

# HONOLULU RAIL TRANSIT PROJECT



## September 2015 MONTHLY PROGRESS REPORT

# HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

[www.HonoluluTransit.org](http://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: West O'ahu Farrington Highway Guideway along Kualakai Parkway looking Diamond Head.

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

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

**TABLE OF CONTENTS**

TABLE OF FIGURES ..... 4

LIST OF ACRONYMS ..... 5

PROJECT MAP ..... 7

PROGRESS REPORT SUMMARY OF CHANGES..... 8

1 EXECUTIVE SUMMARY ..... 10

2 OVERALL PROJECT PROGRESS AND FINANCIALS ..... 12

    2.1 Project Progress ..... 12

    2.2 Project Budget ..... 14

    2.3 Project Contingency ..... 14

    2.4 Project Funding ..... 16

    2.5 Project Revenue and Costs ..... 18

3 SCHEDULE..... 19

4 CONTRACT STATUS ..... 22

    4.1 System-Wide ..... 25

    4.2 Section I – West O’ahu/Farrington Highway: East Kapolei to Pearl Highlands ..... 32

    4.3 Section II – Kamehameha Highway: Pearl Highlands to Aloha Stadium ..... 44

    4.4 Section III – Airport: Aloha Stadium to Middle Street Transit Center Station ..... 52

    4.5 Section IV – City Center: Middle Street Transit Center Station to Ala Moana Center..... 60

    4.6 Project-Wide ..... 64

5 OVERALL PROJECT-WIDE ACTIVITIES ..... 70

    5.1 Permits ..... 72

    5.2 Hawai’i Department of Transportation (HDOT) Agreements ..... 72

    5.3 Utility Agreements ..... 73

    5.4 Right-of-Way ..... 75

6 MANAGEMENT AND ADMINISTRATIVE UPDATES ..... 80

    6.1 Safety and Security ..... 83

    6.2 Quality Management ..... 88

    6.3 Buy America Compliance ..... 91

    6.4 Disadvantaged Business Enterprise (DBE) ..... 91

    6.5 Planning and Environment..... 92

    6.6 Risk Management ..... 93

    6.7 Community Outreach ..... 96

    6.8 Staffing ..... 97

APPENDICES..... 99

    A. Action Items ..... 100

    B. Project Contingency Management General Background and Clarifications ..... 101

    C. Project Cost Reports ..... 107

    D. Procurement and Contract Status..... 114

    E. Vehicle Carshell Progress Tracker ..... 116

    F. DBE Participation..... 117

    G. Risk ..... 120

    H. Project Organization Chart ..... 121

    I. Indices on Key Commodities ..... 122

    J. Project Photos ..... 123

**Table of Figures**

Figure 1. Overall Project Progress (% Complete) ..... 12

Figure 2. Construction Progress (% Complete) ..... 12

Figure 3. Design Progress (% Complete) ..... 13

Figure 4. Utilities Progress (% Complete)..... 13

Figure 5. Project Contingency Budget..... 14

Figure 6. Draft Cost Contingency Drawdown Chart ..... 15

Figure 7. Planned vs. Received Project Funding..... 16

Figure 8. Project Funding Sources (YOE \$M)..... 16

Figure 9. New Starts Drawdown by Federal Fiscal Year ..... 17

Figure 10. Project Revenue versus Incurred Costs..... 18

Figure 11. Cash Balance Summary ..... 18

Figure 12. HRTP Master Project Schedule Summary (MPSS)..... 20

Figure 13. Utility Agreements Status ..... 73

Figure 14. Right-of-Way Status for the Parcels ..... 75

Figure 15. Relocation Status for the Occupants..... 77

Figure 16. Third-Party Agreement Status..... 77

Figure 17. DBE Participation this Month ..... 92

Figure 18. Risk Matrix..... 95

Figure 19. Top Project Risks ..... 95

Figure 20. Risks Added ..... 96

Figure 21. Risks Deleted ..... 96

Figure 22. HART participated in nearly two dozen community events, workshops and meetings to discuss the progress of the rail project..... 96

