway Guideway Design-Build (KHG)					
SC-HRT-1400027	General Engineering Consultant (GEC-3)	CH2M Hill	16-005 QA	6/16 - 6/17	6/16-17/16	6/24/16
CT-HRT-1200106	Core Systems Contract (CSC)	AHJV - HI	16-006 QA/E	6/2 - 6/3	6/2-3/16	
RFB-HRT-837903	H2R2 Ramp Construction	Royal Contracting	16-007 QA/BA/E	8/4 - 8/5		
CT-HRT-11HO195	KHG Casting Facility	KIVC - HI	16-008 QA/BA	7/20 - 7/21		
CR-HRT-1500503	West Oahu Station Group Construction	NAN, Inc	16-009 QA/BA/E	9/13 - 9/15		
CT-HRT-1500236	Farrington Highway Station Group Construction FHSG	Hawaiian Dredging	16-010 QA/BA/E	9/27 - 9/29		
CT-HRT-11HO195	WOFH and KHG Surveying and Alignments	KIVC - HI	16-011 QA	8/16 - 8/18		
CT-HRT-10HO137						
SC-HRT-14000323	Airport Section Utilities Construction	NAN, Inc	16-012 QA/BA/E	8/30 - 8/31		
DB -	Airport Guideway and Station (Design)	TBD	16-013 QA	TBD		
DB-	City Center Guideway and Station (Design)	TBD	16-014 QA	TBD		
CT-HRT-1300318	Elevator and Escalator - Manufacture, Install and Maintain	US Schindler - HI	16-015 QA/BA	10/4 - 10/6		
		US Schindler - NJ				

Quality Assurance (QA); Buy America (BA); Environmental (E); Safety Security (SS)

Page 1 of 2



HONOLULU AUTHORITY for RAPID TRANSPORTATION

COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: 2016 Rev 5

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULE D	DATE PERFORMED	DATE CLOSED
SC-HRT-1600008	Airport Section Utilities CE&I East	Stantec	16-016 QA	10/18 - 10/20		
	Airport Section Guideway & Stations CE&I East	Stantec	TBD	TBD		
	City Center Section Guideway & Stations CE&I East'					
SC-HRT-1400050	West Side Station Group CE&I	PGH Wong - HI	16-017 QA	10/25 - 10/27		
	West Oahu Farrington Highway and Kamehameha Highway Guideways CE&I					
	Elevator and Escalator - CE&I					
	Pearl Highlands Parking Structure/Bus Transit Center CE&I					
	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes CE&I					
CT-HRT-1200106	Configuration Management Plan (CMP)	AHJV - HI	16-018 QA	11/3 - 11/4		
CT-HRT-1600152	Kamehameha Highway Station Group Construction	NAN, Inc	16-019 QA/BA/E	11/15 - 11/17		
CCH-100	Honolulu Authority for Rapid Transportation (HART)	HART	16-020 QA/SS	12/06 - 12/13		
DB-	Pearl Highlands Garage Transit Center and H1R2 Ramp	TBD	TBD	TBD		
DB-	Airport Guideway and Stations (Construction)	TBD	TBD	TBD		
DB-	City Center Guideway and Stations (Construction)	TBD	TBD	TBD		
DB	UH West O'ahu Park-and-Ride and Campus Road "B"	TBD	TBD	TBD		

Quality Assurance (QA); Buy America (BA); Environmental (E); Safety Security (SS)

Page 2 of 2

• Key Issues

HART NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
37 (Audits)	37	0
1 (Construction)	1	0

- Continue updating, reviewing and approval of appropriate HART Project Baseline Plans and Procedures due to new policies, re-organization, process improvement and lessons learned from the internal audits. Upon approval of revised plans and procedures, training of HART employees and consultants must be performed in order to assure competency and proficiency.
- Resolution of two (2) major WOFH NCRs that need to be addressed and corrected to prevent recurrence and to mitigate impact on the overall progress of the project. The major NCRs are described below:
 - **Span 258 – NCR 509:** a few strands of the 12-Strands Tendon T1L installed on Span 258 failed after post-tensioning. KIWC has prepared a Remediation Plan to replace the failed Tendon T1L. The defective Tendon was removed and saved for postmortem by KIWC on April 14, 2016; replaced and stressed on April 15, 2016; and grouted on April 22, 2016. Hence, Span 258 was lowered to its correct position.
 - **Span 249 – NCR 525:** a few strands of Tendon T3 installed in Span 249 failed after post-tensioning. The defective Tendon T3 was removed on April 21, 2016. The tendon replacement, stressing and grouting was completed on June 18, 2016.

On May 25, 2016, the initial meeting of KIWC (executive, management, construction and quality staff), HNTB/FIGG (EOR and field engineers) and HART (CE&I [Resident Engineers and Contract Compliance Managers], management, engineering, and quality staff) was held at the KIWC Field Office to discuss the NCRs. The meeting agenda is as follows: General Information from Span 258 and 249, Status of Investigation and Testing, Probable Cause of Water Intrusion into the Ducts, Root Cause, and Corrective Actions. Future meetings have been scheduled to discuss and assure the structural integrity of all Tendons on the project. The HART Design and Construction Group is now taking the lead on this issue.

- **Spans 59 and 60 – NCR 544:** During the GEDO Cart checking of the tracks alignment, the technician found that the horizontal alignment was off about 1 ½ inches on top of Spans 59 and 60. KIWC investigated the problem and found that the erection of the spans centerline was off about one inch. KIWC has corrected the NCR by chipping the reinforced concrete shear keys (4 ends) of the spans, realigned the spans, repair the shear keys, realigned and welded the rail, and ultrasonic tested the welds.
- Resolution of one (1) major KHG NCR that needs to be addressed and corrected to prevent recurrence and to mitigate impact to the overall progress of the project. The following is the major NCR identified:
 - **Drilled Shafts:** To date there are four (4) Open NCRs which are related to the CSL Reports, and 172 Drilled Shafts completed (added 16), which indicates that there were few CSL issues encountered lately and the process has improved.
- Erection and finishing of spans, construction of “shear keys” between columns and spans, and construction of concrete walkways on WOFH and KHG guideways.
- Resolution of one (1) major KHG NCR: Drilled Shafts (Cross Hole Sonic Logging Reports) quality and repair.
- Final Inspection of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, Contact Rails, Switches, etc.
- Installation and welding of rails and turnouts on top of the WOFH and KHG guideways.
- Construction of the KHG Balanced Cantilever segmental spans.
- Manufacturing of Carbody(s) at Hitachi Rail Italy and its subcontractor manufacturing facilities in Italy.
- Final Assembly of Passenger Vehicles in Hitachi Rail facilities in Pittsburg, CA.
- Pre-shipment, I&T and FAI of wayside core system and passenger vehicles materials, parts and components.
- Final Inspection of OSB, WTB, TWF and MOW buildings prior to turnover to HART/CSC.
- Performed a QA Audit of CH2M on the GEC 3 contract.
- Performed a Joint HART/AHJV QA Audit of Hitachi Rail USA, Inc. on the AHJV CSC DBOM contract.
- Performed a Combined QA and Environmental Compliance Audit of AHJV on the CSC DBOM contract.

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

- **Overview and Key Issues**

- On Feb. 8, 2016, HART submitted a request for waiver of Buy America requirements for the variable refrigerant flow (VRF) HVAC system for the train control and communications rooms at the stations. We are awaiting FTA’s determination.
- Vehicles: In accordance with FTA clarification on the definition of “post-delivery audit period” as the “time period in the procurement process when the rolling stock’ (first vehicle) ‘is delivered to the recipient until title to the rolling stock’ (last vehicle) ‘is transferred to the recipient or the rolling stock’ (last vehicle) ‘is put into revenue service, whichever is first,” HART intends to conduct a post-delivery audit during the defined “post-delivery audit period,” when actual costs can be verified. We anticipate this to occur on or around first quarter of 2017.

6.4 Disadvantaged Business Enterprise (DBE)

- **Activities this Month**

- \$36,842,718 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 6/30/16
 - 6.43% = DBE utilization on total disbursed FTA funds received to date (\$36,842,718 divided by \$573,085,805)
 - 2.09% = DBE utilization to date on total Project FTA funds (\$36,842,718 divided by \$1,763,903,901)

*Total DBE Participation = \$36.8M
(previous report = \$35.1M)*

Figure 16. DBE Participation this Month

DBE Participation in June		
DBE Firm	Contract Number	Participation
Lawson & Associates	SC-HRT-1400061 MM-964	\$61,868
ADS System Safety Consulting	SC-HRT-1400061 MM-964	\$81,045
David’s Fencing	CT-HRT-10H0449 DB-200	\$888
LKG-CMC	SC-HRT-1400049 MM-962	\$11,452
David’s Fencing	CT-HRT-10H0137 DB-120	\$3,009
Don’s Makiki	CT-HRT-10H0137 DB-120	\$36,665
PAC Electric	CT-HRT-10H0137 DB-120	\$309,611
Glad’s Landscaping	CT-HRT-10H0137 DB-120	\$17,849
AMR Estimating	SC-HRT-1400027 MM-913	\$62,653
The Solis Group	SC-HRT-1400027 MM-913	\$218,283
Dovetail Consulting	MOU-11-SO-1 MM-930	\$26,108
Geotech	CT-HRT-1500309 DBB-385	\$5,633
Amazon Construction	CT-HRT-1500309 DBB-385	\$5,775
Lenax Construction	SC-HRT-1600008 MM-595	\$816,417
LKG-CMC	SC-HRT-1600008 MM-595	\$102,641
TOTAL FOR THE MONTH		\$1,759,897

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

6.5 Planning and Environment

• Activities this Month

- Programmatic Agreement Activities:
 - HART's Programmatic Agreement (PA) team met with the Hawai'i State Historic Preservation Division (SHPD) on Monday June 6, 2016, as part of ongoing consultation with the division.
 - HART coordinated with the Navy's Federal Preservation Officer to prepare final submittals of Big Makalapa and Little Makalapa National Register nominations on Monday, June 20, 2016.
 - HART met with the Kāko'o to discuss better management of Consulting Party (CP) concerns.
 - Completed internal review on meeting minutes for Consulting Parties' (CPs) FTA Annual Meeting.
- Planning, Environmental, and Cultural Activities:
 - HART researched, prepared and submitted responses to correspondence regarding karst caverns and project safety.
 - HART submitted regular Transportation Improvement Plan updates to the Oahu Metropolitan Planning Organization (OMPO).
 - HART is preparing a slideshow presentation for the upcoming Floodplain Managers Conference hosted by DLNR.
 - The next Mitigation Monitoring Quarterly report is due in July for the reporting period of April-June 2016. Continued coordination is planned with stakeholder agencies regarding street tree transplanting and mitigation efforts.
 - HART Board of Directors approved HART's Hawaiian Station Naming Policy to form a working group tasked with recommending Hawaiian names for all 21 stations. The Hawaiian Station Naming Working Group met on Tuesday, June 28, 2016.
 - HART met with The Outdoor Circle on Thursday, June 2, 2016 to update tree mitigation status and discuss future tree planting, relocation and disposition efforts.
 - HART staff met with the State Department of Transportation Harbor Division to discuss potential tree relocation of the existing sixty-four (64) Coconut Palms along Nimitz Highway.
 - HART staff met with the Ala Wai Golf Course to coordinate potential tree relocation.
 - HART staff continued coordination with Leeward Community College, Waipahu High School, and community stakeholders regarding planning and design issues with the Middle Loch Connector.
 - HART Planning continued to participate in a weekly Multimodal Integration Technical Team (MITT) consisting of HART, DTS, and O'ahu Transit Services (OTS) planners to work on technical issues supporting bus-rail integration planning.
 - Environmental staff participated in Quality, Environmental, and Buy America audits of Ansaldo Honolulu Joint Venture on June 2 and 3, 2016.
 - Pearl Highlands Park and Ride (PHPR) Public-Private Partnership (P3)
 - Reviewed six RFI responses
 - Conducted five market sounding interviews with RFI respondents
 - Briefed 5 board members (Hanabusa, T. Lee, Atta, Kim, Formby)
 - Briefed City department and State directors
 - Briefed City Managing Director
 - On June 16, 2016, the HART Board decided not to pursue P3 on PHPR, but directed staff to continue to explore P3 and TOD opportunities for the Project.
 - Submitted application for FTA Pilot Program for Transit-Oriented Development grant, on June 13, 2016.
 - Co-led DPP's Waipahu Town TOD Tour with Mayor's subcabinet.
 - Submitted draft of the following Post-RODs to FTA for review:
 - Emergency Backup Generators
 - City Center Realignment (including the Ala Moana Station relocation)
 - Airport Casting Yard
 - City Center Casting Yard
- Sustainability:
 - HART presented to Hawaii Green Growth Smart Sustainable Cities Study Team, on June 2, 2016.
 - HART attended Verge: Asia Pacific Clean Energy Forum, from June 21-23, 2016.
 - HART participated in HDOT Sustainable Transportation Working Group, on June 22, 2016.

- **Looking Ahead**

- HART will provide preliminary options analysis to inform Board on further project P3 potential activities.
- Ongoing coordination with DTS to ensure consistent planning of seamless bus and rail services focusing on rail's interim opening date.
- Refine and develop bus-rail integration needs for Lagoon Drive, Waimanu Street and Ala Moana locations.
- The next consultation meeting with HART/SHPD is scheduled for Tuesday, July 5, 2016.
- Continue Hawaiian Station Naming Working Group efforts to provide primary Hawaiian station names for 21 stations.
- Continue development of HART's sustainability program.
- HART to develop Sustainability Focus Group with to-be-identified stakeholders.
- Continue coordination with DPP, the State, and HCDA regarding transit-oriented development.
- Continue to review and meet with contractors regarding proper environmental submittals.
- Ongoing coordination with FTA on removing the federal interest from the Pearl Highlands Parking Garage P3.
- Prepare and submit Post-ROD Documentation for FTA approval prior to need dates as indicated:
 - Emergency Backup Generators, third quarter 2016
 - City Center Realignment (including the Ala Moana Station relocation), third quarter 2016
 - Airport and City Center Casting Yards, third quarter 2016
 - Prepare and submit separate draft Post-RODs for the following topics for third quarter 2016 and beyond: Additional Project-Wide Right-of-Way, West O'ahu Park and Ride Lots (including interim Park and Ride at Ho'opili Station), Hōlau Market and Ai-Goto Parcels at Chinatown Station, and the Project revised Phased Openings.
- Follow up meeting with Hawaii Green Growth Smart Sustainable Cities Study Team, on July 7, 2016.

6.6 Risk Management

The primary goal of risk management is to maintain a reserved contingency balance throughout the life of the Project that is acceptable to HART and the FTA. Effective management of project risks is necessary to significantly increase the likelihood of delivering a successful project. Risk management is the systematic process of identifying, analyzing, and responding to risk in a timely manner. Risk management is integral to all phases leading up to revenue service opening including: planning, design, construction, systems testing, system operation start up, safety and security certification, and ultimately to project construction closeout.

Risk assessment discussions with the project teams are held on a regular basis to identify, assess, prioritize, manage and mitigate risk exposure, and develop prudent contingency plans. The Project Risk Register (RR) is the depository for all risks identified for the Project. Every month, risks contained in the RR are reviewed to confirm risks are appropriately identified, identify new risks, and close out risks that no longer pose an issue.

The HART program has adopted a new Risk Management System that focuses on mitigation strategies to assist the project teams in project delivery. The program has recently performed bottoms up risk assessment for every project in the program. This process evaluated every base cost and schedule for each of the individual projects in the program. A network risk model was created to define how a risk on one project in the program affects other projects in the program. By monetizing the potential impacts of schedule, it assists the project teams in decision support of how to best manage the risk.

A workshop was held for each construction project and residual risks were refined and quantified for cost and schedule impacts. After each risk is quantified, a strategy was developed on how to mitigate its impacts, and a risk owner was assigned. The program risk manager will seek continuous updates from the risk owner on how the progress of the strategy is performing. This process is called monitor and control. This new risk management system generates reports to assist the risk manager and project managers in managing the risk reserve (contingencies) for the program.

The top risks have been reformatted from the previous month's table format to the following bullet list. The new risk management system quantifies the risk as schedule impact or direct cost impact independently. The schedule impact is than monetized based in the model and based upon the contracts impacted. The top risks to the program are then evaluated on both schedule and cost. The top risks from the most recent risk workshops are:

- Enough available funding to complete the entire program
- HECO East – Utility clearance issues
- HECO West – Utility clearance issues
- Misidentified and unidentified utilities on City Center Guideway and Stations project
- De-energizing the existing overhead 138kv and 46kv lines on Airport Guideway and Stations project
- Late identification of additional 138kv ROW needs on City Center Guideway and Stations project
- Re-baseline the schedule for the Core Systems project
- HECO East Airport Guideway and Stations - Utility Clearance Issues
- Potential change orders in construction for the KHG project
- Potential change orders in construction for the WOGH Guideway project
- Procurement delays for City Center project.

The tables listing the number of risks, which were previously in appendix G, have also been removed. As HART implements the risk management system focused on mitigation, monitoring, and control, the PMOC has requested to work with HART to possibly develop a new tracking mechanism or data reporting set to better assist in the oversight of the program.

NOTES OF SIGNIFICANCE

- HART is currently going through an exercise in developing a recovery plan to manage the funding gap.
- Intensive focus continues to be placed on issues involving Hawaiian Electric Co. (HECO) coordination and clearance issue resolution.
- Established an on-call contract to pothole to better define existing utilities, and specifications are being developed for the City Center project to assist the design-builder in pricing unidentified and misidentified utilities.
- Developing agreements with landowners and utilities for access during construction is mitigating potential construction schedule delays.
- Clearance of HECO overhead facilities and HART Guideway and Stations is undergoing evaluation for site specific solutions with respect to the 138kV, 46kV and 12kV transmission lines. The range of solutions to meet physical separation are extraordinary in cost, requiring further study prior to reaching an agreeable solution that is functional and affordable.

AREAS OF FOCUS

A) Market Conditions – The construction market in Hawai'i continues to outpace other major metropolitan US cities. The years 2015 and 2016 are expected to set new records for construction in the state. This translates to increased escalation of about 1% per month from late 2014 through the end of 2016, according to the Rider Levett Bucknall, Quarterly Construction Cost Report. These conditions may impact the supply of experienced craft labor which will in turn affect contractor productivity rates and traffic mobility issues.

Mitigation Progress:

- HART's continuous improvement in estimating methodology has led to more confidence in the likely construction pricing, but continued pricing pressures in the market could still lead to higher than expected price proposals and bids.
- The combined guideway and station packages on the east side (Airport Guideway and Stations contract and City Center Guideway and Stations contract) are still in active procurement.

B) Utilities – Utilities continue to be an issue for the project, as they are for most Transit and Rail projects.

Mitigation Progress:

- Resources to relocate HECO facilities are now keeping up with scheduled requests to resolve utility conflicts through improved coordination efforts between agencies at all levels from project management to executive levels.
- Clearance of HECO overhead facilities and HART Guideway and Stations is undergoing evaluation for site specific solutions with respect to the 138kV, 46kV and 12kV transmission lines. The range of solutions to meet physical separation are extraordinary in cost, requiring further study prior to reaching an agreeable solution that is functional and affordable.

C) Right-of-Way – There are parcels on the east and west segments that are still in an active acquisition process. The goal is to provide site access to the contractors on the east to avoid associated inefficiencies related to re-sequencing the work plan which would have a negative impact to the revenue service date.

Mitigation Progress:

- Nearly all west side property transactions have been accomplished.
- East side – there are a number of third-party agreements needed on the Airport Section and private parcels on the City Center Section. Cost-to-cure partial property improvement impacts have now been mostly resolved.

6.7 Community Outreach

• **Activities this Month**

- The Honolulu Rail Project was featured on a local morning news show that aired live from the Rail Operations Center. Honolulu Mayor Kirk Caldwell and HART Board Chair Colleen Hanabusa joined HART Executive Director and CEO Dan Grabauskas as live guests throughout the show and discussed a wide variety of accomplishments, milestones and issues about the project.
- HART participated in the revival of Hawaii of Girls State, a nonpartisan program that teaches young women responsible citizenship, by providing speakers for a session on transportation.
- HART also made several other presentations and participated in the Hire Leeward Job & Career Fair.

Since the inception of HART, the outreach team has participated in:

- *982 Presentations and Events*
- *545 Neighborhood Board Meetings*

Prior to the inception of HART, the outreach team participated in:

- *1,001 Presentations and Events*
- *541 Neighborhood Board Meetings*

• **Construction Outreach**

- HART held two Business and Community meetings this month, one in Waipahu and a second one in the Pearl City area. These regular meetings are designed to provide business operators and community members along the rail corridor with updated information about construction work and upcoming traffic changes in their areas. The meetings are also designed to provide businesses and community members with the opportunity to provide feedback that helps shape some of HART’s business assistance programs.
- HART staff provided a project overview and a presentation about the construction plans for the Dillingham Boulevard portion of the City Center section of the rail project to a group of business owners and operators at a meeting attended by nearly 70 people.
- HART continues to provide weekly traffic updates, notifying motorists, elected officials and members of the public of upcoming lane closures due to rail construction and utility work. The advisories are posted on the project website and distributed via email to local media outlets.

Figure 17. Public Outreach



- **Community Input**

- HART's public outreach team responded to nearly 200 public inquiries this month. Inquiries were related to traffic and lane closures as well as project construction plans.

- **Look Ahead**

Coming in July:

- HART plans to participate in the Hawaii Lodging Hospitality and Food Service Expo. HART plans to make presentations to the Native Hawaiian Chamber of Commerce and to the Chinese Chamber of Commerce.

6.8 Staffing

- **Overview**

- The Director of Communications position has been filled with a City employee. This position was formerly held by a Project Management Support consultant employee.
- The Chief Financial Officer position hiring activities are on hold.
- A Deputy Director of Operations and Maintenance position is being created and recruited as a City position.

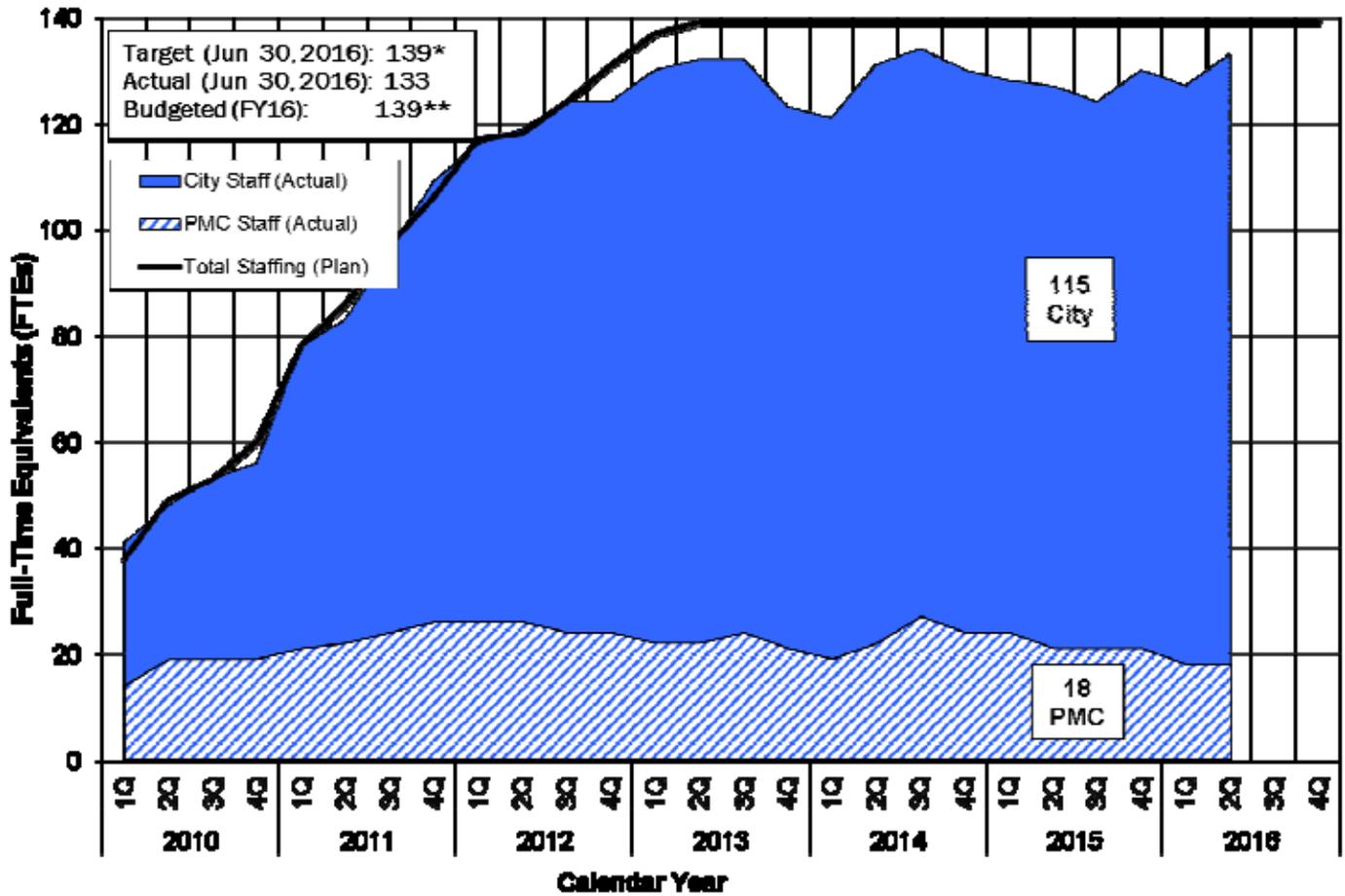
Figure 18. Staffing Activities

Staffing Activities				
Title	Group	New/Existing HART position (City or PMC)	Position Status	Start Month
Design and Construction				
Assistant Project Manager (City Center DB)	Construction	New (City)	Filled	June
Electrical Engineer	Core Systems	Existing (City)	Filled	June
Project Manager (KHSG)	Construction	Existing (City)	Recruiting	
Mechanical/Electrical Engineer	Core Systems	Existing (City)	Recruiting	
Budget and Finance				
Chief Financial Officer	Budget and Finance	Existing (City)	On hold	
Financial Analyst	Budget and Finance	Existing (City)	Recruiting	
Quality Assurance				
Quality Assurance Engineer * (Civil)	Quality Assurance	Existing (City)	Recruiting	
Administrative Services				
Information Technology Support Technician	Administrative Services	Existing (City)	Recruiting/Interviewing	
Personnel Clerk	Administrative Services	Existing (City)	Recruiting via Civil Service	
Public Information				
Director of Communications	Public Information	Existing (PMC to City)	Filled	June
Information Specialist	Public Information	Existing (City)	Recruiting via Civil Service	
Project Controls				
Scheduler	Project Controls	Existing (City)	Recruiting	
CMS Trainer	Project Controls	Existing (City)	Recruiting/Interviewing	
Procurement				
Procurement & Contracts Clerk	Procurement & Specifications	Existing (City)	Filled	June
Safety				
Safety Specialist	Safety	Existing (City)	Recruiting	
Operations & Maintenance				
Deputy Director	Operations & Maintenance	New (City)	Recruiting	

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

HART prioritizes filling all vacancies with City employees and supplements the City staff with PMC only when necessary and appropriate. HART currently receives direct project support in centralized functions from the following city departments: Honolulu Police Department (HPD), Department of Information Technology (DIT), Department of Budget and Fiscal Services (BFS), Department of Design and Construction (DDC), Corporation Counsel (COR) and Department of Human Resources (DHR); and from the State of Hawai’i Department of Transportation (HDOT) on Consultant Services Contracts. HART is currently working with the Department of Facility Maintenance (DFM) on creating a Memorandum of Understanding (MOU).

Figure 19. Project Staffing (Actual vs. Planned)



* In accordance with Staffing and Succession Plan Rev 5 (Under Revision)
 ** 139 City positions authorized in FY 2016 HART Operating Budget

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

The organizational chart has been revised to reflect several personnel changes and some minor organizational structure changes. For the latest project organization chart, see Appendix G.

APPENDICES

Appendix A. Action Items

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

Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Resolve HECO issue with Davis-Bacon requirements	HART/FTA	Mar-14	On-going		Open – HECO waiver is pending.
2	Updates resulting from Risk Refresh:					
2a	Update the Contract Packaging Plan	HART	Aug-14	Aug-16		Pending final update of budget and schedule
2b	Re-baseline Financial Plan	HART	Apr-14	Aug-16		Pending final update of budget and schedule
2c	Re-baseline budget	HART	Apr-14	TBD		In progress
2d	Re-baseline MPS	HART	Apr-14	TBD		In progress
2f	Update RCMP (including Hold Points and Secondary Mitigation Measures)	HART	Sept-13	Aug-16		Pending final update of budget and schedule
5	HART to provide Operational Readiness Checklist/Hold Points for MSF Certification	HART	Jan-16	Apr-16	Jun-16	HART has developed detailed schedule with key activities.
10	Submit documentation to FTA for Post-ROD changes	HART	Mar-16	Apr-16	Jun-16	Ongoing activity; specific items will be tracked monthly
11	Provide updated organizational chart	HART	May-16	May-16	May-16	
12	Provide Triennial Review Closeout Letter	FTA	May-16	Jun-16	Jun-16	
13	Provide updated cash flow chart	HART	May-16	Jul-16	Jun-16	