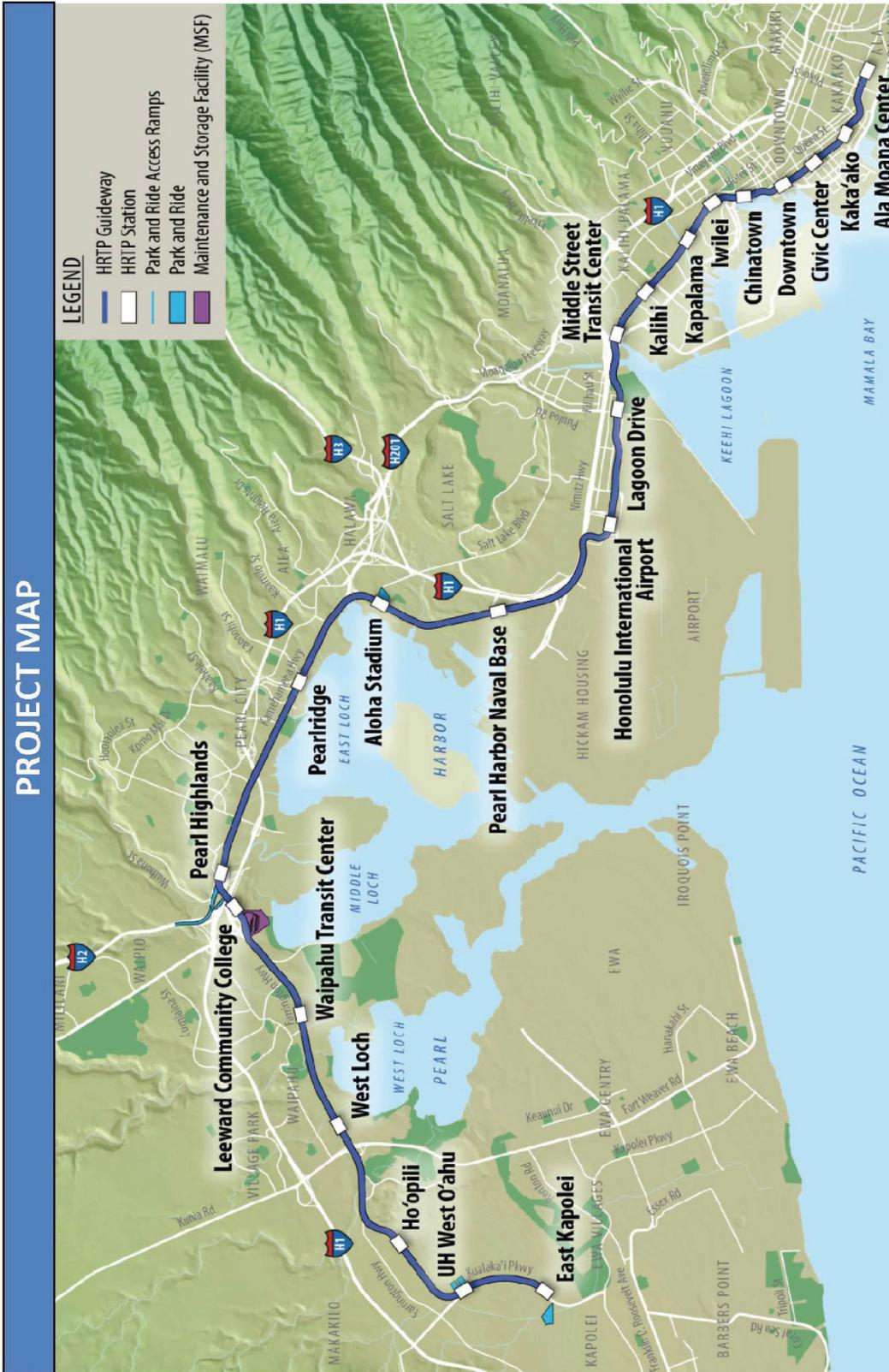
Figure 23. Staffing Activities..... 97

Figure 24. Project Staffing (Actual vs. Planned) ..... 98

LIST OF ACRONYMS

AB	AnsaldoBreda	DPS	Department of Public Safety
ACS	Access Control System	DS	Downstream
AFE	Authorized for Expenditure	DTS	Department of Transportation Services
AGS	Airport Guideway and Stations	DVT	Design Verification Test
AHJV	Ansaldo Honolulu Joint Venture	ECP	Environmental Compliance Plan
AIS	Archaeological Inventory Survey	E/E	Elevator/Escalator
APTA	American Public Transportation Association	EMC	Electromagnetic Compatibility
ARRA	American Recovery and Reinvestment Act	EMF	Electromagnetic Forces
ASG	Airport Station Group	EMI	Electromagnetic Interference
ASU	Airport Section Utilities	EMP	Environmental Management Plan
ATC	Automated Train Control	EOR	Engineer of Record
ATO	Automated Train Operation	EOS	Electrically Operated Switches
AVA	Anil Verma Associates, Inc.	ESA	Engineering Services Agreement
BA	Buy America	FAA	Federal Aviation Administration
BAC	Buy America Compliance	FAI	First Article Inspections
BACM	Buy America Compliance Matrix	FAT	Factory Acceptance Tests
BAFO	Best and Final Offer	FD	Final Design
BCS	Balanced Cantilever System	FDAS	Fire Detection Alarm System
BFS	Budget and Fiscal Services	FDC	Field Design Change
BLS	Bureau of Labor Statistics	FEIS	Final Environmental Impact Statement
BMP	Best Management Practice	FFC	Fixed Facility Contractors
BOD	Board of Directors	FFGA	Full Funding Grant Agreement
BUE	Bottom-Up Estimate	FHSG	Farrington Highway Station Group
CAM	Construction Access Milestone	FLSWG	Fire Life Safety Working Group
CAR	Corrective Actions	FOCN	Fiber Optic Communication Network
CCGS	City Center Guideway and Stations	FTA	Federal Transit Administration
CCO	Contract Change Order	FTE	Full-Time Equivalent
CCTV	Closed Circuit Television	FWS	Fish and Wildlife Service
CDC	Compendium of Design Criteria	GAT	Great Aleutian Tsunami
CE&I	Construction Engineering and Inspection	GBS	Gap Breaker Station
CEL	Certifiable Elements List	GDR	Geotechnical Data Report
CIL	Certifiable Items List	GEC	General Engineering Consultant
CM	Construction Manager	GET	General Excise Tax
CMP	Corrugated Metal Pipe	GIS	Geographic Information System
CMS	Contract Management System	GSA	General Services Administration
CMU	Concrete Multiple Unit	GT	General Terms
CNMMP	Construction Noise Mitigation and Monitoring Plan	HA	Hazard Analysis
COI	Conflict of Interest	HABS	Historic American Buildings Survey
CONRAC	Consolidated Rental Car Facility	HAER	Historic American Engineering Record
COR	Corporation Counsel	HALS	Historic American Landscape Survey
CP	Consulting Party	HART	Honolulu Authority for Rapid Transportation
CPM	Critical Path Method	HCC	Honolulu Community College
CPP	Contract Packaging Plan	HCDA	Hawai'i Community Development Authority
CSC	Core Systems Contract	HCSA	Hawai'i Capital Special District
CSCC	Construction Specification Conformance Checklists	HDCC	Hawaiian Dredging Construction Company
CSL	Cross Hole Sonic Logging	HDOE	Hawai'i Department of Education
CSOC	Core Systems Oversight Consultant	HDOH	Hawai'i Department of Health
CSSP	Construction Safety & Security Plan	HDOT	Hawai'i Department of Transportation
CTS	Communications Transmission System	HDPE	High-density polyethylene
CWRM	Commission on Water Resource Management	HECO	Hawaiian Electric Company
CZM	Coastal Zone Management	HFD	Honolulu Fire Department
DAGS	Department of Accounting & General Services	HHF	Historic Hawai'i Foundation
DB	Design-Build	HHPRB	Hawai'i Historic Places Review Board
DBB	Design-Bid-Build	HIE	Hawaii Independent Energy
DBE	Disadvantaged Business Enterprise	HP	Historic Preservation
DBEDT	Department of Business, Economic Development and Tourism	HPC	Historic Preservation Committee
DBOM	Design-Build-Operate-Maintain	HPCA	Historic Preservation Certification Application
DCAB	Disability and Communication Access Board	HPD	Honolulu Police Department
DCCC	Design Criteria Conformance Checklists	HPF	Historic Preservation Fund
DCN	Design Change Notice	HRHP	Hawai'i Register of Historic Places
DDC	Department of Design and Construction	HRTD	Honolulu Rail Transit Project
DES	Department of Environmental Services	HTI	Hawaiian Telcom
DFIM	Design Furnish Install Maintain	HTL	Hazard Tracking Log
DFM	Department of Facility Maintenance	I&T	Inspection & Testing
DHHL	Department of Hawaiian Homelands	IAMR	Interstate Access Modification Report
DHR	Department of Human Resources	ICCS	Integrated Control and Communication Systems
DIT	Department of Information Technology	ICD	Interface Control Documents
DKSG	Dillingham and Kaka'ako Station Group	ICE	Independent Cost Estimate
DLIR	Hawai'i Department of Labor and Industrial Relations	ICM	Interface Control Manual
DLNR	Department of Land and Natural Resources	IDS	Intrusion Detection System
DOE	Department of Education	IJ	Insulation Joint
DOH	Department of Health	INMS	Integrated Network Management System
DOL	Department of Labor	ITP	Inspection and Test Plan
DPM	Deputy Project Managers	ITS	Intelligent Transportation Systems
DPP	Department of Planning and Permitting	JTMS	Joint Traffic Management System
DPR	Department of Parks and Recreation	JU&O	Joint Use & Occupancy

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



## 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 Map

- The station highlight of the month has been removed as all stations have been highlighted in the Monthly Report. Please see page 7.

### Executive Summary

- The HART Board Meeting Q&A section has been removed for this month, as there were no public questions posed at the September meeting.

### Project Contingency

- The current contingency balance has decreased. Please see pages 14-15.

### Project Funding

- The Section 5309 New Starts Revenue amount received has increased. Please see pages 16-17.
- The total amount of cash received has increased. Please see pages 16-17.

### Project Revenue and Costs

- The ending cash balance amount has increased. Please see page 18.

### Contracts in Procurement

- One contract was issued NTP, and one contract was awarded. Please see pages 24 and 115.

### Contract Status

- West O'ahu/Farrington Highway Guideway (WOFH)
  - The current contract value has increased. Please see page 32.
- West O'ahu Station Group (WOSG)
  - The incurred-to-date amount has decreased. Please see page 36.
- Farrington Highway Station Group (FHSG)
  - A contract page for the Farrington Highway Station Group construction contract has been included, and the FHSG design contract page has been removed. Please see page 38-39.
- Maintenance and Storage Facility (MSF)
  - The current contract value has increased. Please see page 40.
- Kamehameha Highway Guideway (KHG)
  - The projected substantial completion date has shifted to a later date. Please see page 44-45.
  - The current contract value has increased. Please see page 44.
- Kamehameha Highway Station Group (KHSG)
  - The current contract value has increased. Please see page 50.
- Airport Section Utilities Construction
  - The projected substantial completion date has shifted to a later date. Please see page 54.
- Airport Station Group (ASG)
  - The current contract value has increased. Please see page 58.

- Construction Engineering & Inspection East Side Sections
  - The contract completion date has shifted to an earlier date. Please see page 67.
  - The current contract value has decreased. Please see page 67.
  - The incurred-to-date amount has decreased. Please see page 67.
  - The percentage complete has been adjusted. Please see page 67.

#### **Utility Agreements**

- The Figure 13. Utility Agreements Status table has been updated to reflect outstanding agreements, pending amendments, and any applicable MOUs. Please see page 73.

#### **Right-of-Way**

- One partial acquisition has been completed in the City Center section. Please see page 75.

#### **Safety and Security**

- A “HART S&S Certification ‘Open Items List’” table has been included. Please see page 85.

#### **Risk Management**

- The total number of risks in the risk register has decreased. Please see pages 93-96 and 120.

#### **Staffing**

- The actual number of employees has increased. Please see page 98.

# 1 EXECUTIVE SUMMARY

## KEY ACTIVITIES THIS MONTH

### Project Overview

The Honolulu Authority for Rapid Transportation (HART) achieved another milestone with the completion of four miles of the system’s elevated guideway.

The four-mile mark is along Farrington Highway in Waipahu. Crews have constructed more than 170 spans and built more than 200 columns. The guideway segments are cast at the project’s casting yard in Kapolei, and a single span requires about 12 segments. Approximately 3,370 segments have been cast, in preparation for guideway construction.

In addition, the first two rail cars are now in Pittsburg, California and are on schedule to arrive in Honolulu in the first quarter of 2016.



### HART Board

The HART Board of Directors has selected local accountant Terri Fujii to fill a vacant seat on the agency’s Board.

Fujii was selected from a field of 10 candidates who applied for the position. A panel of board members interviewed all of the applicants and recommended Fujii for the post.

She has 29 years of experience in public accounting and is currently an audit partner with CW Associates, a certified public accounting firm. Prior to that she was an office managing partner and assurance partner for the Honolulu office of Ernst & Young LLP.

Fujii is the ninth voting member of the board and will fill the remaining term of former board member Robert “Bobby” Bunda. The term will expire on June 30, 2018.

### TOD Workshop

HART participated in the “Supporting Development and Land Reuse Around Honolulu’s Rail Stations” workshop in September. Experts discussed transit-oriented development (TOD) and the environmental issues associated with it. Attendees learned the process of reusing vacant, abandoned, blighted, and contaminated properties to support TOD.