Appendix B. Project Contingency Management General Background and Clarifications

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

Current Contingency Balance = \$469.7M

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

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

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

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

Changes Identified and Project Performance

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

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

HART Project Contingency Drawdown with Details

06/08/16 09:27:16

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (td)	Contingency Code
July '12 (Bottoms-Up Estimate)					
1)	FD-340	Intermodal Highway Stations Group PD	Budget transfer at Bottoms-Up Estimate from Project Scope to contingency (contract allowance)	\$58,443	90.03 - Contract Allowance
2)	FD-400	Airport Station guideway Utilities PD	Budget transfer for Contract Award less than the AS&E PD contract budget	\$2,654,106	90.02 - Allocated Contingency
3)	MA-975	LEED Commissioning Services	Budget transfer for Contract Award above the LEED Comm. Services contract budget	(\$52,633)	90.02 - Allocated Contingency
4)	DB-320	Kaunahala Highway guideway LB	Budget transfer for Contract Award above the 1912 DB contract budget	(\$20,533)	90.02 - Allocated Contingency
5)	DB-120	West Oahu Farmington Highway guideway LB	Budget transfer for this contingency reserves LOI No. 004	\$3,646,247	90.02 - Allocated Contingency
			July '12 Contingency Drawdown	\$5,881,273	
August '12					
1)	FD-140	West Oahu Stations Group PD	Budget transfer for Contract Awarded under WOSG PD contract budget	\$1,363,700	90.02 - Allocated Contingency
2)	FD-530	Key Center guideway Utilities PD	Budget transfer for Contract Awarded under Key Center PD contract budget	\$5,917,945	90.02 - Allocated Contingency
3)	DB-120	West Oahu Farmington Highway guideway LB	Executed Change Order No. 17 - Procure and Install Portable Blisters	(\$2,410,000)	90.02 - Allocated Contingency
			August '12 Contingency Drawdown	\$4,865,145	
September '12					
	NA	NA	No Contingency Drawdown	\$0	
			September '12 Contingency Drawdown	\$0	
October '12					
1)	DB-120	West Oahu Farmington Highway guideway LB	Executed Change Order No. 31 - Builders Risk Insurance coverage	(\$24,669)	90.02 - Allocated Contingency
			October '12 Contingency Drawdown	(\$24,669)	
November '12					
1)	FD-410	Airport Stations Group PD	Budget transfer for Contract Award under ASG PD the contract budget	\$277,784	90.03 - Contract Allowance
2)	FD-340	Kaunahala Highway Stations Group PD	Budget transfer for Contract Award under KHSS PD the contract budget	\$202,469	90.03 - Contract Allowance
3)	MA-995	General Engineering Consultant	Budget transfer to align contract budget with Contract value	(\$10,633)	90.02 - Allocated Contingency
			November '12 Contingency Drawdown	\$39,620	
December '12					
1)	FD-340	Airport Station guideway Utilities PD	Executed Contract Amendment No. 01 - Design & Engineering Cost Estimates	(\$24,000)	90.02 - Allocated Contingency
			December '12 Contingency Drawdown	(\$24,000)	
January '13					
1)	DB-320	Kaunahala Highway guideway LB	Executed Change Order No. 01 - Access PD alternative analysis	(\$16,983)	90.02 - Allocated Contingency
			January '13 Contingency Drawdown	(\$16,983)	
February '13					
1)	DB-120	West Oahu Farmington Highway guideway LB	Executed Change Order No. 26 - Ins. Cont Requirements Additional Buoy at Ft. Weaver Rd	(\$1,270,178)	90.02 - Allocated Contingency
			February '13 Contingency Drawdown	(\$1,270,178)	
March '13					
1)	FD-240	Intermodal Highway Stations Group PD	Executed Contract Amendment No. 09 - Waipahu Station sewer	(\$3,565)	90.03 - Contract Allowance
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 06 - Ins. Cont Requirements LCI Crossovers Insulating Joints	(\$24,876)	90.02 - Allocated Contingency
			March '13 Contingency Drawdown	(\$28,441)	
April '13					
1)	FD-140	West Oahu Stations Group PD	Executed Contract Amendment No. 01 - Second elevator provision	(\$5,103)	90.03 - Contract Allowance
2)	DB-120	West Oahu Farmington Highway guideway LB	Budget transfer to offset Ins. Cont Requirement for Change Order No. 26	\$1,070,178	90.02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Budget transfer to offset Ins. Cont Requirement for Change Order No. 06	\$434,000	90.02 - Allocated Contingency
4)	DB-320	Kaunahala Highway guideway LB	Budget transfer to align current budget to contract Schedule of Milestones	\$600	90.02 - Allocated Contingency
			April '13 Contingency Drawdown	\$2,023,765	
May '13					
	NA	NA	No Contingency Drawdown	\$0	
			May '13 Contingency Drawdown	\$0	
Summary					
			July '12 - Ending Contingency Balance	\$649.4	
			August '12 - Ending Contingency Balance	\$649.4	
			September '12 - Ending Contingency Balance	\$649.4	
			October '12 - Ending Contingency Balance	\$614.5	
			November '12 - Ending Contingency Balance	\$654.7	
			December '12 - Ending Contingency Balance	\$654.4	
			January '13 - Ending Contingency Balance	\$654.4	
			February '13 - Ending Contingency Balance	\$652.8	
			March '13 - Ending Contingency Balance	\$652.3	
			April '13 - Ending Contingency Balance	\$654.3	
			May '13 - Ending Contingency Balance	\$654.3	

HART Project Contingency Drawdown with Details

Data as of 5/27/16

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (td)	Contingency Code
June '13					
	N/A		No Contingency Drawdown	\$654.3	
			June '13 Contingency Drawdown	\$0	
			June '13 - Ending Contingency Balance	\$654.3	
July '13					
			July '13 Contingency Drawdown	\$654.3	
			July '13 - Ending Contingency Balance	\$0	
1)	FD-430	Airport Section Outbound Utilities PD	Executed Contract Amendment No. 04 - Archival Engineering Design Services	(654.3)	0004 - Allocated Contingency
2)	OB-200	Maintenance & Storage Facility LB	Executed Change Order No. 07 - Archeological Inventory Survey (AIS) Provisional Sum Part 2	(13,000.00)	0007 - Allocated Contingency
3)	OB-300	Maintenance & Storage Facility LB	Executed Change Order No. 08 - Maintenance & Storage Facility Yard Smith Machine	(654.3)	0008 - Allocated Contingency
4)	OB-300	Maintenance & Storage Facility LB	Executed Change Order No. 09 - Yard Light Removal	(137.70)	0009 - Allocated Contingency
5)	OB-300	Maintenance & Storage Facility LB	Executed Change Order No. 10 - Train Configuration	(654.3)	0010 - Allocated Contingency
6)	OB-300	Maintenance & Storage Facility LB	Executed Change Order No. 11 - Preliminary Design & Supplemental Project Mgt	(654.3)	0011 - Allocated Contingency
			July '13 Contingency Drawdown	(16,264.106)	
			July '13 - Ending Contingency Balance	\$649.1	
1)	OB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 30 - Archeological Inventory Survey (AIS) Provisional Part 2	(13,000.00)	0030 - Allocated Contingency
2)	OB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 32 - Kakaia Station Mod Concept	(172.30)	0032 - Allocated Contingency
3)	OB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 34 - Impairment Cultural Property Construction Permit Suspension	(1,195.04)	0034 - Allocated Contingency
4)	OB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 36 - Hoopii Station Rehabilitation Design	(450.015)	0036 - Allocated Contingency
5)	OB-320	Kaemahewa Highway Guideway DB	Executed Change Order No. 06 - Archeological Inventory Survey (AIS) Provisional Part 2	(1,500.00)	0006 - Allocated Contingency
6)	FD-140	West Oahu Stations Group PD	Executed Contract Amendment No. 02 - Canopy Redesign	(954.356)	0002 - Contract Allowance
7)	MA-300	Elevator & Escalator Install/Maint	Budget Transfer for Contract Awarded under E&E IM contract budget	(3,738.472)	0003 - Allocated Contingency
			August '13 Contingency Drawdown	(16,264.204)	
			August '13 - Ending Contingency Balance	\$0	
September '13					
1)	OB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 33 - Provisional Sum E&O Part Use and Occupancy	(4,000.00)	0033 - Allocated Contingency
2)	OB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 35 - Analytic Column Design Contract	(1,107.312)	0035 - Allocated Contingency
3)	OB-200	Maintenance & Storage Facility LB	Executed Change Order No. 12 - HNB Design Elevation	(832.500)	0012 - Allocated Contingency
4)	FD-240	Farmington Highway Stations Group PD	Executed Contract Amendment No. 10 - NTP 2 Delay/Design Delay from Core Systems Contract & West Oahu Farmington Highway DB Contract	(620.466)	0010 - Allocated Contingency
			September '13 Contingency Drawdown	(6,560.278)	
			September '13 - Ending Contingency Balance	\$637.1	
October '13					
1)	OB-200	Maintenance & Storage Facility LB	Executed Change Order No. 13 - Ins. Comp Requirements/ Roof Access Modification	(359.153)	0013 - Allocated Contingency
2)	OB-200	Maintenance & Storage Facility LB	Budget Transfer for Change Order No. 13 for Ins. Comp Requirements	(306.900)	0013 - Allocated Contingency
3)	OB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 37 - Ala Ika Street Mod WSP at CR/Hoopii & Farmington HWY	(24.815)	0037 - Allocated Contingency
4)	OB-300	Maintenance & Storage Facility LB	Executed Change Order No. 05 - Platform Screen Gates Systems	(123.301)	0005 - Allocated Contingency
5)	OB-300	Maintenance & Storage Facility LB	Budget Transfer for Contract Awarded under Decisus FB contract budget	(1,157.760)	0001 - Unallocated Contingency
6)	FD-550	Core Systems Design Build O&M	Budget Transfer for Contract Awarded under Decisus FB contract budget	(622.134,739)	0002 - Allocated Contingency
			October '13 Contingency Drawdown	(2,273.063)	
			October '13 - Ending Contingency Balance	\$615.0	
November '13					
1)	OB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 38 - Insurance Coverage Requirement Oct 2013	(1,000.000)	0038 - Allocated Contingency
2)	OB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer for Change Order No. 08 for Ins. Comp. Requirements	(1,600.000)	0008 - Allocated Contingency
3)	OB-200	Maintenance & Storage Facility LB	Executed Change Order No. 04 - Preliminary Design & Supplemental Project Management 2	(274.846)	0004 - Allocated Contingency
4)	OB-200	Maintenance & Storage Facility LB	Executed Change Order No. 015 - Yard Layout Reorganization/ Structural Steel Modification	(11,723.000)	0015 - Allocated Contingency
5)	OB-200	Maintenance & Storage Facility LB	Budget Transfer for Change Order No. 015 for Ins. Comp. Requirements	(223.000)	0015 - Allocated Contingency
6)	FD-500	Core System Guideway Utilities PD	Executed Contract Amendment No. 01 - Archeological Inventory Survey (AIS) Suspension	(552.303)	0001 - Unallocated Contingency
7)	FD-240	Farmington Highway Station Group PD	Budget Transfer for Contract Award for FHS5 F&E	(12,703,265)	0001 - Unallocated Contingency
			November '13 Contingency Drawdown	(14,987,851)	
			November '13 - Ending Contingency Balance	\$610.0	
1)	FD-430	Airport Section Outbound Utilities PD	Executed Contract Amendment No. 05 - Uleiaa Streetscape scope project	(2,218,926)	0005 - Allocated Contingency
2)	FD-180	West Oahu Station Group PD	Executed Contract Amendment No. 03 - Design relocation of Honolulu and their off-ices	(19,926)	0003 - Allocated Contingency
			December '13 Contingency Drawdown	(2,238,852)	
			December '13 - Ending Contingency Balance	\$609.8	
January '14					
1)	FD-430	Airport Section Outbound Utilities PD	Executed Contract Amendment No. 06 - Archeological Inventory Survey (AIS) Suspension	(12,308,450)	0006 - Allocated Contingency
2)	FD-500	Core System Guideway Utilities PD	Executed Contract Amendment No. 02 - Soil Resistance Test and Max. Sdg. Calculation	(4,908,153)	0002 - Allocated Contingency
3)	MA-300	Construction Engineering & Inspection West	Budget Transfer for Contract Award less than O&M West contract budget	(1,102,817)	0003 - Allocated Contingency
4)	MA-550	Construction Engineering & Inspection East	Budget Transfer for Contract Award less than O&M East contract budget	(1,102,817)	0003 - Allocated Contingency
			January '14 Contingency Drawdown	(14,422,237)	

HART Project Contingency Drawdown with Details

Cost as of 9/27/16

Project No.	Project Desc.	Budget	Transfer	Change	Description	Contingency Drawdown (YTD)	Contingency Code	
6)	West Oahu Farrington Highway Guideway DB				Executed Change Order No. 048 - Standard Specification Revision 2.0	\$1,629,000	90.02 - Allocated Contingency	
7)	West Oahu Farrington Highway Guideway DB				Executed Change Order No. 048 - Unservice Coverage Requirements 2.0.4	\$1,400,000	90.02 - Allocated Contingency	
8)	City Center Gateway Utilities HD				Executed Contract Amendment 004 - Aesthetic Station Column	\$1,195,000	90.02 - Allocated Contingency	
9)	PD-580				Executed Contract Amendment 005 - City Center Station Interior Cart Scope Impact	\$1,120,000	90.02 - Allocated Contingency	
10)	PD-340				Executed Contract Amendment 001 - Special Provisions Update/Shear Wave Analysis	\$1,030,000	90.03 - Contract Allowance	
11)	Kamehameha Highway Stations Group HD				Executed Contract Amendment 003 - Historic Architecture/Highway Sign	\$1,111,000	90.03 - Contract Allowance	
12)	PD-340				Executed Contract Amendment 005 - Added Bus Shelters at Aloha Stadium Station	\$1,030,000	90.03 - Contract Allowance	
13)	PD-430				Executed Contract Amendment 010 - Aesthetic Station Column and Pearl Harbor Station Redesign	\$1,338,150	90.02 - Allocated Contingency	
14)	PD-430				Executed Contract Amendment 011 - Airport Station Rescue Cart Scope Impact	\$1,610,000	90.02 - Allocated Contingency	
15)	PD-140				Executed Contract Amendment 001 - Traffic Signal Control/UV/UV/Access Road	\$1,627,122	90.03 - Contract Allowance	
September '14 Contingency Drawdown							\$18,398,163	
September '14 - Ending Contingency Balance						\$550.1		
October '14								
1)	DECOM-000				Executed Change Order No. 009 - WOPH Guideway Alignment for CS	\$1,425,000	90.02 - Allocated Contingency	
2)	DE-200				Executed Change Order No. 028 - Escalation due to Schedule Impacts	\$1,500,000	90.01 - Unallocated Contingency	
3)	DE-320				Executed Change Order No. 033 - Station Load & Configuration Mods	\$1,360,000	90.02 - Allocated Contingency	
4)	DE-120				Executed Change Order No. 047 - Station Load & Configuration Mods	\$1,400,000	90.01 - Unallocated Contingency	
5)	PD-440				Executed Contract Amendment No. 003 - Extension of PM Services	\$1,700,000	90.03 - Allocated Contingency	
6)	PD-440				Executed Contract Amendment No. 003 - 45th Pegasus Bridges to HA Stations	\$1,450,000	90.02 - Allocated Contingency	
7)	PD-340				Executed Contract Amendment No. 001 - Extension of PM Services	\$1,070,000	90.03 - Contract Allowance	
8)	PD-340				Executed Contract Amendment No. 002 - Incorporation of Comments	\$1,030,000	90.01 - Unallocated Contingency	
9)	PD-340				Executed Contract Amendment No. 003 - Value Engineering	\$1,472,165	90.01 - Unallocated Contingency	
10)	PD-340				Executed Contract Amendment No. 004 - EOR/MOR	\$1,433,500	90.01 - Unallocated Contingency	
11)	PD-140				Executed Contract Amendment No. 010 - Temporary Paving/LCL Near UPA/UPH/WD & Ho'opi Seepage Holding Tank	\$1,579,260	90.03 - Contract Allowance	
12)	PD-140				Executed Contract Amendment No. 011 - Extension of PM Services	\$1,291,500	90.02 - Allocated Contingency	
October '14 Contingency Drawdown							\$18,307,136	
October '14 - Ending Contingency Balance						\$531.8		
November '14								
1)	DECOM-000				Executed Change Order No. 012 - Deleted Ticket Vending Machines	\$10,350,000	90.02 - Allocated Contingency	
2)	PD-560				Executed Contract Amendment No. 002 - General Excise Tax Credit	\$355,586	90.02 - Allocated Contingency	
November '14 Contingency Drawdown							\$10,705,586	
November '14 - Ending Contingency Balance						\$542.5		
December '14								
1)	DECOM-000				Executed Change Order No. 016 - HRT Train Make-up/Prement/Delivery	\$63,715	90.02 - Allocated Contingency	
2)	DECOM-000				Executed Change Order No. 013 - HECCO Connection Changes	\$1,500,000	90.02 - Allocated Contingency	
3)	DE-320				Executed Change Order No. 014 - Escalation due to Schedule Impacts	\$3,500,000	90.02 - Allocated Contingency	
4)	DE-120				Executed Change Order No. 048 - Escalation due to Schedule Impacts	\$15,000,000	90.01 - Unallocated Contingency	
December '14 Contingency Drawdown							\$18,713,716	
December '14 - Ending Contingency Balance						\$523.8		
January '15								
1)	DECOM-000				Executed Change Order No. 011 - Estimate Station Manager Booths	\$10,000	90.02 - Allocated Contingency	
2)	DE-120				Executed Change Order No. 050 - Escalation due to Schedule Impacts/Ameyon Aggregate	\$1,494,413	90.01 - Unallocated Contingency	
3)	DE-120				Executed Change Order No. 051 - Escalation due to Schedule Impacts/Ameyon Aggregate	\$1,170,000	90.01 - Unallocated Contingency	
4)	DE-120				Executed Change Order No. 052 - Escalation due to Schedule Impacts/Ameyon Aggregate	\$1,526,120	90.01 - Unallocated Contingency	
5)	DE-120				Executed Change Order No. 053 - Escalation due to Schedule Impacts/Ameyon Aggregate	\$1,168,630	90.01 - Unallocated Contingency	
6)	DE-120				Executed Change Order No. 054 - Escalation due to Schedule Impacts/Ameyon Aggregate	\$1,168,650	90.01 - Unallocated Contingency	
7)	DE-120				Executed Change Order No. 055 - Escalation due to Schedule Impacts/Ameyon Aggregate	\$1,763,177	90.01 - Unallocated Contingency	
8)	DE-120				Executed Change Order No. 056 - Escalation due to Schedule Impacts/Ameyon Aggregate	\$1,529,215	90.01 - Unallocated Contingency	
9)	DE-120				Executed Change Order No. 057 - Escalation due to Schedule Impacts/Ameyon Aggregate	\$1,177,883	90.01 - Unallocated Contingency	
10)	DECOM-000				Executed Change Order No. 014 - Estimate Secondary Emergency Access at MSP	\$50,000	90.02 - Allocated Contingency	
11)	PD-630				Executed Contract Amendment No. 012 - Contaminated Soil - Piers, Waygate Lubricators	\$183,100	90.03 - Allocated Contingency	
12)	PD-560				Executed Contract Amendment No. 003 - Scope for Downtown Station/Center Station/Ala Moana Station & Ewa Platte	\$440,017	90.02 - Allocated Contingency	
13)	PD-560				Executed Contract Amendment No. 004 - Ala Moana Transit Center Station/Ala Moana Station & Ewa Platte	\$1,018,117	90.02 - Allocated Contingency	
14)	PD-340				Executed Contract Amendment No. 005 - Addition of Ewa Entrances to HRS Stations	\$171,448	90.02 - Allocated Contingency	
15)	PD-240				Executed Contract Amendment No. 006 - Addition of 30' Guideway Section West Loch and Waipahu Stations	\$1,700,000	90.02 - Allocated Contingency	
16)	PD-340				Executed Contract Amendment No. 007 - NCCS to West Loch and Waipahu Station Design	\$1,530,000	90.02 - Allocated Contingency	
January '15 Contingency Drawdown							\$1,969,243	
January '15 - Ending Contingency Balance						\$519.8		
February '15								
1)	DE-120				Executed Change Order No. 058 - Intra-Range Channel Geotechnical	\$1,617,601	90.02 - Allocated Contingency	
2)	DE-120				Executed Change Order No. 059 - Revision of Waipahu Guideway, LCC Station & Pedestrian Viaduct Criteria	\$1,011,020	90.03 - Allocated Contingency	
3)	DE-120				Executed Change Order No. 060 - Waipahu Station Design Details	\$1,293,484	90.02 - Allocated Contingency	
4)	DE-120				Executed Change Order No. 061 - Intra-Range Station Design Details	\$1,069,311	90.02 - Allocated Contingency	
5)	DE-120				Executed Change Order No. 062 - West Loch and UPH/WD Station Revisions of Guideway	\$1,641,131	90.02 - Allocated Contingency	