TOD is a type of community development that includes a mixture of housing, office, retail and other amenities integrated into a walkable neighborhood and located near rail stations and quality public transportation.

### Cost:

Project Costs Summary Through Aug. 28, 2015		
	Current Budget (\$M)	Incurred To Date (\$M)
Project Budget	\$4,455.7	\$1,670.6
Project Contingency	\$492.9	\$0.5
Finance Charges*	\$173.1	\$0.0
<b>TOTAL</b>	<b>\$5,121.7</b>	<b>\$1,671.1</b>
* \$173.1 million represents the project debt financing costs that are federally eligible. The total estimated debt financing costs of the project is \$215 million, per the FFGA Financial Plan.		

### Schedule:

Project Progress* Through Aug. 28, 2015				
	Actual		Early Plan	Late Plan
Overall Project Progress	38.3%		63.4%	54.6%
Overall Construction Progress	29.7%		56.2%	46.6%
Overall Design Progress	87.1%		98.9%	96.7%
Overall Utilities Progress	33.9%		73.0%	58.7%
*All 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.				

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

The CSC contractor is continuing to progress through Final Design. Qualification and design verification tests are ongoing; completing the pre-shipment inspection test for MSF Yard Control Bungalow equipment. Construction interface with the MSF contractor (KKJV) is ongoing, with AHJV on site working on the Yard Control Bungalow (YCB) foundations, after the completion of the YCB ground grid. The first and second passenger vehicle carshells have arrived at the final assembly facility in Pittsburg, California. (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 manufacturing of the required elevator and escalator equipment for these stations can be released once the respective contractor's schedules have been submitted and approved. The FHSG contract and WOSG contract have been awarded, however the WOSG NTP is pending. The NTP for FHSG has been issued and once the contractor provides an acceptable schedule, the manufacturing of the FHSG equipment will be released. The KHSG contract was advertised in August and the contract is planned to be awarded by the end of this year. (See Section 4.1.B for details)

West O'ahu Farrington Highway (WOFH) Contract

HART and Kiewit Infrastructure West Company (KIWC) continue to work together to ensure that quality and safety are the highest priorities. HART continues to monitor KIWC production rates as it relates to potential schedule impacts. KIWC submitted a revised baseline schedule dated October 2014 for which production is measured against. The most recently submitted progress schedule, through August 2015, reflects a six month delay to the contractual substantial completion date specific to the LCC portables, parking lot and access structure operations. KIWC and HART continue to work together to mitigate the impacts to the critical path activities. A revised baseline schedule was submitted by KIWC in August 2015 and is currently under review. The LCC Construction Right of Entry Agreement with the University of Hawai'i (UH) was issued and it is anticipated that the Contract Change Order required to update the substantial completion date and associated baseline acceptance will follow. In September 2015, the second truss (Heading #2) progressed towards the end of Span 1L, completing the erection of spans in the westward portion of the alignment. KIWC is currently demobilizing Heading #2 to Span 250, Work Area 4, by the Waipahu High School to progress westwards towards Waipahu Transit Center Station. (See Section 4.2.A for details)

Maintenance and Storage Facility (MSF) Contract

HECO completed the work necessary for providing power for MOW, OSB, WTB and TWF. The contractor is continuing to install power distribution panels within the OSB, MOW and WTB. De-stressing of the storage and maintenance tracks continues. Platform walls, stem walls and foundation construction are completed for the Train Wash Facility. Signal and train control conduit installation continues. Installation of rail is continuing, including contact rail and pre-curved rail. Siding, painting, HVAC, and finishing are continuing for the OSB, MOW and WTB, as well as mechanical, electrical and plumbing installations. (See Section 4.2.D for details)

Kamehameha Highway Guideway (KHG) Contract

Construction of columns has been completed from Acacia Road west, to intersect the WOFH contract. Discussions with HECO are being held at an elevated level to coordinate the schedule of work to minimize project delays. ROE for utility relocations are nearing completion, with work anticipated to start once utility ROE has been received. HART and HDOT are working together to achieve concurrence on betterment costs and funding. Per KIWC's progress schedule, as submitted with the application for payment, the contract is nine months behind schedule for guideway structure. (See Section 4.3.A for details)

Airport Section Utilities (ASU) Construction Contract

The Airport Section Utilities contract continues to be impacted by differing and unforeseen site conditions; a sewer leak along Kamehameha Highway prompted emergency work at night, despite not having a noise variance. In spite of these impediments, work is proceeding along Kamehameha Highway, Airport and the Nimitz Off-Ramp area. On Sept. 2, Nan was notified that work related to the telecom duct bank at Valkenburgh would be deleted from the contract. (See Section 4.4.B for details)

## 2 OVERALL PROJECT PROGRESS AND FINANCIALS

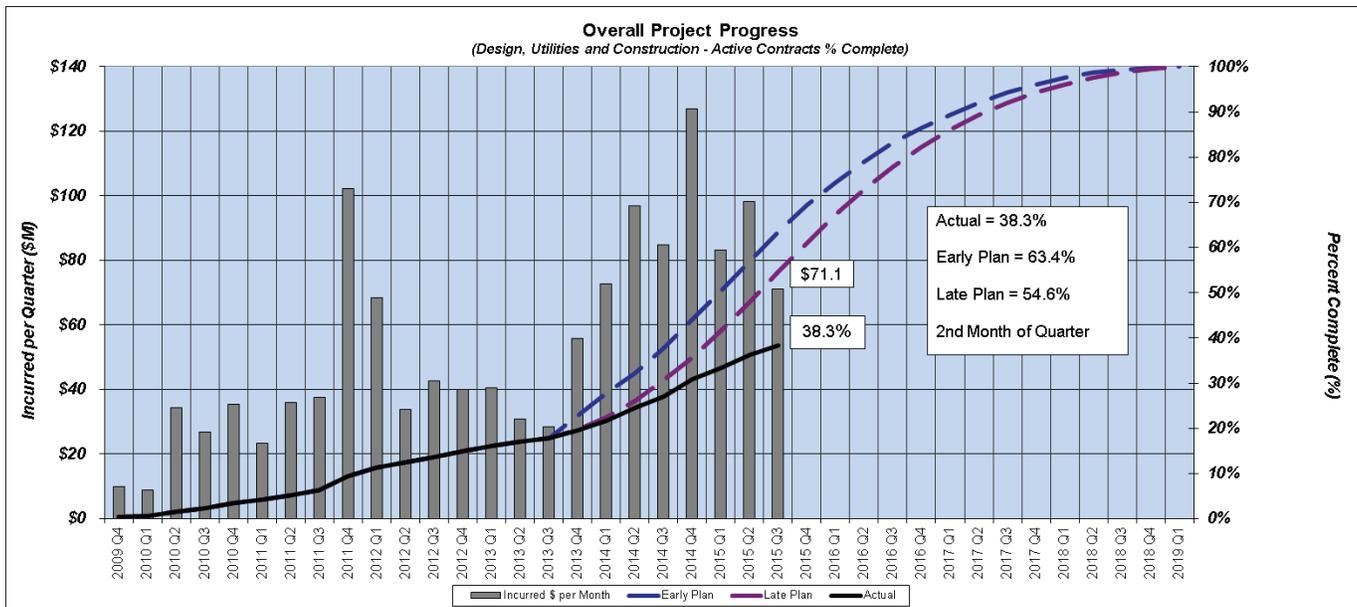
### 2.1 Project Progress (data as of Aug. 28, 2015)

All 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.

Note:

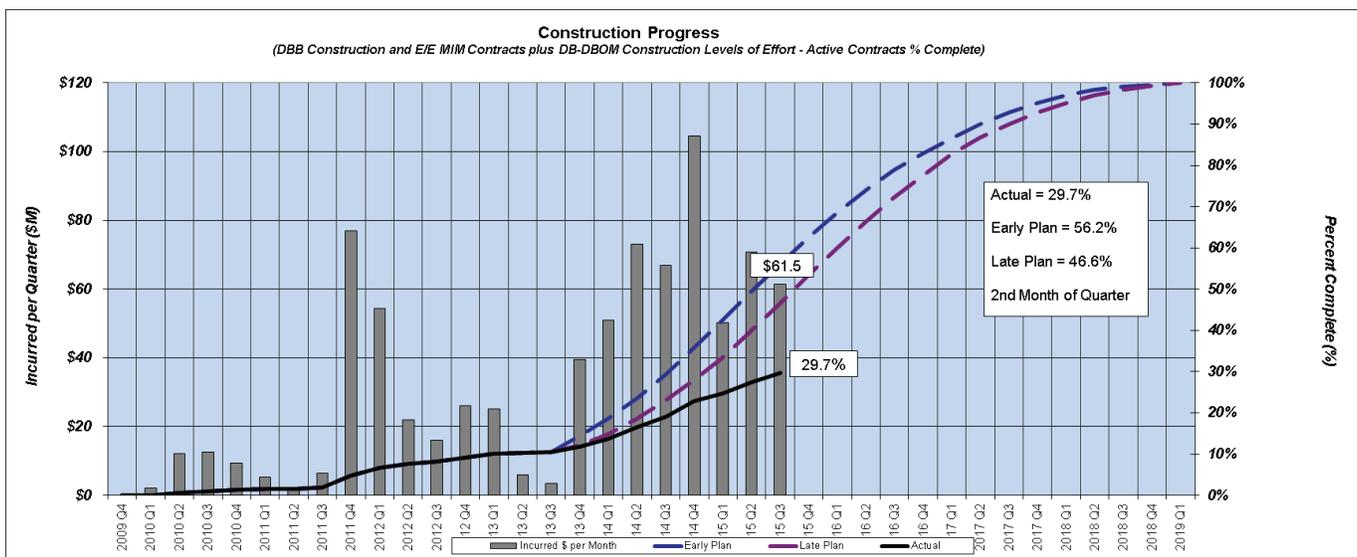
- Actual = Actual cost of work performed, based on invoiced-to-date amount.
- Early Plan = Earliest dates activities can begin and finish, based on logic and durations used in the schedule.
- Late Plan = Latest dates activities can begin and finish and not have an impact on completion date, based on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

Figure 1. Overall Project Progress (% Complete)



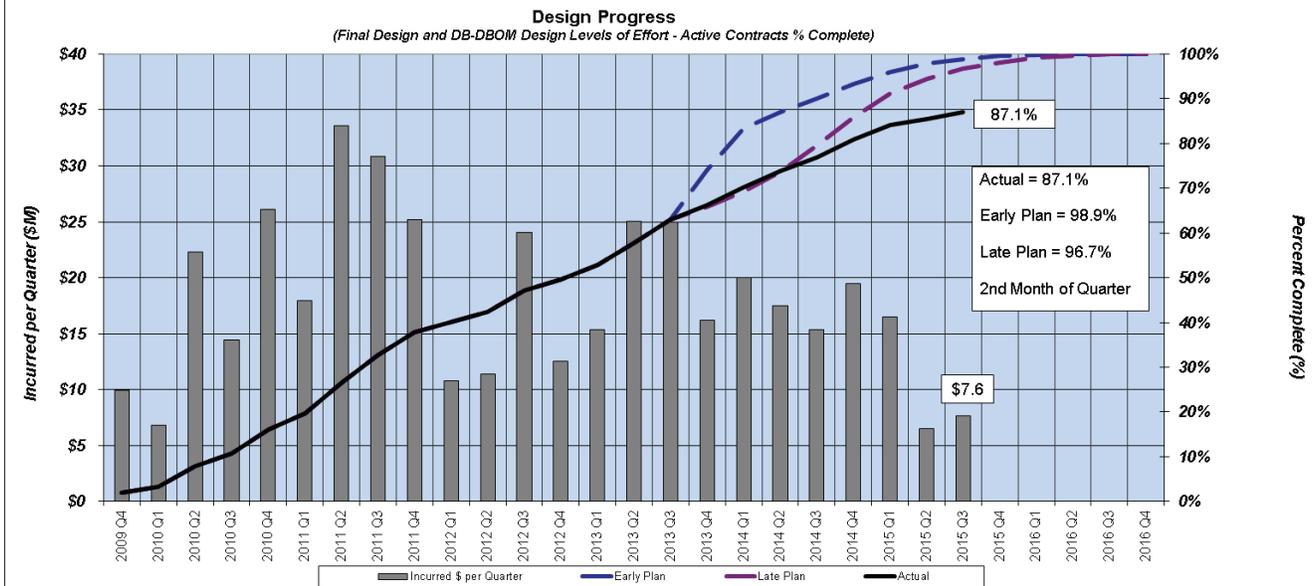
At present “overall” project progress is based on the weighted value progress of the individual construction and design contracts (Design-Build [DB], Design-Bid-Build [DBB], Design-Build-Operate-Maintain [DBOM], Elevator/Escalator Manufacture-Install-Test-Maintain [MIM], Final Design [FD] and DB-DBOM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

Figure 2. Construction Progress (% Complete)



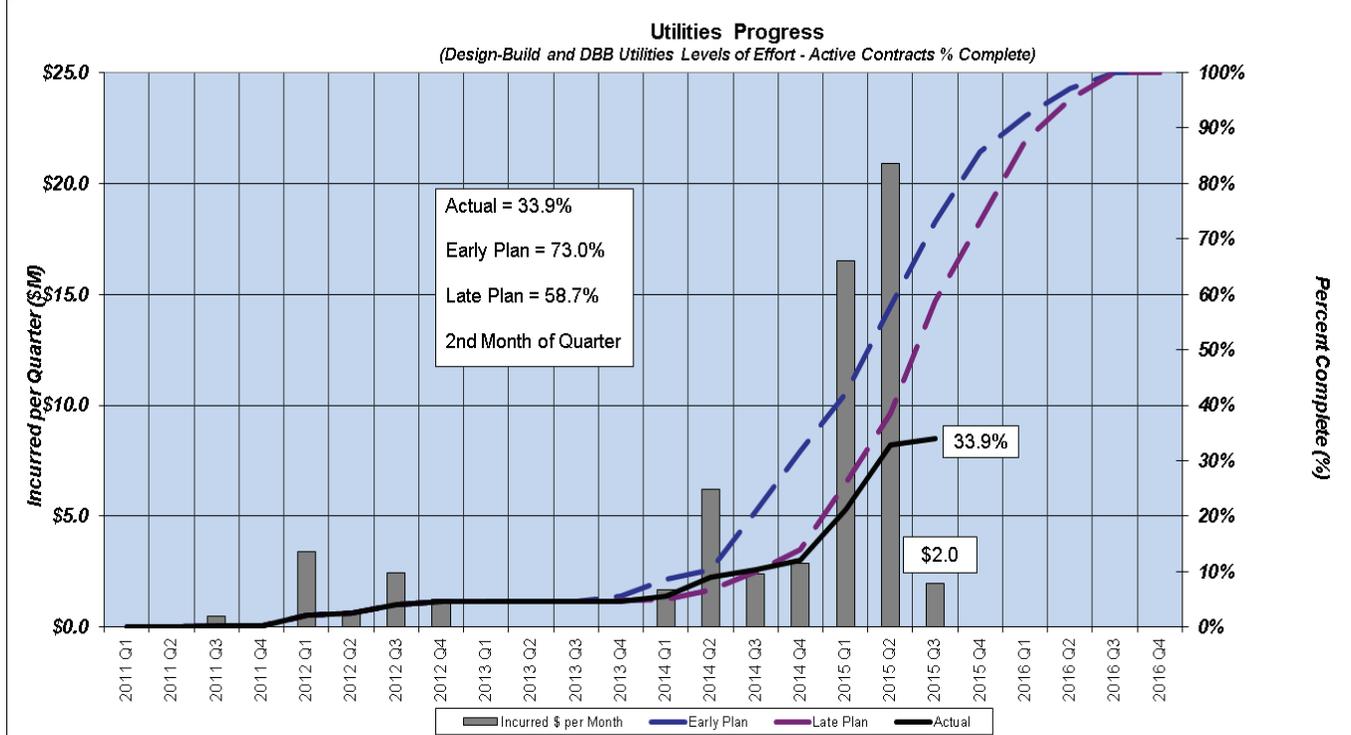
Overall construction progress is based on the weighted average progress of the individual DBB and E/E MIM construction contracts and the DB-DBOM construction levels of effort, not including consultant construction engineering and inspection (CE&I) services.

Figure 3. Design Progress (% Complete)



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

Figure 4. Utilities Progress (% Complete)



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

**2.2 Project Budget (data as of Aug. 28, 2015)**

- FFGA Project Budget = **\$5,121.7M**
  - Current Project Budget - \$4,455.7M
  - Current Project Contingency - \$492.9M
  - Project Finance Charges - \$173.1M
  
- Total Incurred Cost = **\$1,671.1M** (37.5% of current project budget)
  - August 2015 Incurred Cost = \$40.6M