HART Project Contingency Drawdown with Details

Cont as of 5/27/16

Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (Ft.)	Contingency Code
053-120	West Oahu Farmington Highway guideway DB	February '15 Contingency Drawdown	(4,186,853)	00 01 - Unallocated Contingency
February '15 - Ending Contingency Balance			\$515.6	
March '15			\$515.6	
060M-920	Core Systems Contract Design Build O&M	Excluded Change Amendment No. 015 - Test and Storage Truck Changes at WSP	(7,910,000)	00 02 - Allocated Contingency
FD-140	West Oahu Stations Group PD	Excluded Change Amendment No. 013 - WO-S5 Rebar and VE Items, 488 Bay Station Canopy Roof, Change to CSC Dow location	(1,500,000)	00 02 - Allocated Contingency
FD-140	West Oahu Stations Group PD	Excluded Change Amendment No. 013 - WO-S5 Rebar and VE Items, 488 Bay Station Canopy Roof, Change to CSC Dow location	(3,450,000)	00 03 - Contract Allowance
FD-530	City Center Corridor Utilities PD	Excluded Change Amendment No. 006 - Management Extension thru October 2014	(6,620,000)	00 02 - Allocated Contingency
0B3-525	Airport Section Guideway 7 Pier Construction	Excluded Change Order No. 001 - H001 A Utility Relocation at Piers	(4,920,063)	00 02 - Allocated Contingency
FD-340	Kamehameha Highway Stations Group PD	Excluded Change Amendment No. 006 - Misc. RFI's Interface Items	(5,509,176)	00 02 - Allocated Contingency
FD-340	Kamehameha Highway Stations Group PD	Excluded Change Amendment No. 006 - Aloha Stadium Low Impact Development Requirement	(543,000)	00 03 - Contract Allowance
March '15 Contingency Drawdown			(4,910,639)	
March '15 - Ending Contingency Balance			\$510.7	
April '15			\$510.7	
FD-140	West Oahu Stations Group PD	Excluded Contract Amendment No. 014 - Rebar on East Kapolei Escalator	(570,000)	00 02 - Allocated Contingency
FD-140	West Oahu Stations Group PD	Excluded Contract Amendment No. 014 - Hoopla Grading	(174,000)	00 03 - Contract Allowance
FD-140	West Oahu Stations Group PD	Excluded Contract Amendment No. 015 - Redesign of SPSS Trench at S53 and CSC, Cabinets at East Kapolei	(53,000)	00 02 - Allocated Contingency
FD-525	Airport Section Guideway 7 Pier Construction	Excluded Change Order No. 002 - Contractor to Perform CSL Testing	(317,276)	00 02 - Allocated Contingency
0B3-120	West Oahu Farmington Highway guideway DB	Excluded Change Order No. 049 - Habitat Assessment for LOC-Footables	(89,134)	00 02 - Allocated Contingency
April '15 Contingency Drawdown			(626,666)	
April '15 - Ending Contingency Balance			\$510.4	
May '15			\$510.4	
FD-140	West Oahu Stations Group PD	Excluded Contract Amendment No. 016 - PSB/over to Canopy Design/Power to Hoopla Station Courtyard/Measures	(1,132,000)	00 03 - Contract Allowance
FD-340	Farmington Highway Stations Group-2 PD	Excluded Contract Amendment No. 009 - West Loch Generator	(37,000)	00 03 - Contract Allowance
FD-440	Airport Stations Group PD	Excluded Contract Amendment No. 004 - HA Construction for redigations	(520,000)	00 03 - Contract Allowance
0B3-120	Kamehameha Highway guideway DB	Excluded Change Order No. 016 - Delay to Midblock Shaft #1	(1,211,000)	00 02 - Allocated Contingency
0B0M-920	Core Systems Contract Design Build O&M	Excluded Change Order No. 016 - Update Passenger Counters Onboard Time 2/1/16 Provisions on Veh	(114,161)	00 02 - Allocated Contingency
0B3-100	Maintenance & Storage Facility DB	Excluded Change Order No. 030 - OSB 1st Floor/1st Floor System Design Rler	(620,000)	00 02 - Allocated Contingency
May '15 Contingency Drawdown			(6516,630)	
May '15 - Ending Contingency Balance			\$509.8	
June '15			\$509.8	
MM-923	E001 Construction Consultant City center	Budget Transfer from Inactive CSP: H001 Airport consultant took on City Center scope	\$1,054,782	00 01 - Unallocated Contingency
MM-923	Architectural & Cultural Monitoring	Budget Transfer to Provide funding for FY2015	(551,000)	00 01 - Unallocated Contingency
MM-923	E001 cost	Excluded Contract Amendment No. 033 - Airport Design Build Package	(523,640)	00 02 - Allocated Contingency
MM-901	Program Management Support Const/Phase-2	Budget Transfer for cancelled option for one year extension of services	(87,018,317)	00 01 - Unallocated Contingency
0B0M-920	Core Systems Contract Design Build O&M	Budget Transfer for on call Contractor performing CSC related scope at the ROC	(1,694,000)	00 02 - Allocated Contingency
June '15 Contingency Drawdown			(88,106,327)	
June '15 - Ending Contingency Balance			\$501.7	
July '15			\$501.7	
FDH-100	City and County of Honolulu	Inactive CSP (D1S costs) reduces budget to incurred costs	\$410,596	00 01 - Unallocated Contingency
DB-120	West Oahu Farmington Highway guideway DB	Excluded Contract Change Order No. 065 - Rebar of LOC-Problems/Fish Lot	(5,920,979)	00 01 - Unallocated Contingency
DB-120	West Oahu Farmington Highway guideway DB	Excluded Contract Change Order No. 066 - Rebar Offset L L Lane at Kahuili	(1,755,000)	00 01 - Unallocated Contingency
DB-120	West Oahu Farmington Highway guideway DB	Excluded Contract Change Order No. 067 - Revised West Yard Lead	(1,234,856)	00 01 - Unallocated Contingency
DB-120	Maintenance & Storage Facility DB	Excluded Contract Change Order No. 031 - NOVA Interior Bldg Systems Utilities	(1,500,000)	00 02 - Allocated Contingency
DB-120	Maintenance & Storage Facility DB	Excluded Contract Change Order No. 032 - Revision of Vegetative Roof Request	(1,553,415)	00 02 - Allocated Contingency
July '15 Contingency Drawdown			(1,807,656)	
July '15 - Ending Contingency Balance			\$500.7	
August '15			\$500.7	
DB-120	West Oahu Farmington Highway guideway DB	Excluded Contract Change Order No. 068 - Delay RTTP 2 & 4 - OMC Escalation	(6,229,450)	00 01 - Unallocated Contingency
DB-120	Maintenance & Storage Facility DB	Excluded Contract Change Order No. 033 - E003-remediation	(446,179)	00 02 - Allocated Contingency
DB-120	Kamehameha Highway guideway DB	Excluded Change Order No. 017 - Redesign Sewer Main 935+00 to 947+00	(1,191,700)	00 02 - Allocated Contingency
FD-140	West Oahu Stations Group PD	Excluded Contract Amendment No. 017 - Power to LEHAW Station and Electrical Bonding	(448,000)	00 03 - Contract Allowance
FD-340	Farmington Highway Stations Group-2 PD	Excluded Contract Amendment No. 010 - Pedestrian Bridge Modification	(119,150)	00 03 - Contract Allowance
FD-340	Kamehameha Highway Stations Group PD	Excluded Change Amend H0 007 - Value Engineering Rebar, Sp Coat and PH, PS, and AS New Platform Canopy Contribution	(824,632)	00 02 - Allocated Contingency
FD-340	Airport Stations Group PD	Excluded Contract Amendment No. 065 - Design Build Document	(270,000)	00 02 - Allocated Contingency
0B0M-920	Core Systems Contract Design Build O&M	Excluded Change Order No. 017 - Usage Finder Study	(181,950)	00 02 - Allocated Contingency
FD-350	Kingman Park Station Group PD	Excluded Change Amend No. 0006 - Scope of Change - Schedule Extension	(433,156)	00 02 - Allocated Contingency
August '15 Contingency Drawdown			(17,106,631)	
August '15 - Ending Contingency Balance			\$492.9	
September '15			\$492.9	
DB-120	Kamehameha Highway guideway DB	Excluded Contract Change Order No. 018 - Blurred Subsurface at Blaney 4246 Utility Utility from RFP	(673,331)	00 02 - Allocated Contingency
September '15 Contingency Drawdown			(673,331)	
September '15 - Ending Contingency Balance			\$492.8	

HART Project Contingency Drawdown with Details

Data as of 5/27/16

#	Project No.	Project Desc.	Budget/Transfer/Change Description	Contingency Drawdown (\$)	Contingency Code
Oct'15					
1)	FD-340	Kamehameha Highway Stations Group PD	Executed Change Amend No. 008 - Interface Coordination	\$492.8	00.02 - Allocated Contingency
2)	FD-340	Kamehameha Highway Stations Group PD	Executed Change Amend No. 009 - Reprint of NTHA		00.02 - Allocated Contingency
3)	FD-240	Arrington Highway Stations Group 2 PD	Executed Change Amend No. 011 - NTP2 Extension		00.02 - Allocated Contingency
4)	FD-240	Arrington Highway Stations Group 2 PD	Executed Change Amend No. 012 - VA Switchgear Pack & TSSS Foundation		00.02 - Allocated Contingency
5)	FD-140	West Oahu Stations Group PD	Executed Contract Amendment No. 018 - RTF-A Replacement		00.02 - Allocated Contingency
6)	FD-140	West Oahu Stations Group PD	Executed Contract Amendment No. 019 - East Kapiolei Band Walkways		00.03 - Contract Allowance
7)	FD-480	Airport Stations Group PD	Executed Contract Amendment No. 008 - General Excise Tax Credit	\$68,553	00.02 - Allocated Contingency
8)	DB00M-020	Core Systems Contract Design Build O&M	Executed Change Order No. 018 - Settlement of RFCC 000026/000. Delay Claim Resolution	\$8,300,000	00.02 - Allocated Contingency
9)	DB00M-020	Core Systems Contract Design Build O&M	Executed Change Order No. 019 - Credit for four CAR contracts. Reallocates the requirements for mixed fleet operations	\$5,200,000	00.02 - Allocated Contingency
			Oct '15 Contingency Drawdown	\$5,100,000	
Nov'15					
			Oct '15 - Ending Contingency Balance	\$489.0	
1)	DB-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 035 - Replace Chimneys to Color Scheme	\$489.0	00.02 - Allocated Contingency
2)	DB-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 037 - AIS Horizontal Unit Credit from COO 0007	\$685,904	00.02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 038 - Unpaid Suspension Amounts	\$171,110	00.02 - Allocated Contingency
4)	DB-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 039 - Escalation of Additional Design Services Due to Schedule	\$78,000	00.02 - Allocated Contingency
5)	MM-010	Fair Collection Consultant	Budget Transfer for Contract Award - MM19 OF Fair Collection Consultant	\$1,178,500	00.05 - Contract Allowance
			Nov '15 Contingency Drawdown	\$1,778,120	
			Nov '15 - Ending Contingency Balance	\$488.2	
Dec'15					
			Nov '15 - Ending Contingency Balance	\$488.2	
1)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 069 - Bitty Reducible at Waipahu Depot	\$488.2	00.01 - Unallocated Contingency
2)	DB-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 041 - Payment of 30 work day to AI	\$151,663	00.02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 038 - New Building System Design. MCM Interest Bldg Sys Dev P&I and O&M later Bldg Sys Dev P&I	\$130,000	00.02 - Allocated Contingency
4)	DB-330	Kamehameha Highway guideway DB	Executed Contract Change Order No. 019 - Reallocate Building Card Frames. HCO1 additional scope - design build	\$87,891	00.02 - Allocated Contingency
5)	FD-550	City Center Guideway Utilities PD	Executed Change Amend No. 007 - City Center Reopening	\$14,030	00.02 - Allocated Contingency
			Dec '15 Contingency Drawdown	\$659,587	
			Dec '15 - Ending Contingency Balance	\$487.3	
Jan'16					
			Dec '15 - Ending Contingency Balance	\$487.3	
1)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 010 - Equipment Relocation	\$103,000	00.01 - Unallocated Contingency
2)	DB-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 040 - Layout Direct Fabricated Turnout	\$42,934	00.02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Executed Contract Change Order No. 042 - Mainline Rail Material Quantities	\$38,000	00.02 - Allocated Contingency
4)	DBB-525	Airport Section Guideway 7 Pier Construction	Executed Change Order No. 004 - Adjustment for Unapplied Allowance	\$571,28	00.02 - Allocated Contingency
5)	DBB-525	Airport Section Guideway 7 Pier Construction	Executed Change Order No. 005 - Chg Elevation Change. Access to Pier 5&6 55'6"	\$68,330	00.02 - Allocated Contingency
			Jan '16 Contingency Drawdown	\$145,856	
			Jan '16 - Ending Contingency Balance	\$487.4	
Feb'16					
			Jan '16 - Ending Contingency Balance	\$487.4	
1)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 073 - Escal Due to Schedule Impacts P.1	\$11,950,000	00.01 - Unallocated Contingency
2)	DB00M-020	Core Systems Contract Design Build O&M	Executed Change Order No. 020 - Airport City Center Alignment	\$47,500	00.02 - Allocated Contingency
3)	DB00M-020	Core Systems Contract Design Build O&M	Executed Change Order No. 021 - FOC Reallocate To DBS Patch Panel	\$17,307,500	00.02 - Allocated Contingency
			Feb '16 Contingency Drawdown	\$29,755,000	
			Feb '16 - Ending Contingency Balance	\$473.1	
Mar'16					
			Feb '16 - Ending Contingency Balance	\$473.1	
1)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 076 - Addition of Demos of Existing Structures	\$29,000	00.01 - Unallocated Contingency
2)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 077 - Pre-Cast Yield Extended Lease	\$519,536	00.01 - Unallocated Contingency
3)	DB-330	Kamehameha Highway guideway DB	Executed Contract Change Order No. 021 - HCO1 Fence in Roadway Median, Transfer Pipe at 1st Durbin	\$15,418	00.02 - Allocated Contingency
4)	DB-330	Kamehameha Highway guideway DB	Executed Contract Change Order No. 022 - HCO1 Single Lane Diagrams	\$413,319	00.02 - Allocated Contingency
5)	DB00M-020	Core Systems Contract Design Build O&M	Executed Change Order No. 022 - Obstruction Detection	\$530,000	00.02 - Allocated Contingency
6)	DB00M-020	Core Systems Contract Design Build O&M	Executed Change Order No. 023 - Removal of Station Pre-Spallers	\$77,000	00.02 - Allocated Contingency
7)	DB00M-020	Core Systems Contract Design Build O&M	Executed Change Order No. 001 - Added Sub for future Downspout at Vahalaeha. Street and Nimitz Highway	\$4,000	00.03 - Contract Allowance
8)	DBB-505	Airport Section Utilities	Executed Change Order No. 003 - Pictorial of Water Line JVI 012 conflict	\$5,660	00.03 - Contract Allowance
			Mar '16 Contingency Drawdown	\$1,064,633	
			Mar '16 - Ending Contingency Balance	\$473.5	
Apr'16					
			Mar '16 - Ending Contingency Balance	\$473.5	
1)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 078 - Left Turn Farrowing Hwy at 1st Leases	\$172,000	00.01 - Unallocated Contingency
2)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 079 - 86 Foot clearance at Conflict 3-265-E1	\$5,402	00.02 - Allocated Contingency
3)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 080 - Unknown Utility 2 inch Gas Line	\$16,869	00.02 - Allocated Contingency
4)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 081 - ATT Locations in 705.M1	\$6,300	00.02 - Allocated Contingency
5)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 082 - RFCC 00118 Transfer Pipe Removal at Sta 611+41	\$44,174	00.02 - Allocated Contingency
6)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 083 - Sewer Wire Materialization (RFCC 00121)	\$44,116	00.02 - Allocated Contingency
7)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 084 - HFL Issues at 180th Contract 603.15 (RFCC 00125)	\$6,000	00.02 - Allocated Contingency
8)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 085 - LCC Campus Construction Impacts (RFCC 180)	\$7,143.03	00.01 - Unallocated Contingency
9)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 086 - LCC Station Access Construction Impacts (RFCC 140)	\$1,441,720	00.01 - Unallocated Contingency
10)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 087 - RFCC 00150 Hazardous Material at Outer Building	\$49,000	00.02 - Allocated Contingency
11)	DB-120	West Oahu Arrington Highway guideway DB	Executed Contract Change Order No. 088 - RFCC 00153 Debris at Shaft 258	\$31,190	00.02 - Allocated Contingency