*Total Incurred Cost = \$1,671.1M  
(previous report = \$1,630.5M)*

**2.3 Project Contingency (data as of Aug. 28, 2015)**

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

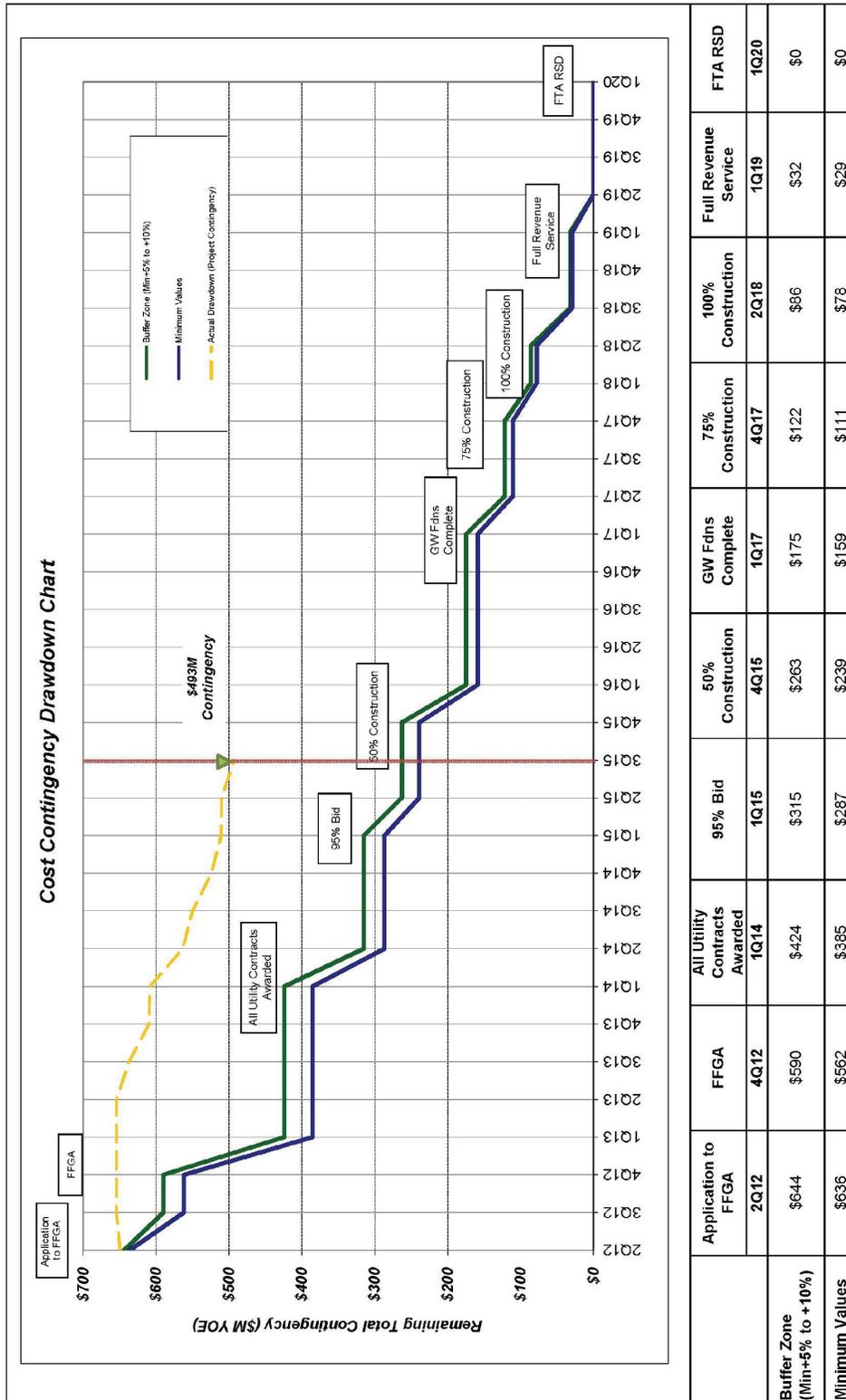
- Current Project Contingency Balance = **\$492.9M**
  - Contingency drawdown to date – \$150.7M (23.4% of baseline project contingency budget)
  - \$7.8M contingency drawdown during August 2015. Please see Appendix B for more details.
    - Pearl Highlands Parking Structure/Bus Transit Center budget transfer to Project contingency under review

*Current Contingency Balance = \$492.9M  
(previous report = \$500.7M)*

Figure 5. Project Contingency Budget

Project Contingency Budget		
Contingency	SCC Code	Budget (\$M)
Unallocated Contingency	90.01	\$101.9
Allocated Contingency	90.02	\$540.1
Allowances	90.03	\$1.6
<b>Baseline FFGA Project Contingency Budget</b>	<b>90.01 - 90.03</b>	<b>\$643.6</b>
Contingency drawdown through June 2015 Report	90.01 - 90.03	(\$133.8)
Contingency drawdown July 2015 Report	90.01 - 90.03	(\$8.1)
Contingency drawdown August 2015 Report	90.01 - 90.03	(\$1.0)
Contingency drawdown September 2015 Report	90.01 - 90.03	(\$7.8)
Contingency drawdown to date	90.01 - 90.03	(\$150.7)
<b>Current FFGA Project Contingency</b>	<b>90.01 - 90.03</b>	<b>\$492.9</b>

Figure 6. Draft Cost Contingency Drawdown Chart



Data as of 8/26/15 - Aug '15 Reporting Period

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

2.4 Project Funding (data as of Aug. 28, 2015)

Figure 7. Planned vs. Received Project Funding

Planned vs. Received Project Funding				
Funding Source	Pre-FFGA Project <sup>1</sup>	FFGA Project Period		Total Project
	2007 - 2009 Actuals Received	Planned <sup>2</sup> (\$YOE M)	2009 - Present Actuals Received	2007 - Present Actuals Received
	[A]		[B]	[C] = A + B
Beginning Project Cash Balance <sup>3</sup>	0	298	298	n/a
Interest Income on Cash Balance	7	3	2	9
FTA Section 5309 New Starts Revenue <sup>4</sup>	0	1,550	446	446
FTA Section 5307 Formula Funds	0	210	0	0
ARRA Funds	0	4	4	4
Net General Excise Tax (GET) Surcharge revenues FY2010-FY2023	378	3,291	1143	1,521
<b>Total</b>	<b>385</b>	<b>5,356</b>	<b>1,893</b>	<b>1,980</b>

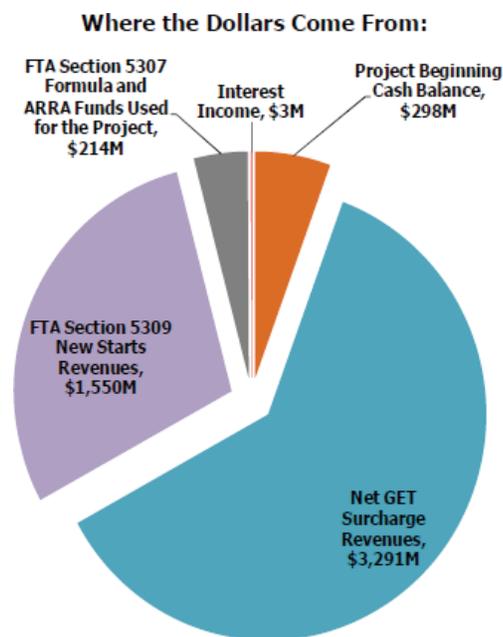
<sup>1</sup> GET and Interest Income received during Pre-Preliminary Engineering (pre-PE) phase prior to entry into PE

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

<sup>3</sup> Beginning Project Cash Balance at Entry into Preliminary Engineering (PE) on October 16, 2009 (the FFGA Project start date) = 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.

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

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



Source: FFGA Financial Plan, p. 2-1

- General Excise Tax (GET) Surcharge (data as of Aug. 28, 2015)
  - \$1,143M = amount received since the Project’s entry into FTA’s Preliminary Engineering phase of project development.
    - \$1,182M = Projected Net GET Surcharge Revenue for FYs 2010-1Q 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 \$39M behind.
    - \$39M shortfall is approximately 1.2% of the total GET surcharge projections per the FFGA Financial Plan of \$3.291B.
  - \$0 = GET surcharge received in August 2015.
- Full Funding Grant Agreement (FFGA)
  - \$11.7M = New Starts drawdown processed and received in August 2015.
  - \$152K = New Starts drawdown processed in August 2015, but not received until Sept. 2, 2015.
- The \$5307 funds for the Project, per the Financial Plan, are \$210M.

*Total Cash Received Since PE = \$1,893M*  
 (previous report = \$1,859M)

*GET Received Since PE = \$1,143M*  
 (previous report = \$1,143M)

*GET Received Since 2007 = \$1,521M*  
 (previous report = \$1,521M)

Figure 9. New Starts Drawdown by Federal Fiscal Year (data date as of Aug. 28, 2015, per the FTA TEAM website)

New Starts Grant Information by Federal Fiscal Year				
Federal Fiscal Year Allocation	Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance	FFGA Base Case Cash flow
2008	\$15,190,000	\$15,190,000	\$0	
2009	\$19,800,000	\$19,800,000	\$0	
2010	\$30,000,000	\$30,000,000	\$0	
2011	\$55,000,000	\$55,000,000	\$0	\$20,607,242
2012	\$200,000,000	\$200,000,000	\$0	\$99,382,758
2013	\$236,277,358	\$125,563,103	\$110,714,255	\$258,280,277
2014	\$250,000,000	\$0	\$250,000,000	\$441,719,724
2015 (pending)	\$250,000,000	\$0	\$250,000,000	\$250,000,000
2016 (pending)	\$250,000,000	\$0	\$250,000,000	\$250,000,000
2017 (pending)	\$243,732,642	\$0	\$243,732,642	\$230,010,000
<b>Total</b>	<b>\$1,550,000,000</b>	<b>\$445,553,103</b>	<b>\$1,104,446,897</b>	<b>\$1,550,000,000</b>

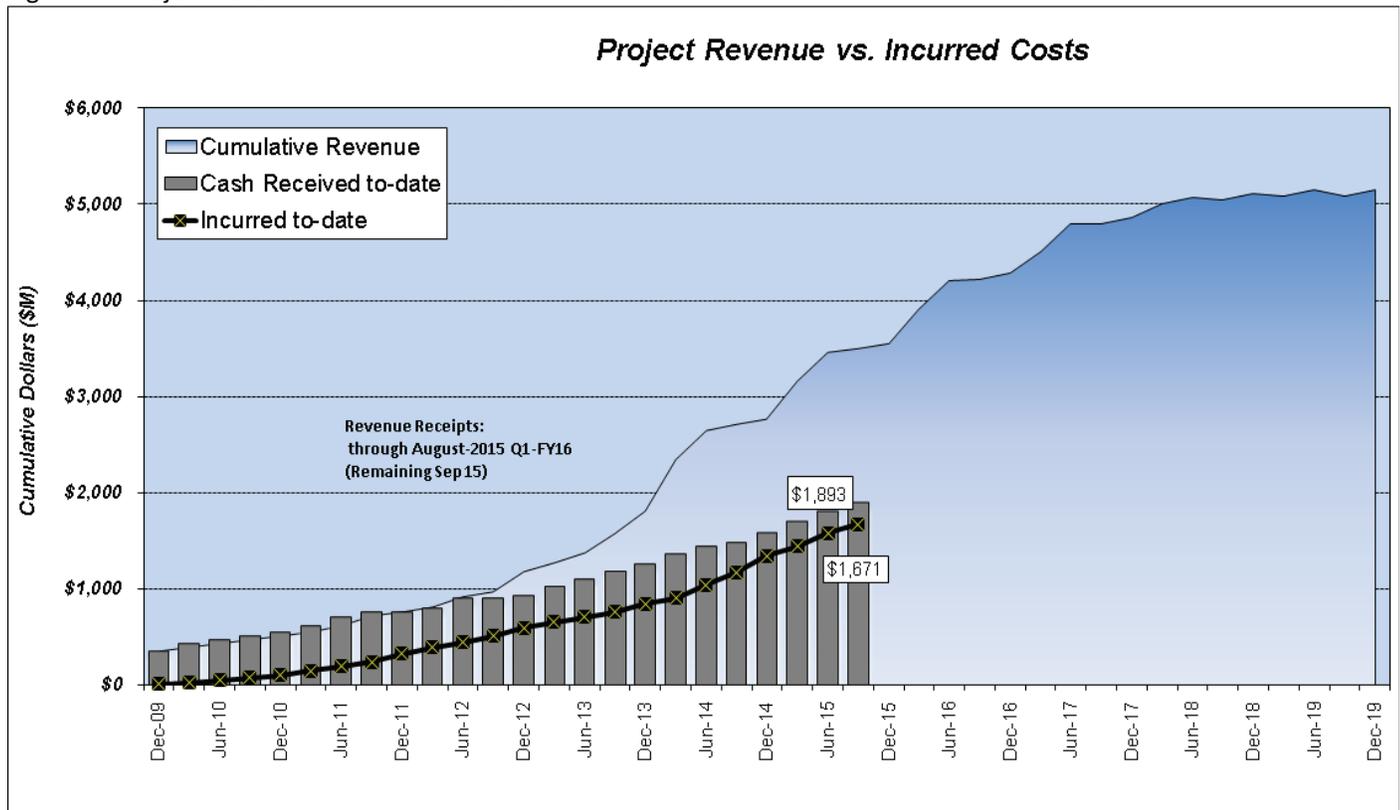
2.5 Project Revenue and Costs

(data as of Aug. 28, 2015)

Ending Cash Balance 8/31/15 = \$292M

(previous report = \$283.7M)

Figure 10. Project Revenue versus Incurred Costs



Planned Funding levels as per the June 2012 FFGA Finance Plan  
Data date for Revenue & Incurred Cost = Aug. 28, 2015

Figure 11. Cash Balance Summary

AUGUST 2015 CASH BALANCE SUMMARY		
	AUGUST	FY16 YTD Cumulative
<b>Beginning Cash Balance 08/01/15</b>	283,718,376	293,010,823
Expenditures:		
Operating Expenditures	(1,245,585)	(2,156,825)
Capital Expenditures	(24,576,847)	(85,317,464)
<b>Expenditures Total:</b>	<b>(25,822,432)</b>	<b>(87,474,290)</b>
Receipts:		
GET Surcharge	0	52,330,383
FTA Drawdown	34,046,472	34,046,472
Interest	11,593	26,689
Other (rental, refunds, copy fees, etc.)	18,788	32,718
<b>Receipts Total:</b>	<b>34,076,852</b>	<b>86,436,263</b>
<b>Ending Cash Balance 08/31/15</b>	<b>291,972,796</b>	<b>291,972,796</b>

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

### 3 SCHEDULE

(data as of Aug. 28, 2015)

#### OVERVIEW

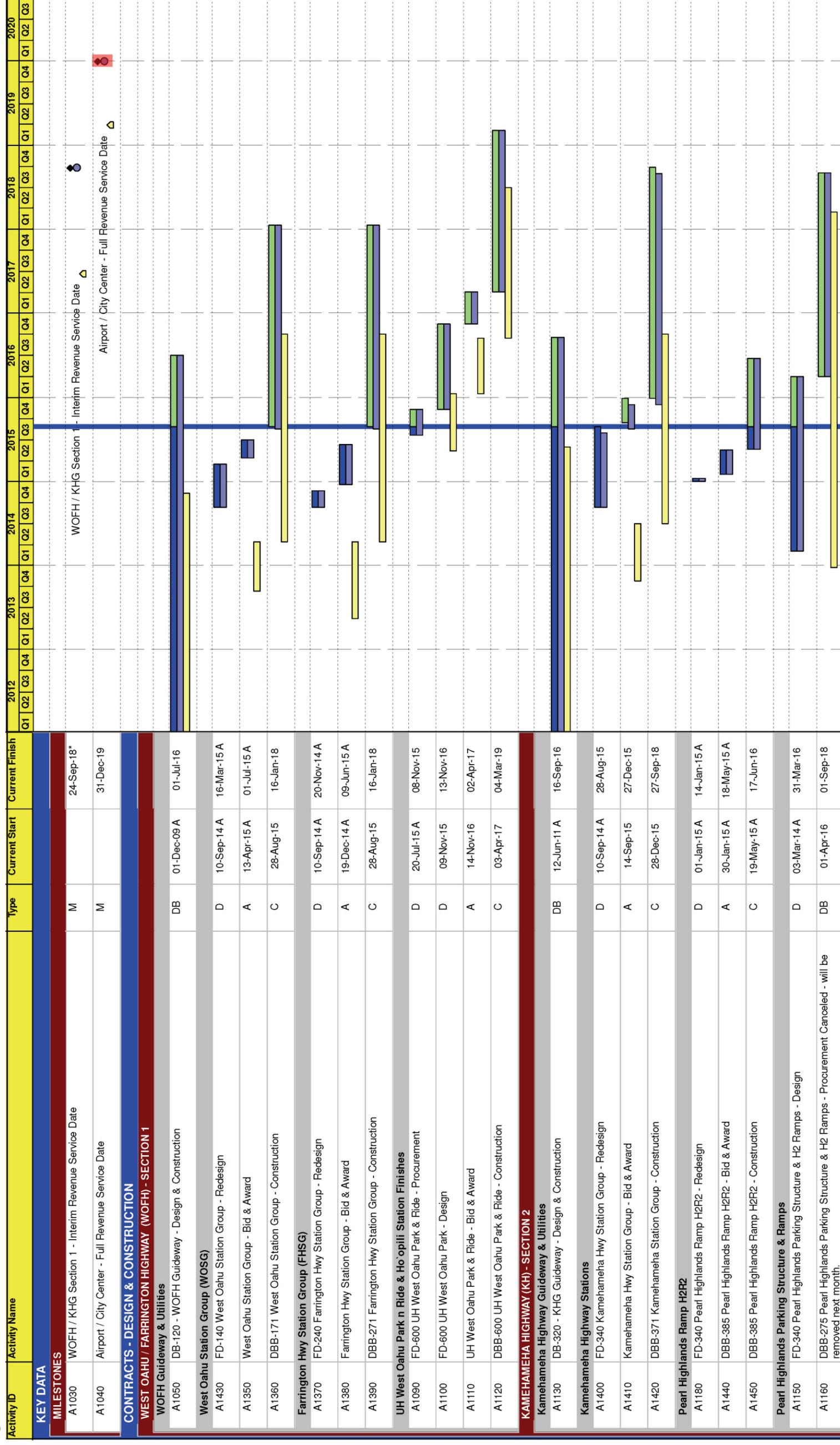
- The Master Program Summary Schedule reflects currently approved schedule end dates for contracts that have been awarded, and planned dates for future contracts. The schedules in the Contract Status section reflect current contractor forecast end dates for contracts that have been awarded.
- H2R2 Ramp (DBB-385), WOSG (DBB-171) and FHSG (DBB-271) contractor schedules will be added to this report as soon as baseline schedules are accepted by HART. Until accepted contractor schedules become available, placeholder schedules spanning the contract dates are displayed in the contract sections of this report.
- 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 civil and structural construction work is behind approved planned schedules. KHG guideway construction contractor progress is behind approved planned schedules.
- Right-of-way acquisition, third-party interface and utility relocations continue to be areas of concern for program completion.