HART Project Contingency Drawdown with Details

Data as of 5/27/16

#	Project No.	Project Desc.	Budget Transf/Change Description	Contingency Prio/Drawn (EA)	Contingency Code
12)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 099 - RFCC-00134 Shift 211 650-ET Conflict	\$22,760	90.02 - Allocated Contingency
13)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 090 - RFCC-00138 Unincorporated Irrigation Lines at WHS	\$2,874	90.02 - Allocated Contingency
14)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 091 - Issue 000159 A/S Provisional Sum Reconciliation	\$1,093,600	90.02 - Allocated Contingency
15)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 092 - RFCC-00028 East to West 1/2 Mile Vertical Clearance Provisions	\$519,369	90.02 - Allocated Contingency
16)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 093 - RFCC-00034 West to East 1/2 Mile Vertical Clearance Provisions	\$6,112	90.02 - Allocated Contingency
17)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 095 - RFCC-00037 Emergency Walkway - Guideway Areas	\$571,100	90.02 - Allocated Contingency
18)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 096 - RFCC-00038 Unimproved 24" Storm Drain Line	\$300,194	90.02 - Allocated Contingency
19)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 097 - RFCC-00042 Additional Drainage Requirements	\$775,000	90.02 - Allocated Contingency
20)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 098 - WOFH Precast Yard Lease Extension to Jun16	\$518,836	90.01 - Unallocated Contingency
21)	DB-120	Kamehameha Highway Guideway DB	Executed Contract Change Order No. 093 - Provisional Sum - HECO Utility Conflict	\$80,000	90.02 - Allocated Contingency
22)	DB-120	Kamehameha Highway Guideway DB	Executed Contract Change Order No. 094 - Issue 225 HECO Conflict 12-943-ET Ductbank Constr.	\$550,000	90.02 - Allocated Contingency
23)	DB-120	Kamehameha Highway Guideway DB	Executed Contract Change Order No. 097 - RF-0000077 Station Loads and Configuration Changes - Construction	\$610,000	90.02 - Allocated Contingency
24)	DB-120	Kamehameha Highway Guideway DB	Executed Contract Change Order No. 099 - RFCC-00009 - O&P and Builder's Risk Credit	\$1,223,824	90.02 - Allocated Contingency
25)	DB-505	Airport Section Utilities	Executed Change Order No. 004 - RFCC-00009 - O&P and Builder's Risk Credit	\$303,369	90.03 - Contract Allowance
26)	DB-505	Airport Section Utilities	Executed Change Order No. 006 - RFCC-00006 - Impacts Due to Heavy R/OE Delay	\$649,430	90.03 - Contract Allowance
27)	DB-505	Airport Section Utilities	Executed Change Order No. 008 - RFCC-00002-HFI Scope Revision - Kamehameha Hwy	\$264,112	90.03 - Contract Allowance
28)	DB-AM-920	Core Systems Contract Design Build O&M	Executed Change Order No. 043 - TC Design for Future Platform V&P	\$562,000	90.02 - Allocated Contingency
29)	DB-AM-920	Core Systems Contract Design Build O&M	Executed Change Order No. 029 - UPS Transformer Winding Temperature	\$75,000	90.02 - Allocated Contingency
30)	FD-180	West Oahu Stations Group HD	Executed Contract Amendment No. 021 - Ala Moana Canopy Design	\$5,200	90.03 - Contract Allowance
31)	FD-300	Kamehameha Highway Stations Group FD	Executed Change Amend No. 010 - Revise Elevator Drawings / Misc. RFID Items	\$100,938	90.02 - Allocated Contingency
32)	FD-520	City Center Guideway Utilities FD	Executed Change Amend No. 008 - Impacts associated with HECO	\$300,000	90.02 - Allocated Contingency
33)	MM-975	LEED Commissioning Services	Executed Change Order No. 003 - Post Construction Services	\$29,926	90.02 - Allocated Contingency
Apr '16 Contingency Drawdown				\$4,077,051	
Apr '16 - Ending Contingency Balance				\$469.5	
May '16				\$469.5	
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 099 - Decision of Station Platform Orders (RF-0000680)	\$51,856	90.02 - Allocated Contingency
2)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 100 - RFCC-00126 - Hazmat Transfer Pipe Removal at STA	\$48,256	90.02 - Allocated Contingency
3)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 102 - Hazardous Materials at Outer Property	\$182,269	90.02 - Allocated Contingency
May '16 Contingency Drawdown				\$21,251	
May '16 - Ending Contingency Balance				\$469.7	
Jun '16 - Board Approved Changes Only - Pending Execution				\$469.7	
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Contract Change Order No. 0104 - Contaminated Material at Moabai Ris	\$1,675,000	90.01 - Unallocated Contingency
Subtotal Board Approved Contingency Drawdown				\$1,675,000	
May '16 - Ending Contingency Balance (Pending Execution)				\$467.8	

Appendix C. Project Cost Reports (data as of May 27, 2016)

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

Project Costs by Contract



Costs Reported as of Month Ending: May 2016

Project Monthly Cost Report by Contract - One Line Summary
5/27/16

Page: 1 of 3

CPP No	Title	A		B	C=A+B		D		E	F
		Original	COMMITTED Changes		Current *	AFE	AFE**	INCURRED		
ART	ART Contracts	124,000	0	124,000	0	124,000	0	0	6,200	5%
CCH-100	Inactive Hart/Qty CCH	15,348,443	0	15,348,443	0	15,348,443	0	0	14,925,228	97%
CCH-101	HART/Qty Dept of BFS	105,092	0	105,092	0	105,092	0	0	0	0%
CCH-102	HART/Qty DDC Land Division	256,201	0	256,201	0	256,201	0	0	173,182	68%
CCH-107	HART/Qty Corporation Counsel (COR)	1,816,253	250,000	1,866,253	250,000	1,866,253	250,000	250,000	217,347	12%
CCH-108	HART /Board of Water Supply (BWS)	928,325	0	928,325	0	928,325	0	0	928,325	100%
DB-120	West Oahu/Farrington Hwy Guideway DB	482,924,000	164,676,628	647,600,628	647,600,628	647,600,628	648,433,042	648,433,042	580,515,254	90%
DB-200	Maintenance & Storage Facility DB	195,258,000	79,592,776	274,850,776	274,850,776	274,850,776	207,881,510	207,881,510	271,532,758	99%
DB-320	Kamehameha Hwy Guideway DB	372,150,000	17,322,586	389,472,586	389,472,586	389,472,586	389,472,586	389,472,586	252,758,722	65%
DBB-171	West Oahu Station Group DBB	56,088,470	0	56,088,470	0	56,088,470	56,088,470	56,088,470	361,800	1%
DBB-185	SPCD - West Side SG Construction	0	0	0	0	0	0	0	0	0%
DBB-271	Farrington Highway Station Group DBB	78,999,000	0	78,999,000	0	78,999,000	78,999,000	78,999,000	450,000	1%
DBB-275	SPCD-Pearl Highlands Pk.g. Str. Constr.	0	0	0	0	0	0	0	0	0%
DBB-371	Kamehameha Hwy Stations Grp. DBB	115,805,845	0	115,805,845	0	115,805,845	0	0	0	0%
DBB-385	Ramp H2R2	5,203,646	0	5,203,646	0	5,203,646	5,203,646	5,203,646	1,246,866	24%
DBB-470	SPCD-Airport Station Group Constr.	0	0	0	0	0	0	0	0	0%
DBB-505	Airport Section Utilities Constr. DBB	27,993,290	-478,477	27,514,812	-478,477	27,514,812	27,935,497	27,935,497	12,930,245	47%
DBB-510	City Ctr. Section Util. Constr. DBB	0	0	0	0	0	0	0	0	0%
DBB-520	SPCD-Airport-City Center Gateway Cntr.	0	0	0	0	0	0	0	0	0%
DBB-525	Airport Section Guideway 7 Pier DBB	3,973,000	548,443	4,027,843	548,443	4,027,843	4,027,843	4,027,843	4,027,843	100%
DBB-580	SPCD-Dillingham/Kaka'ako S.G. Cntr.	0	0	0	0	0	0	0	0	0%
DBB-600	Park-and-Ride Lots Construction	0	0	0	0	0	0	0	0	0%
DBO M-920	Core Systems Design/Build O/M	573,782,793	26,060,894	599,843,687	26,060,894	599,843,687	583,928,675	583,928,675	199,202,996	33%
FD-140	West Oahu Station Group FD	7,789,000	2,402,989	10,191,989	2,402,989	10,191,989	10,053,995	10,053,995	9,199,096	90%
FD-240	Farrington Highway Stations Group FD	9,300,696	4,981,349	14,282,045	4,981,349	14,282,045	12,078,454	12,078,454	12,577,157	88%
FD-245	SPCD-Pearl Highlands Pk.g. Str. FD	0	0	0	0	0	0	0	0	0%
FD-340	Kamehameha Hwy Station Group FD	8,702,592	1,257,636	9,960,228	1,257,636	9,960,228	9,940,890	9,940,890	9,317,068	94%
FD-480	SPCD-Airport Sect. Guideway/Util. FD	38,840,960	4,293,512	43,134,472	4,293,512	43,134,472	43,134,472	43,134,472	41,817,484	96%
FD-440	SPCD-Airport Station Group FD	10,177,365	1,396,487	11,573,852	1,396,487	11,573,852	10,635,793	10,635,793	9,983,402	86%
FD-530	SPCD - City Center Guideway/Util. FD	43,948,220	3,149,342	47,097,562	3,149,342	47,097,562	44,481,241	44,481,241	42,819,804	91%
FD-550	SPCD - Dillingham and Kaka'ako S.G. FD	18,321,918	1,309,799	19,631,717	1,309,799	19,631,717	16,056,412	16,056,412	11,875,668	60%
FD-600	Park-and-Ride Lots Final Design	0	0	0	0	0	0	0	0	0%
HRT-200	HART Labor	50,951,942	0	50,951,942	0	50,951,942	0	0	50,204,818	99%

m_cw_pnoc_monthly_contract_ovr_hdr - No. 19

* Current Committed = Original Contract + CCO/Amendment
 ** AFE = Authorized For Expenditure (Latest NTP Amounts or equal to current commitment Plus Executed Change Orders/Amendments)

Print 6/10/16 19:10



Costs Reported as of Month Ending: May 2016

Project Monthly Cost Report by Contract - One Line Summary

5/27/16 Page: 2 of 3

CPP No	Title	A		B		C=A+B		D		E		F	
		Original	Changes	COMMITTED	Current *	AFE	AFE**	INCURRED	Incurred To Date	PERCENT	PERCENT		
HRT-201	HART ODC Contracts	16,311,124	82,122	16,393,246	16,393,246	412,182	21,965,613	134%					
M-900	Fare Collection DFI	15,464,198	0	15,464,198	15,464,198	593,840	4%						
M-930	Elevators & Escalators Install/Maint	50,982,714	1,016,321	51,999,035	51,999,035	6,458,429	12%						
MM-280	SPCD-WDFH/KHSG CE&I(REPACKAGED)	0	0	0	0	0	0%						
MM-290	Construction Engrg & Insp CEI West	54,232,480	0	54,232,480	54,232,480	16,650,000	47%						
MM-385	SPCD-Pearl Highlands Damage Rmpc CEI	0	0	0	0	0	0%						
MM-500	SPCD-By M959 CEI East	0	0	0	0	0	0%						
MM-525	SPCD-By M959 CEI East	0	0	0	0	0	0%						
MM-580	SPCD-By M959 CEI East	0	0	0	0	0	0%						
MM-585	SPCD - Const. Engrg & Insp. CEI East	63,083,417	-50,377,317	12,706,100	12,706,100	(85,120,317)	37%						
MM-586	Construction Engrg & Insp CEI East 2	55,036,130	0	55,036,130	55,036,130	4,917,370	9%						
MM-600	SPCD-UHWO Pkg-Hooplii Stn Frsh CEI	0	0	0	0	0	0%						
MM-900	Program Mgt Support Const (PMS-C-1)	15,952,569	0	15,952,569	15,952,569	20,700,000	0%						
MM-901	Program Mgt Support Const (PMS-C-2)	33,376,897	18,444,023	51,820,920	51,820,920	45,124,813	81%						
MM-905	MM-905 Gen Engrg Const EIS/PE	0	78,564,942	78,564,942	78,564,942	74,157,822	94%						
MM-910	MM-910 Gen Engrg Const FD-Construct	150,000,000	0	150,000,000	150,000,000	149,446,962	100%						
MM-913	MM-913 Gen Engrg Reconnect	46,143,277	398,451	46,541,728	46,541,728	28,897,965	62%						
MM-915	HDOT Traffic Mgmt. Consult.	1,600,000	2,400,000	4,000,000	4,000,000	3,319,751	83%						
MM-920	HDOT Coordination Const WDFH	3,000,000	6,500,000	9,500,000	9,500,000	6,999,835	74%						
MM-921	HDOT Coordination Const KHG	10,000,000	-1,400,000	8,600,000	8,600,000	4,389,752	51%						
MM-922	HDOT Coordination Const Airport	12,000,000	-5,600,000	6,400,000	6,400,000	2,727,863	43%						
MM-923	HDOT Coordination Const City Center	0	0	0	0	0	0%						
MM-925	HDOT Labor - WDFH/KHSG Agreements	550,000	1,265,633	1,815,633	1,815,633	3,081,266	100%						
MM-926	HDOT Labor - Airport Agreements	0	0	0	0	0	0%						
MM-930	HDOT State SOA Manager & Consultant	1,272,400	583,142	1,855,542	1,855,542	902,107	49%						
MM-935	Real Estate Consultant	3,000,000	5,077,665	8,077,665	8,077,665	6,555,895	81%						
MM-937	Real Estate Consultant - Maps/Surv.	2,998,000	0	2,998,000	2,998,000	1,056,637	35%						
MM-940	Kako'o Consultant	1,000,000	0	1,000,000	1,000,000	526,643	53%						
MM-941	Kako'o Consultant II	200,000	0	200,000	200,000	33,333	17%						
MM-945	On-Call Contractor	1,000,000	1,000,000	2,000,000	2,000,000	1,952,468	98%						
MM-946	On-Call Hazmat Removal Contractor	3,075,000	75,000	3,150,000	3,150,000	2,921,560	93%						
MM-947	On-Call Contractor 2	7,500,000	0	7,500,000	7,500,000	4,544,869	61%						
MM-950	OCIP Consultant	1,250,000	0	1,250,000	1,250,000	1,059,219	85%						

* Current Committed = Original Contract + CCO/Amendment

** AFE = Authorized For Expenditure (Latest NIP Amounts or equal to current commitment Plus Executed Change Orders/Amendments)

m_low_pmoc_monthly_contract_one_line - No. 19

Print 6/10/16 19:10



Costs Reported as of Month Ending: May 2016

Project Monthly Cost Report by Contract - One Line Summary

5/27/16 Page: 3 of 3

CPP No	Title	A		B		C=A+B		D		E		F	
		Original	Changes	COMMITTED	Current *	AFE	AFE**	INCURRED To Date	INCURRED To Date	PERCENT	PERCENT		
MM-951	Owner-Controlled Insurance Program	41,000,000	0	41,000,000	41,000,000	0	0	26,542,505	65%				
MM-960	Archaeological & Cultural Monitoring	1,658,474	0	1,658,474	1,658,474	1,658,474	1,658,474	1,426,021	86%				
MM-962	Core Systems Support	43,988,989	0	43,988,989	43,988,989	3,600,000	3,600,000	16,123,918	37%				
MM-964	Safety and Security Consultant	4,699,573	112,751	4,812,324	4,812,324	4,012,751	4,012,751	3,472,697	72%				
MM-970	Fare Collection Consultant	1,178,300	0	1,178,300	1,178,300	1,178,300	1,178,300	42,037	4%				
MM-975	LEED Commissioning Services for MSF	278,630	39,900	318,530	318,530	318,530	318,530	170,560	54%				
OTHER	All Project Wide Documents	0	0	0	0	0	0	0	0%				
PA-101	Programmatic Agreement Humanities	0	0	0	0	0	0	0	0%				
PA-102	Programmatic Agreement HPC	400,000	0	400,000	400,000	200,000	200,000	176,809	44%				
PA-103	Programmatic Agreement HPC Park Impr	0	0	0	0	0	0	0	0%				
ROW	Real Estate / Right-of-Way	109,885,511	0	109,885,511	109,885,511	121,992	121,992	111,228,308	101%				
UTIL	Utility Company Contracts	95,637,272	-1,920,761	93,716,512	93,716,512	71,809,181	71,809,181	54,182,374	58%				
Total Project:		2,966,344,005	362,532,235	3,328,876,240	3,328,876,240	2,668,706,687	2,668,706,687						

* Current Committed = Original Contract + COO/Amendment

** AFE = Authorized For Expenditure (Latest NTP Amounts or equal to current commitment Plus Executed Change Orders/Amendments)

Project Costs by SCC – Level 2



Costs Reported as of Month Ending: May 2016
Project Monthly Cost Report by SCC Details

5/27/16

Page: 1 of 3

SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G	I
		Baseline	Transfers	BUDGET	COMMITTED	Current	Current*						
1. Subtotal 10 - 80 SCC Costs													
NTP.2		0	0	0	0	0	0	0	0	0	0	0	0
10.02	Guideway & Track Elements	1,114,215,147	44,071,133	1,158,286,280	549,126,727	36,073,579	957,914	1,158,286,280	0	388,415,819	0	0	0
10.04	Guideway: A-grade semi-exclusive	0	17,378	17,378	0	17,378	0	17,378	0	17,378	0	0	17,378
10.04	Guideway: Aerial Structure	1,022,380,671	41,511,056	1,063,891,727	464,239,973	26,827,936	957,914	1,063,891,727	0	333,788,738	0	0	2,095,882
10.05	Guideway: Built-up fill	0	0	0	0	0	0	0	0	0	0	0	0
10.08	Guideway: Retained Cut or Fill	7,482,944	(1,056,688)	6,426,256	6,426,256	0	0	6,426,256	0	0	0	0	0
10.09	Track: Direct Fixation	79,347,205	2,664,360	82,011,565	74,204,369	9,197,889	0	82,011,565	0	52,482,945	0	0	0
10.11	Track: Ballasted	3,293,724	(535,849)	2,697,875	2,697,875	0	0	2,697,875	0	0	0	0	0
10.12	Track: Special (Switches, turnouts)	1,700,803	1,530,876	3,231,679	1,530,876	30,876	0	3,231,679	0	30,876	0	0	30,876
20. Stations Stops, Terminals, Intermodal	421,804,740	(2,189,630)	419,615,110	302,892,630	1,016,321	1,182,958	419,615,110	0	6,008,981	0	0	0	0
20.01	A-grade station, stop, shelter...	6,111,332	(6,111,332)	0	0	0	0	0	0	0	0	0	0
20.02	Aerial Station, stop, shelter, mall	294,563,457	6,643,853	301,207,310	250,893,315	0	785,600	301,207,310	0	0	0	0	0
20.06	Automobile parking multi-story str	66,408,765	0	66,408,765	0	0	0	66,408,765	0	0	0	0	0
20.07	Elevators, Escalators	54,721,186	(2,722,151)	51,999,035	51,999,035	1,016,321	397,368	51,999,035	0	6,008,981	0	0	0
30. Support Facilities, Yards, Shops, Admin	92,535,015	22,731,655	115,266,670	115,402,782	19,053,118	7,792	115,266,670	0	116,534,536	0	0	0	0
30.01	Administration Bldg; Office, sales	0	231,250	231,250	231,250	231,250	0	231,250	0	205,266	0	0	0
30.02	Light Maintenance Facility	7,591,888	(9,184)	7,582,704	7,582,704	(4,089)	0	7,582,704	0	7,537,692	0	0	7,537,692
30.03	Heavy Maintenance Facility	38,099,138	5,108,668	43,207,806	43,207,806	5,350,776	0	43,207,806	0	43,248,881	0	0	43,248,881
30.04	Storage or Maintenance of Way Buil	7,797,460	819,670	8,617,130	8,753,242	1,017,332	0	8,617,130	0	8,650,085	0	0	8,650,085
30.05	Yard and Yard Track	39,046,529	16,581,251	55,627,780	55,627,780	12,463,849	7,792	55,627,780	0	56,892,622	0	0	56,892,622
40. Sitework & Special Conditions	983,178,121	37,815,070	1,020,994,191	733,609,614	166,528,940	1,350,301	1,020,994,191	0	573,088,075	0	0	0	0
40.01	Demolition, Clearing, Earthwork	29,380,138	(9,066,868)	20,313,270	10,804,041	1,505,797	0	20,313,270	0	4,492,846	0	0	4,492,846
40.02	Site Utilities, Utility Relocation	299,449,756	(353,895)	299,095,861	196,993,138	43,483,53	58,531	299,095,861	0	129,218,985	0	0	129,218,985
40.03	Haz. mat'l, contain'd soil removal	9,199,237	(5,059,433)	4,139,804	3,798,286	453,286	1,483,696	4,139,804	0	3,117,547	0	0	3,117,547
40.04	Environmental Mitigation	26,979,122	4,990,976	31,970,098	16,557,672	16,864	0	31,970,098	0	11,384,137	0	0	11,384,137
40.05	Site structures, retaining walls,	7,996,960	11,000,743	18,997,703	14,691,531	4,734,683	14,574	18,997,703	0	5,957,823	0	0	5,957,823
40.06	Pedestrian/bike access/landscaping	41,073,897	(5,627,874)	35,446,023	5,697,888	473,454	143,500	35,446,023	0	1,485,794	0	0	1,485,794
40.07	Auto, bus, van accessways	181,979,367	(17,592,167)	164,387,200	38,506,351	2,438,835	0	164,387,200	0	5,708,044	0	0	5,708,044
40.08	Temporary Facilities/Indirect Cost	386,517,624	59,524,588	446,042,212	446,630,708	151,957,367	250,000	446,042,212	0	411,723,009	0	0	411,723,009

Report: H_Civil_Proc_mnth_V_Scc_Details - No. 23

* Current Committed = Original Contract + CCO/Amendment

** AFE = Authorized For Expenditure (Latest NTP Amounts or equal to current commitment Plus Executed Change Orders/Amendments)

*** Changes Identified= Pending + Probable + Potential Changes

**** Est. At Completion = Original Contract + CCO/Amendments + Changes Identified

Print Date: 6/10/16 19:31



Costs Reported as of Month Ending: May 2016
Project Monthly Cost Report by SCC Details

5/27/16

Page: 2 of 3

SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G	I
		Baseline	Transfers	BUDGET	Current	COMMITTED	AFE	ESTIMATE AT COMPLETION	INCURRED	Changes ID'd***	Est. At Completion***	Variance	Incurred To Date
1. Subtotal 10 - 80 SCC Costs													
50. Systems		221,284,301	27,474,531	248,758,832	249,062,816	27,038,039	487,000	248,758,832	0	0	0	52,716,182	
50.01	Train control and signals	81,982,556	24,381,140	106,363,696	106,363,696	23,961,030	0	106,363,696	0	0	0	6,989,403	
50.02	Traffic signals and crossing prot.	10,458,226	(206,890)	10,251,336	0	0	0	10,251,336	0	0	0	0	
50.03	Traction power supply: substation	29,500,926	1,379,880	30,880,806	30,880,806	(87,485)	437,000	30,880,806	0	0	0	6,070,239	
50.04	Traction power distribution: cat	32,878,150	5,059,838	37,937,988	37,937,988	7,941,115	0	37,937,988	0	0	0	22,444,552	
50.05	Communications	53,691,339	6,133,477	59,824,816	59,824,816	5,573,419	0	59,824,816	0	0	0	17,708,011	
50.06	Fare collection system and equipm	9,159,277	(9,112,878)	46,399	15,510,537	(10,350,000)	0	46,399	0	0	0	(496,024)	
50.07	Central Control	3,613,827	(160,036)	3,453,791	3,453,791	0	0	3,453,791	0	0	0	0	
80. ROW, Land, Existing Improvements		197,397,947	515,616	197,913,563	114,952,226	2,066,815	5,000,000	197,913,563	0	0	0	118,101,018	
80.01	Purchase or lease of real estate	179,360,664	237,816	179,598,480	97,256,849	39,015	5,000,000	179,598,480	0	0	0	104,405,768	
80.02	Relocation of existing households	18,037,293	277,800	18,315,093	17,695,477	2,027,800	0	18,315,093	0	0	0	13,695,250	
70. Vehicles		186,829,020	4,645,501	191,474,521	191,474,521	1,446,224	40,000	191,474,521	0	0	0	42,773,570	
70.01	Light Rail	166,721,386	5,847,191	172,568,577	172,568,577	1,446,224	0	172,568,577	0	0	0	31,815,624	
70.06	Non-revenue vehicles	14,346,923	(1,320,375)	13,026,548	13,026,548	0	40,000	13,026,548	0	0	0	10,957,946	
70.07	Spare parts	5,760,711	118,685	5,879,396	5,879,396	0	0	5,879,396	0	0	0	0	
80. Professional Services		1,087,890,119	38,802,015	1,126,692,134	1,066,710,128	111,596,761	(26,348,953)	1,126,692,134	0	0	0	824,984,951	
80.01	Preliminary Engineering	94,055,262	24,644,185	118,699,447	109,567,127	20,905,682	0	118,699,447	0	0	0	103,784,827	
80.02	Final Design	228,321,692	(4,648,993)	223,672,739	208,239,624	33,325,198	(8,068,930)	223,672,739	0	0	0	171,865,428	
80.03	Project Management Design & Cons	863,849,768	(28,315,655)	835,534,113	377,177,087	84,939,428	(17,504,214)	335,534,113	0	0	0	332,518,451	
80.04	Constr. Admin. & Management	199,656,728	(34,420,307)	165,236,421	131,252,384	(44,789,988)	0	165,236,421	0	0	0	93,473,754	
80.05	Professional Liability & other Ins	46,549,724	28,781,938	75,331,662	43,174,657	7,000,500	0	75,331,662	0	0	0	28,561,024	
80.06	Legal; Permits; Review Fees e.t...	67,641,005	(3,206,464)	64,434,541	38,203,225	5,032,033	0	64,434,541	0	0	0	22,978,337	
80.07	Surveys, Testing, Investigation, I	21,759,336	47,250,396	69,009,732	101,279,246	1,574,480	0	69,009,732	0	0	0	34,785,894	
80.08	Startup	65,996,664	8,716,816	74,713,480	57,816,477	9,909,409	(775,909)	74,713,480	0	0	0	37,017,297	
ACR	Provisional Pay Requests	0	0	0	0	0	0	0	0	0	0	21,139,376	
ACR	Provisional Request For Payment	0	0	0	0	0	0	0	0	0	0	21,139,376	
Subtotal:		4,305,074,410	173,866,892	4,478,941,302	3,323,231,265	384,258,837	(16,172,988)	4,478,941,302	0	0	0	2,143,762,458	
2. NTP													
NTP	Authorized For Expenditure	0	0	0	0	2,300,861,710	0	2,300,861,710	0	0	0	0	0
NTP	Notice To Proceed	0	0	0	0	2,300,861,710	0	2,300,861,710	0	0	0	0	0

Report #: C:\01_pm\cc_monthly_Scc_detail - No. 23

* **Current Committed = Original Contract + CCO/Amendment**
 ** **AFE = Authorized For Expenditure (Latest NTP Amounts or equal to current commitment Plus Executed Change Orders/Amendments)**

*** **Changes Identified= Pending + Probable + Potential Changes**

**** **Est. At Completion = Original Contract + CCO/Amendments + Changes Identified**

Print Date: 6/10/16 19:31



Costs Reported as of Month Ending: May 2016
Project Monthly Cost Report by SCC Details