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

The 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).



Printed: 01-Sep-15 18:37  
 July 2015 Update Milestone  
 Milestone  
 FFGA Baseline  
 July 2015 Update  
 Remaining Work  
 Actual Work  
 FFGA Baseline Milestone





## 4 CONTRACT STATUS

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

#### OVERVIEW

- Vehicle Aluminum Carshell Manufacturing is moving forward in Reggio Calabria, Italy – The first two carshells arrived in Pittsburg, CA, and the third carshell is expected to arrive in California in mid-October 2015. Work continues on the 4<sup>th</sup> and 5<sup>th</sup> carshells.
- On-Board Train Control equipment and vehicle couplers have also been shipped to Pittsburg, CA.
- Progressing with sub-system testing and design verification activities.
- Yard Control Bungalow construction is underway – work on the YCB foundations and floor slab was completed in September. Construction of the walls and roof slab will follow and are expected to be complete by the end of October 2015.
- Traction Power Cable installation has been initiated; currently installing power feeds to the MSF TPSS.

#### KEY ISSUES

- Revisions to the station and guideway Construction Access Milestone (CAM) dates might affect substantial completion of the Core Systems Contractor's work. HART and the CSC will evaluate the full extent of potential impact once we have clarity of the expected CAM dates. This issue is being addressed in CSC RFCR # 18.
- Vehicle Production and Testing is an ongoing monitored risk. Carshell production experienced some challenges and delays in the initial assembly of key components that affected the completion and shipment of the first carshell. Final Assembly of the first vehicle may have similar challenges. HART and CSC will continue to work together to plan and respond to the issues as they arise.

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

#### OVERVIEW

- Fare Systems Technical Consultant Contract awarded to CH2M Hill on Sept. 24, 2015, for a term of five years.
- Based upon requests from potential Offerors, the deadline for receipt of proposals for the Fare Systems Contract currently in RFP stage was extended to Oct. 30, 2015, with BAFO anticipated in early December 2015, and award in January 2016.

#### KEY ISSUES

- Completing technical and legal review of MOU for O&M cost sharing between HART and the City.
- Assuring response to over 50 vendor questions and 6 Alternative Technical Concepts are provided on time.

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

#### OVERVIEW

- Leeward Community College (LCC) Portables and Parking Lot Change Order – KIWC has developed plans which were approved by the Honolulu Department of Planning and Permitting (DPP), LCC and HART. HART has completed the review of the Access Structure. LCC construction is ongoing with excavation, compaction, grading and utility relocation in the parking lot area. The delivery of the portable buildings is scheduled to begin in October 2015.
- Balanced Cantilever System (BCS) Form Advancement – BCS construction is progressing. Pier tables and segments for Piers 253 through 256 are in various levels of completion. Segment casting and stressing is proceeding in both eastward and westward directions from Piers 253, 254 and 255. All segments for Pier Table 253 are approaching completion. Upstream and downstream segments between BCS 254 and 255 are being cast and Pier Table 256 has been completed.
- Span by Span Advancement – Work on the left side single track spans around East Kapolei Station was completed in September 2015, bringing all truss work on the westward portion of the alignment to completion. The heading at this section is currently being demobilized to Span 250, Waipahu High School, Work Area 4. East-bound spans have been erected by West Loch Station and proceed towards Waipahu Station. A third truss (Heading #3) has been assembled in the area around the Pearl Highlands Station and segments are being erected through the eastern end of the WOFH segment.

KEY ISSUES

- Drilled Shaft Quality (for additional detail, see 4.2.A Quality Management)
- Intelligent Transportation System Issues (for additional detail, see 4.2.A Key Issues)
- Intersection Closure for Span by Span Operation (for additional detail, see 4.2.A Key Issues)
- Track Welding and Track Construction Operations (for additional detail, see 4.2.A Quality Management)

**Maintenance and Storage Facility (Section 4.2.D)**OVERVIEW

- HECO completed testing and checking switchgear, and providing power for MOW, OSB, WTB and TWF. Power distribution panel installation is ongoing for OSB, MOW and WTB. De-stressing of the storage and maintenance tracks continues. Platform walls, stem walls and foundation construction are completed for the Train Wash Facility. Signal and train control conduit installation continues. Installation of rail is continuing, including contact rail and pre-curved rail. Siding, painting, HVAC, and finishing are continuing for the OSB, MOW and WTB, as well as mechanical, electrical and plumbing installations.

KEY ISSUES

- Coordination with the abutting WOFH main line contract for completion of site access in the east and west yards, including rail, vehicular access and utility interconnection.
- Preparation for the receipt of rail car delivery is underway including design of an unloading area on the maintenance track adjacent to the OSB.
- Orderly completion of traction power, train control and building services raceways for turnover to Core Systems Contractor.

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

- Construction of Drilled Shafts – With the mobilization of the LB44, KIWC currently has 2 drill spreads in operation on KHG. One-third of the KHG shafts have been completed. Anomalies and defects on the KHG shafts have been minimal to date. Drilled shafts are being constructed ahead of the planned rate.
- Relocation of Utility Poles – Relocation of utility pole 51 at TMK 9-8-008-029 is pending finalization of the ROE with the property owners and utility companies.
- HDOT betterments – KIWC has been issued RFCRs to incorporate HDOT's betterments into the design and construction. HART has received the cost proposal for RFCR 30 (Replace CMP with RCP), has finalized the ICE, received HDOT concurrence, and is waiting for NSM approval for negotiation. HART has received the cost proposal for RFCR 32 (Traffic Signals), and is finalizing the ICE. The remainder of the betterment RFCR is still pending receipt of cost proposals from KIWC.
- Balanced Cantilever System (BCS) – KIWC has completed placement of all but one of the BCS shafts. Footings for piers 306 and 307, west of the H-1 overcrossing, are completed. KIWC anticipates superstructure construction to begin in early 2016.
- All Temporary ITS work on the KHG alignment has been completed and is operational, as of Sept. 16, 2015.

KEY ISSUES

- Curb/Gutter and Sidewalk Construction – HART continues to monitor the installation of curb/gutters and sidewalks for conformance. Several sections have required removal and replacement. KIWC is working with its flatwork subcontractor to continue to improve the finished product.
- Drilled Shaft CSL Results – KHG continues to have CSL results that exceed the 10% velocity reduction, but to date most have been resolved without any repairs required.
- Environmental Complaints – HART continues to work with KIWC to respond to, and mitigate, noise complaints along the alignment. Noise monitoring stations have been installed to assist in the monitoring of the construction activities and work hours have been adjusted accordingly. KIWC/HART will continue to monitor the entire alignment to ensure compliance.
- The planned mobilization of a third drill spread to KHG has been postponed to ensure unrestricted traffic flow in the vicinity of Pearl Ridge and Pearl Kai during the holiday season. Drill will temporarily remain on WOFH and KIWC currently intends to mobilize the 885 into this area in January.

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

- The contractual Substantial Completion milestone for ASU is Feb. 6, 2016, and was intended to ensure completion of this work prior to the contractor for the Airport guideway beginning construction. Delays, in particular the Navy right of entry issue, have extended the ASU milestone date to August 2016. However, the Airport Segment Guideway and Stations contract has also been delayed and will not be in construction prior to the forecast completion of the ASU contract. Finalizing the descoped work at Valkenburgh could lessen the delay.

KEY ISSUES

- Noise variance permit for night work has been recently approved by DOH. Contractor to submit a RFCC for this work. The contractor got the ITS system connected the week of Sept. 21.