Page: 3 of 3

5/27/16

SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G	I
		Baseline	Transfers	BUDGET	Transfers	COMMITTED	Current	Current*	AFE**	Changes ID'd***	Est. At Completion****	Variance	Incurred To Date
2. NTP													
NTP	Authorized For Expenditure	0	0	0	0	0	0	0	2,300,861,710	0	0	0	0
NTP	Notice To Proceed	0	0	0	0	0	0	0	2,300,861,710	0	0	0	0
Subtotal:		0	0	0	0	0	0	0	2,300,861,710	0	0	0	0
3. Contingency													
CNTR	Allocated Contingency	541,689,343	(89,767,178)	(69,767,178)	441,922,165	5,644,975	3,019,120	342,195,410	441,922,165	0	441,922,165	0	691,455
90.02	Allocated Contract Contingency	540,101,329	(102,376,335)	(102,376,335)	437,724,994	3,019,120	3,019,120	342,228,712	437,724,994	0	437,724,994	0	691,455
90.03	Allowances	1,588,014	2,609,157	2,609,157	4,197,171	2,625,855	0	(33,302)	4,197,171	0	4,197,171	0	0
90.07	Known Change Contingency	0	0	0	0	0	0	0	0	0	0	0	0
PRJ	Unallocated Contingency	101,871,170	(74,099,714)	(74,099,714)	27,771,456	0	0	0	27,771,456	0	27,771,456	0	0
90.01	Unallocated Project Contingency	101,871,170	(74,099,714)	(74,099,714)	27,771,456	0	0	0	27,771,456	0	27,771,456	0	0
Subtotal:		643,560,513	(173,866,892)	(173,866,892)	469,693,621	5,644,975	3,019,120	342,195,410	469,693,621	0	469,693,621	0	691,455
4. Finance Charges - Eligible													
OTH	Finance Charges	173,058,243	0	0	173,058,243	0	0	0	173,058,243	0	173,058,243	0	0
100.1	Finance Charges: Project-Eligible	173,058,243	0	0	173,058,243	0	0	0	173,058,243	0	173,058,243	0	0
Subtotal:		173,058,243	0	0	173,058,243	0	0	0	173,058,243	0	173,058,243	0	0
FTA TOTAL PROJECT COSTS 5,121,693,166													
					5,121,693,166	3,328,876,240	2,668,706,687	325,422,422	5,121,693,166	0	2,144,453,913	0	2,144,453,913
4. Finance Charges - Ineligible Costs													
FINC	Finance Charges	42,000,000	0	0	42,000,000	0	0	0	42,000,000	0	42,000,000	0	0
100.2	FTA Non-Eligible Costs	42,000,000	0	0	42,000,000	0	0	0	42,000,000	0	42,000,000	0	0
Subtotal:		42,000,000	0	0	42,000,000	0	0	0	42,000,000	0	42,000,000	0	0
INELIGIBLE COSTS													
		42,000,000	0	0	42,000,000	0	0	0	42,000,000	0	42,000,000	0	0
Total Project:		5,163,693,166	(0)	(0)	5,163,693,166	3,328,876,240	325,422,422	5,163,693,166	5,163,693,166	0	2,144,453,913	0	2,144,453,913

Report: M_C10_pm00_monthly_Scc_details - No. 23

* Current Committed = Original Contract + CCO/Amendment

** AFE = Authorized For Expenditure (Latest NTP Amounts or equal to current commitment Plus Executed Change Orders/Amendments)

*** Changes Identified= Pending + Probable + Potential Changes

**** Est. At Completion = Original Contract + CCO/Amendments + Changes Identified

Print Date: 6/10/16 19:31

Appendix D. Procurement and Contract Status

Awarded Contracts						
Contract Code	Contract Name	Contractor Name	Advertise Date	Contract Date	Issue NTP	Contract Substantial Completion Date
DB-120	West O'ahu/Farrington Highway Guideway (WOFH)	Kiewit Infrastructure West Company (KIWC)	Apr 03 '09	Nov 11 '09	Dec 01 '09	Jul 07 '16
DB-200	Maintenance and Storage Facility (MSF)	Kiewit / Kobayashi Joint Venture (KKJV)	Jul 24 '09	June 30 '11	Jul 25 '11	May 02 '16
DB-320	Kamehameha Guideway (KHG)	Kiewit Infrastructure West Company (KIWC)	Mar 19 '10	June 30 '11	Jul 12 '11	Sep 16 '16
DBOM-920	Core Systems Contract	Ansaldo Honolulu JV	Aug 17 '09	Nov 26 '11	Jan 13 '12	Mar 15 '19
MI-630	Elevators and Escalators	Schindler Elevator Corporation	Dec 18 '12	Jul 31 '13	Aug 02 '13	Jun 13 '18
FD-140	West Oahu Station Group Final Design and Support	URS Corporation	Jan 14 '10	Jan 14 '12	Jan 15 '12	Jan 27 '17
FD-240	Farrington Highway Station Group Final Design and Support -2	URS Corporation	Jan 10 '13	Sep 27 '13	Sep 30 '13	Nov 14 '16
FD-340	Kamehameha Highway Station Group Final Design (includes H2/R2 Ramp) and Support	Anil Verma Associates, Inc.	Jan 28 '11	Nov 16 '12	Nov 26 '12	Jan 14 '17
FD-430	Airport Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Jan 26 '11	Dec 22 '11	Jan 05 '12	Jan 30 '17
FD-530	City Center Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Dec 16 '11	Jul 30 '12	Jul 31 '12	Apr 30 '18
FD-440	Airport Station Group Final Design and Support	AECOM Technical Services, Inc.	Mar 30 '12	Nov 7 '12	Nov 14 '12	Jul 01 '15
FD-660	Dillingham and Kaka'ako Station Groups "East Side Stations" Final Design and Support	Perkins+Will	Nov 16 '12	Aug 15 '13	Aug 19 '13	Jul 30 '18
MM-290	Construction Engineering & Inspection West Side Sections	PGH Weng Engineering, Inc.	Jul 26 '13	Jan 9 '14	Jan 09 '14	Jan 09 '20
MM-596	Construction Engineering & Inspection East Side Sections	URS Corporation	Jul 26 '13	Jan 07 '14	Jan 09 '14	Oct 09 '15
MM-901	Program Management Support Consultant - 2 (PMSC-2)	InfraConsult LLC	Aug 03 '11	Feb 28 '12	Mar 08 '12	Mar 07 '17
MM-910	General Engineering Consultant II (GEC-2) (Final Design and Construction)	Parsons Brinckerhoff	Sep 03 '09	Jun 30 '11	Aug 02 '11	Dec 31 '14
MM-913	General Engineering Consultant III (GEC-3)	CH2M HILL	Jul 26 '13	Dec 5 '13	Dec 05 '13	Apr 04 '19
MM-935	Real Estate Consultant	Paragon Partners, Ltd.	Apr 01 '11	Mar 14 '12	Mar 14 '12	Mar 13 '17
MM-937	Real Estate Mapping & Surveying	R.M. Towill Corporation	Nov 15 '13	May 22 '14	May 23 '14	May 21 '17
MM-940	Kāko'o Consultant	Pacific Legacy, Inc.	May 20 '11	Mar 29 '12	Mar 30 '12	Feb 14 '17
MM-941	Section 106 Programmatic Agreement Project Manager Kāko'o II	Honua Consulting	Jun 26 '15	Dec 08 '15	Jan 04 '16	Jan 03 '18
MM-950	Owner-Controlled Insurance Program (OCIP) Consultant	Marsh USA, Inc.	Jan 31 '12	May 10 '12	Jun 05 '12	May 09 '17
MM-951	Owner-Controlled Insurance Program (OCIP) Brokerage Services	Aon Risk Services, Inc., of Hawaii	Jun 04 '13	Apr 09 '14	Apr 09 '14	Mar 30 '19
MM-960	Archaeological & Cultural Monitoring	Cultural Surveys Hawai'i	Sep 10 '13	Jan 15 '14	Jan 15 '14	Sep 10 '19
MM-962	CORE Systems Support	Lea+Elliott, Inc.	Sep 13 '13	Feb 10 '14	Feb 11 '14	Sep 10 '19
MM-964	Safety / Security Support	Lawson & Associates, Inc.	Oct 23 '13	Apr 23 '14	May 01 '14	Dec 14 '17
MM-975	LEED Commissioning Services for the Maintenance and Storage Facility (MSF)	Enovity, Inc.		Oct 6 '10	Oct 07 '10	Aug 31 '17
PA-102	Historic Architecture Design Services	Fung Associates, Inc.	Mar 15 '13	Aug 1 '13	Aug 01 '13	Oct 28 '16
MM-915	HDOT Traffic Management Coordination Consultant	ICX Transportation Group, Inc.	Aug 15 '11	Jun 5 '12	Jun 12 '12	Jun 11 '17
MM-920	HDOT Design Coordination Consultant - West O'ahu/Farrington Highway Guideway	AECOM Technical Services, Inc.		Jun 7 '11	Jun 08 '11	Jun 07 '16
MM-921	HDOT Design Coordination Consultant - Kamehameha Highway Guideway Section	AECOM Technical Services, Inc.		Jun 28 '12	Jun 29 '12	Jun 30 '17
MM-922	HDOT Design Coordination Consultant - Airport and City Center Guideway	SSFM International, Inc.		Jun 8 '12	Jun 12 '12	Jun 13 '17
MM-925	HDOT Labor Master Agreement WOFH	HDOT		Oct 27 '10	Oct 27 '10	Oct 27 '19
MM-945	On-Call Construction Contractor	Royal Contracting Co. Ltd.	Jun 02 '14	Aug 6 '14	Aug 14 '14	Jul 06 '19
MM-946	On-Call Hazardous Materials (HazMat) Removal Contractor	CH2M HILL		Aug 23 '12	Sep 07 '12	Aug 22 '19
MM-947	On-Call Construction Contractor II	Royal Contracting Co. Ltd.	Mar 17 '15	May 21 '15	May 21 '15	May 21 '20
MM-948	On-Call Construction Contract "III"	Royal Contracting Co. Ltd.	Feb 23 '16	May 19 '16	May 13 '16	NTP + 84 months
MM-596	Construction Engineering and Inspection (CE&I) "II" Contract	Stantec Consulting Services	Mar 25 '15	Sep 10 '15	Sep 14 '15	Dec 31 '19
MM-970	Fare Collection System Technical Support Consultant	CH2M HILL	Mar 24 '15	Oct 22 '15	Oct 23 '15	Dec 31 '19
MM-980	Complex Construction Claims Negotiation and Litigation Services	Arcadis U.S., Inc.	Apr 27 '16	Jun 29 '16	TBD	NTP + 60 months + 3 year option
MM-980	Complex Construction Claims Negotiation and Litigation Services	Hill International Consulting, Inc.	Apr 27 '16	Jun 29 '16	TBD	NTP + 60 months + 3 year option
MM-980	Complex Construction Claims Negotiation and Litigation Services	Kobayashi Sugita & Goda, LLP	Apr 27 '16	Jun 29 '16	TBD	NTP + 60 months + 3 year option
MM-982	On Call Appraisers	ACM Consultants, Inc.	Mar 18 '16	Jun 23 '16	Jun 23 '16	NTP + 48 months
MI-900	Fare Systems Contract	INIT Innovations in Transportation, Inc.	Aug 11 '15	Apr 14 '16	Apr 18 '16	Apr 17 '26
DBB-385	Ramp H2R2	Royal Contracting Co. Ltd.	Jan 30 '15	May 18 '15	May 18 '15	May 31 '16
DBB-505	Airport Section Utilities Construction	Nan, Inc.	Dec 17 '13	Jun 30 '14	Oct 6 '14	Jul 13 '16
DBB-625	Airport Section Guideway Seven (7) Pier Construction Contract	HDCC / CJA JV	Jul 09 '14	Sep 18 '14	Sep 18 '14	Apr 22 '15
DBB-271	Farrington Hwy Stations Group Construction	Hawaiian Dredging Construction Company, Inc.	Dec 19 '14	Jun 22 '15	Aug 17 '15	NTP + 29 months
DBB-171	West O'ahu Stations Group Construction	Nan, Inc.	Apr 13 '15	Jul 20 '15	Oct 13 '15	NTP + 29 months
DBB-371	Kamehameha Hwy Stations Group Construction	Nan, Inc.	Aug 18 '15	Nov 17 '15	TBD	NTP + 32 months
	Independent Financial Auditor "II" Contract	KMH LLP	Oct 26 '15	Mar 15 '16	Mar 23 '16	Mar 22 '18

Appendix F. DBE Participation

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

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

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

DBE Participation (9/24/07 to 6/30/16)						
DBE Firm	NAICS	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
David's Fencing	238990	APA	M	CT-HRT-10H0137 DB-120	\$ 9,809	
				CT-DTS-1100195 DB-320	\$ 140,654	
				CT-HRT-1500297 MM-947	\$ 221	
				CT-HRT-1000449 DB-200	\$ 80,842	\$ 231,526
Glad's Landscaping	561730	APA	M	CT-HRT-10H0137 DB-120	\$ 321,639	\$ 321,639
Don's Makiki	484110	APA	M	CT-HRT-10H0137 DB-120	\$ 573,696	
				CT-HRT-10H0449 DB-200	\$ 81,581	
				CT-DTS-1100195 DB-320	\$ 60,714	\$ 715,991
Pacific Preferred Contractors Corp.	237310	APA	M	CT-HRT-10H0137 DB-120	\$ 85,043	
				CT-HRT-1500297 MM-947	\$ 3,840	\$ 88,883
PAC Electric	238210	APA	F	CT-HRT-10H0137 DB-120	\$ 6,146,047	\$ 6,146,047
PMJ Builders	238310	APA	M	CT-HRT-10H0137 DB-120	\$ 43,866	
				CT-DTS-1100195 DB-320	\$ 107,100	\$ 150,966
Standard Sheetmetal & Mechanical	236220	APA	M	CT-HRT-10H0449 DB-200	\$ 6,105	\$ 6,105
LP&D Hawaii	541320	APA	M	SC-DTS-1100013 FD-240	\$ 219,911	\$ 219,911
Ace Land Surveying	541370	NA	M	SC-DTS-1100013 FD-240	\$ 38,700	\$ 38,700
Integrated Security Tech.	561621	O	F	CT-HRT-1200106 DBOM-920	\$ 105,180	\$ 105,180
LKG-CMC	541618	O	F	SC-HRT-11H0131 MM-905	\$ 2,600,462	
				SC-DTS-0700001 ****MM-910	\$ 2,783,277	
				SC-HRT-1400051 MM-595	\$ 271,047	
				SC-HRT-1600008 MM-595	\$ 102,641	

DBE Participation (9/24/07 to 6/30/16)						
DBE Firm	NAICS	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
				SC-HRT-1400049 MM-962	\$ 377,608	\$ 6,135,035
Lawson & Associates	541690	O	F	SC-HRT-11H0131 MM-905	\$ 740,962	
				SC-DTS-0700001 ****MM-910	\$ 150,141	
				SC-HRT-1400061 MM-964	\$ 1,392,592	\$ 2,283,695
Gary K. Omori	541618	APA	M	SC-HRT-11H0131 MM-905	\$ 388,609	
				SC-DTS-0700001 ****MM-910	\$ 392,920	\$ 781,529
Pat Lee & Assoc.	541618	APA	M	SC-HRT-11H0131 MM-905	\$ 402,791	
				SC-DTS-0700001 ****MM-910	\$ 374,110	\$ 776,901
212 Harakawa	541430	APA	F	SC-HRT-11H0131 MM-905	\$ 358,141	
				SC-DTS-0700001 ****MM-910	\$ 354,758	\$ 712,899
JAD & Associates	541330	APA	M	SC-DTS-0700001 ****MM-910	\$ 508,355	\$ 508,355
Pacific Architects	541310	APA	M	SC-DTS-0700001 ****MM-910	\$ 39,273	\$ 39,273
Nagame Okawa*	541310	APA	M	SC-DTS-0700001 MM-910	\$ 67,014	\$ 67,014
Consulting Structural Hawaii	541330	APA	M	SC-DTS-0700001 ****MM-910	\$ 298,557	\$ 298,557
Bright Light Marketing Group	541613	APA	F	SC-HRT-1200038 FD-430	\$ 162,813	
				SC-HRT-1200149 FD-530	\$ 191,227	
				SC-HRT-1300022 FD-440	\$ 134,912	\$ 488,952
Ki Concepts	541320	APA	M	SC-HRT-1200077 MM-922/923	\$ 26,550	\$ 26,550
Miyabara Associates	541320	APA	M	SC-HRT-1300022 FD-440	\$ 99,850	\$ 99,850
Anil Verma Associates, Inc. **	541350	HA	M	SC-HRT-1200111 FD-340	\$ 3,890,116	\$ 3,890,116
AMR Estimating Services ***	541330	HA	M	SC-HRT-11H0131 MM-905	\$ 135,281	
				SC-HRT-1400027 MM-913	\$ 1,117,066	\$ 1,252,347
The Nakoa Companies	541620	NA	M	CT-HRT-1200106 DBOM-920	\$ 3,843	\$ 3,843
Hawaiya Technologies	238210	APA	F	CT-HRT-10H0449 DB-200	\$ 27,514	
				CT-HRT-1200106 DBOM-920	\$ 20,142	\$ 47,656
Element Environmental	541620	APA	M	SC-HRT-1400050 MM-290	\$ 1,659,795	\$ 1,659,795
PSC Consultants	541330	APA	M	SC-HRT-1400050 MM-290	\$ 894,632	

DBE Participation (9/24/07 to 6/30/16)						
DBE Firm	NAICS	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
				SC-HRT-1400051 MM-595	\$ 10,197	\$ 904,829
Bow Construction Management	541330	APA	M	SC-HRT-1400050 MM-290	\$ 122,018	\$ 122,018
FIC, LLC	541611	APA	M	SC-HRT-1400051 MM-595	\$ 1,299,481	\$ 1,299,481
The Solis Group	541620	O	F	SC-HRT-1400027 MM-913	\$ 1,753,317	\$ 1,753,317
Island Hauling	484110	APA	M	CT-HRT-1000449 DB-200	\$ 355,656	\$ 355,656
ADS System Safety Consulting *****	541620	BA	M	SC-HRT-1400061 MM-964	\$ 1,916,893	\$ 1,916,893
Minatoishi Architects	541310	APA	F	SC-HRT-1400027 MM-913	\$ 335,266	\$ 335,266
Dovetail Consulting	541330	BA	F	MOU-11-SO-1 MM-930	\$ 873,849	\$ 873,849
Amazon Construction Co.	238990	APA	F	CT-HRT-1500056 MM-945	\$ 446,558	
				CT-HRT-1500309 DBB-385	\$ 5,775	
				CT-HRT-1500297 MM-947	\$ 857,986	\$ 1,310,319
Aloha Steel	238120	APA	M	CT-HRT-1500056 MM-945	\$ 176	
				CT-HRT-1400323 DBB-505	\$ 35,989	
				CT-HRT-1500297 MM-947	\$ 152	\$ 36,317
Carol Kwan Consulting	561730	O	F	CT-HRT-1500056 MM-945	\$ 13,291	
				CT-HRT-1500297 MM-947	\$ 2,117	\$ 15,408
Geotech	423390	NA	M	CT-HRT-1500309 DBB-385	\$ 5,633	\$ 5,633
Lenax Construction	541611	O	F	SC-HRT-1600008 MM-595	\$ 816,417	\$ 816,417
Total						\$ 36,842,718

* Nagame Okawa's countable participation is limited to the period from 1/2/09 to 2/16/10. The company graduated from the DBE program on 2/16/10.
 ** Anil Verma Associates, Inc. is a prime contractor and was certified as a DBE effective 6/26/13.
 *** AMR Estimating Services, Inc. was certified as a DBE effective 10/25/13.
 **** DBE participation from 9/24/07 to 9/17/13.
 ***** ADS System Safety Consulting was certified as a DBE effective 8/7/14.

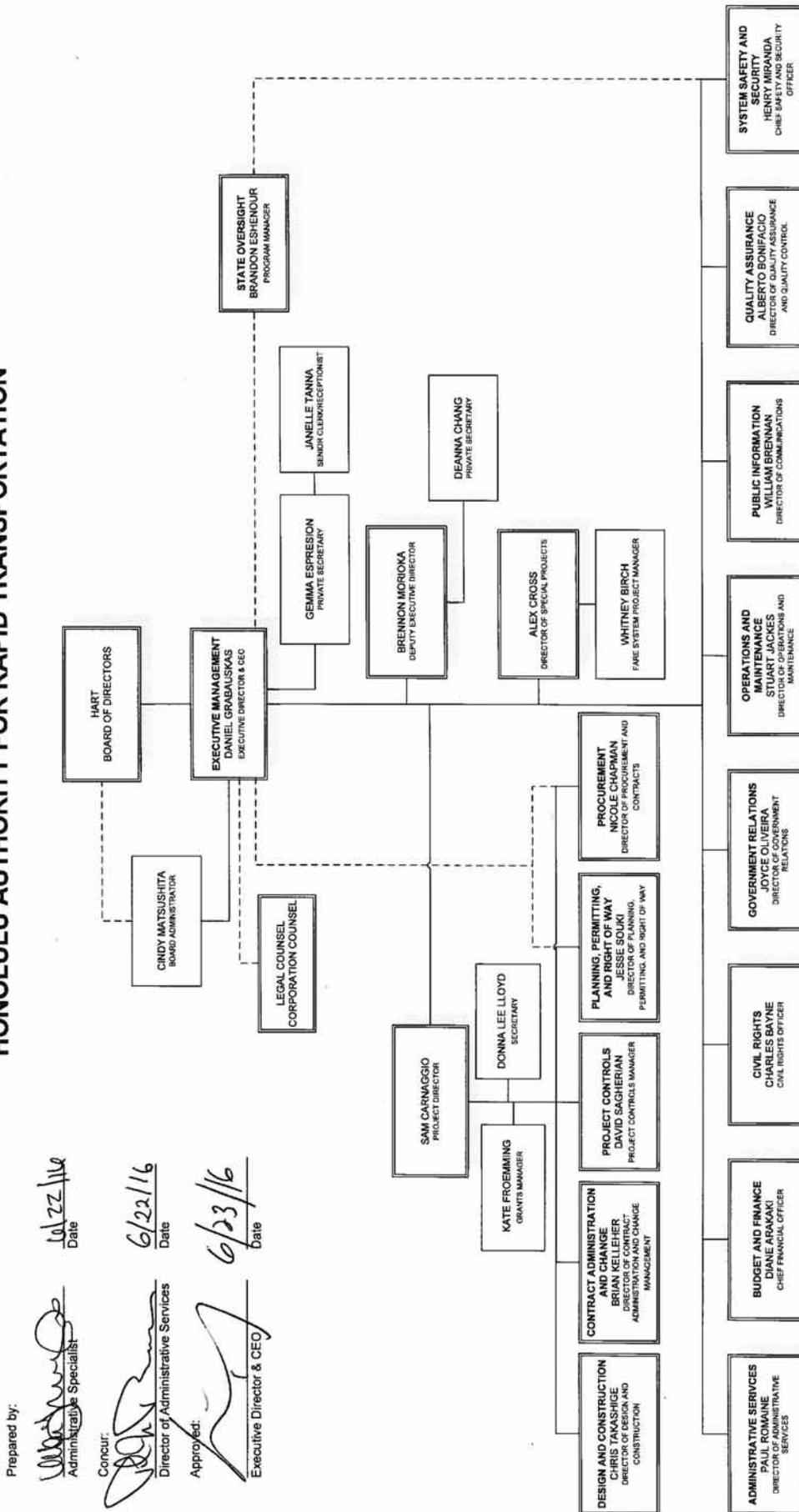
Race Categories

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

Appendix G. Project Organization Chart

June 27, 2016

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION



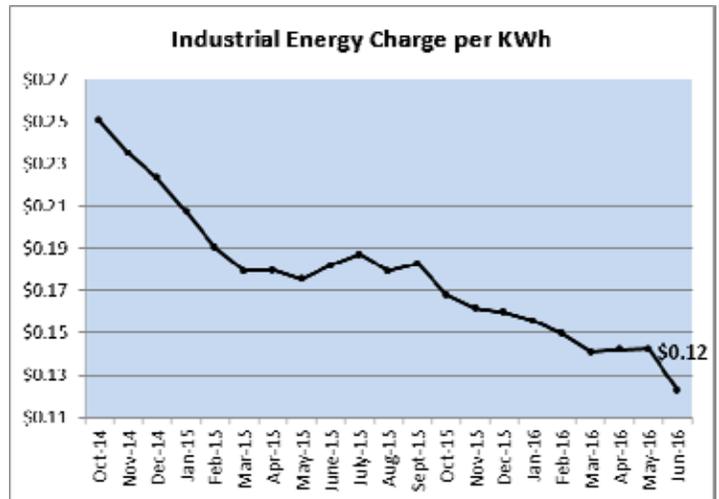
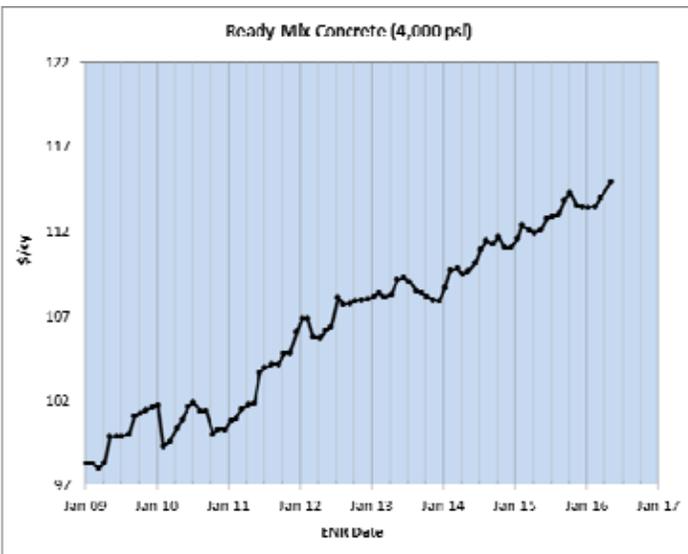
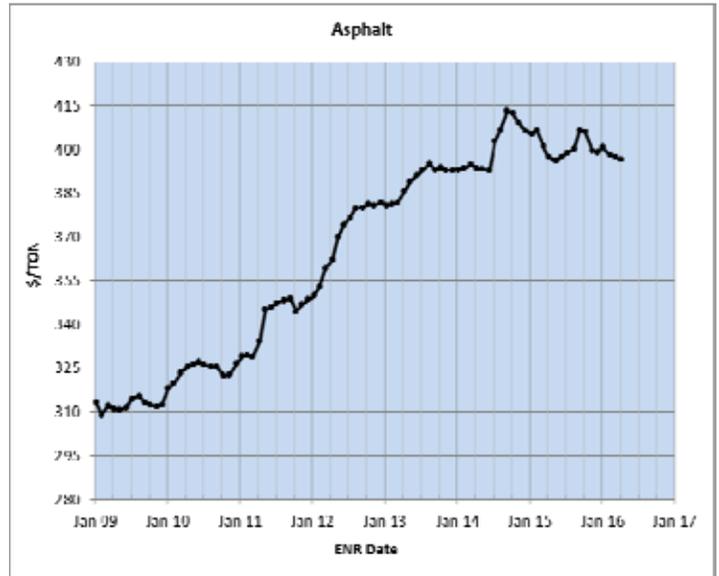
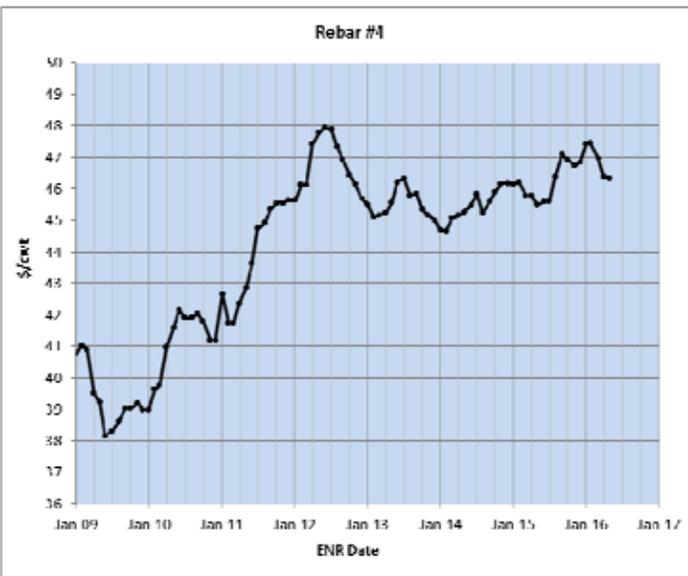
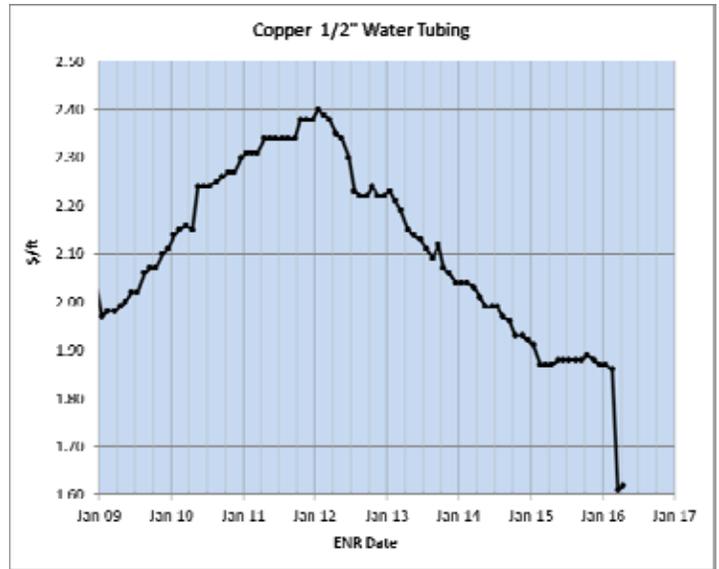
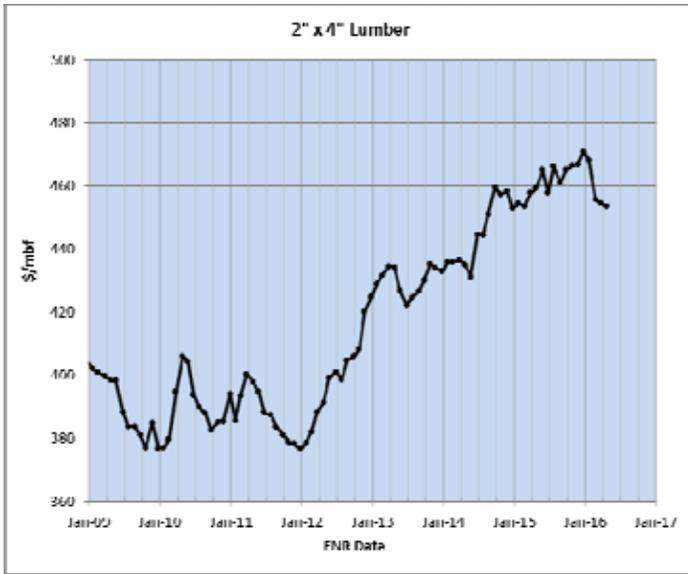
Prepared by: *[Signature]*
Administrative Specialist
Date: 6/22/16

Concur: *[Signature]*
Director of Administrative Services
Date: 6/22/16

Approved: *[Signature]*
Executive Director & CEO
Date: 6/23/16

Appendix H. Indices on Key Commodities

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



Source: HECO: Effective Rate Summary for P Rate

Appendix I. Project Photos



Guideway construction in West O'ahu.



Equipment storage site.



Construction on Kamehameha Highway.



Balanced cantilever operations near the H-1 Freeway.



Construction along Kamehameha Highway.



Future Aloha Stadium Station.



Operations and Servicing Building (OSB).



Wheel Truing Building and OSB.



Maintenance of Way Building.



Casting Yard.