**Contracts in Procurement**OVERVIEW

- Recent Award of Contract:
  - HART entered into a contract with Stantec Consulting Services Inc. on Sept. 10, 2015, for Construction Engineering and Inspection (CE&I) "II" services, primarily for the east section of the guideway and stations. The term of the contract is from NTP through Dec. 31, 2019, with a two year option period. NTP was issued Sept. 14, 2015.
- Active Procurements:
  - An award of notice was issued to CH2M Hill, Inc. for the Fare Collection Technical Support Services contract on Sept. 24, 2015.
  - RFP Part 1 proposals for the Airport Guideway and Stations were due on Aug. 11, 2015. HART received a competitive number of proposals. Priority-Listed Offerors (PLO) have been established and RFP Part 2 was issued to the PLOs. HART is on schedule with the Part 2 solicitation timeline for Alternative Technical Solutions discussions.
  - A Request for Proposal was issued for a Section 106 Programmatic Agreement Project Manager (Kāko'o "II") on June 26, 2015. Proposals were due on July 31, 2015. The evaluation committee will enter into discussions.
  - Part 1 of the Request for Proposals for the City Center Guideway and Stations (CCGS) Design-Build Contract was advertised on Aug. 4, 2015. The Qualifications proposals are due Nov. 18, 2015.
  - The Kamehameha Highway Stations Group (KHSB) Construction Contract (Design-Bid-Build) Request for Bids was advertised on Aug. 18, 2015. The bids are due Nov. 17, 2015.
  - The Fare Systems Contract Request for Proposals was advertised on Aug. 11, 2015. The proposals are due Oct. 30, 2015.
- Upcoming Procurements:
  - The Dillingham Utilities and Road Widening Design-Bid-Build Contract is anticipated to be advertised early 2016.

KEY ISSUES

- Key Issues and Updates:
  - HART entered into a contract for CE&I "II" services with Stantec Consulting Services Inc.
  - Airport Guideway and Stations Design-Build Contract: The evaluation committee concluded its evaluation and established the Priority List of the top three ranked Offerors. RFP Part 2 was issued to the Priority-Listed Offerors.
  - Core Systems Contract: The sale of one of the members of Ansaldo Honolulu Joint Venture is currently pending.

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: December 2019

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



**Project Overview:** The CSC contractor is continuing to progress through Final Design. Qualification and design verification tests are ongoing; completing the pre-shipment inspection test for MSF Yard Control Bungalow equipment. Construction interface with the MSF contractor (KKJV) is ongoing, with AHJV on site working on the Yard Control Bungalow (YCB) foundations, after the completion of the YCB ground grid. The first and second passenger vehicle carshells have arrived at the final assembly facility in Pittsburg, California.

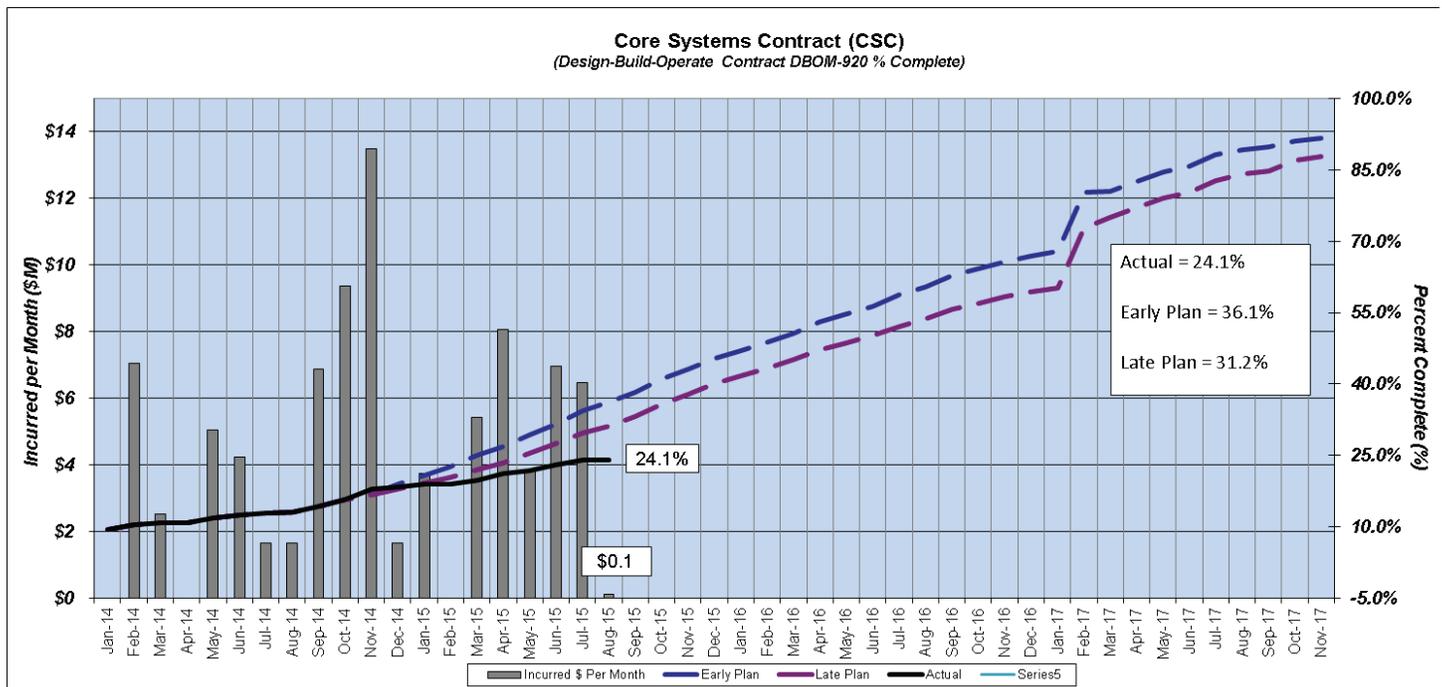
**COST INFORMATION:**

Original Contract:	\$573,782,793	Incurred-to-Date:	\$143,620,180
Current Contract Value <sup>1</sup> :	\$595,063,687	Incurred in August:	\$107,697

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

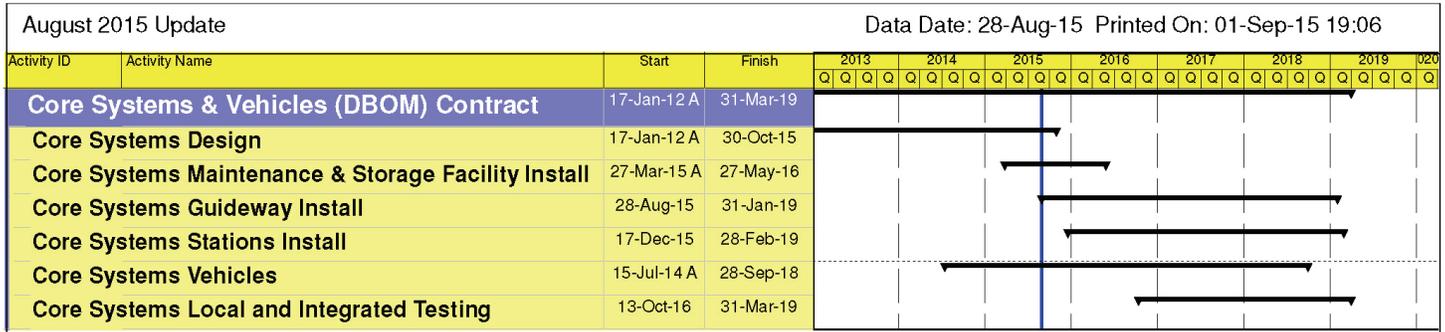
Disadvantaged Business Enterprise (DBE) Participation	
Actual DBE Participation:	\$129,165
DBE % Attained:	0.029%

August Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$21,280,894</b>



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:**



	Interim Design Submitted Documents	Final Design Submitted Documents	Target Completion Date
Passenger Vehicles	100%	56%	4 <sup>th</sup> Q 2015
Communications	100%	37%	4 <sup>th</sup> Q 2015
ATC/SCADA	88%	94%	4 <sup>th</sup> Q 2015
TES	100%	99%	4 <sup>th</sup> Q 2015
Fire Detection	100%	55%	4 <sup>th</sup> Q 2015
PSG, UPS, MOW, YCB	N/A	78%	4 <sup>th</sup> Q 2015

**CRITICAL PATH SUMMARY:**

- Continue to oversee construction activities with the MSF contractor, the CSC installation subcontractor and the On-Call Contractor.
- Passenger Vehicle crews finalized manufacturing of the first and second carshells in Reggio Calabria, Italy. Progress is ongoing with the other carshells, and this work is being monitored closely.
- Due to the modified CAM dates, the equipment installation at Pearl Highlands and Pearlridge Stations are now driving the critical path.

**WORK PROGRESS:**

Activities this Month:

- Project-Wide Percent Complete: 25%
- Passenger Vehicle Percent Complete: 29%

**Design:**

- ATC/SCADA – Documents Received: 11, Documents Returned: 18.
- Communications – Documents Received: 17, Documents Returned: 7.
- Traction Power – Documents Received: 43, Documents Returned: 3.
- Fire Detection – Documents Received: 1, Documents Returned: 1.
- Platform Screen Gates – Documents Received: 0, Returned: 5.
- Passenger Vehicles – Documents Received: 50, Documents Returned: 16.

Look Ahead:

**Design:**

- Completion of ATC/SCADA Final Design for Segment 1.
- Completion of TES Final Design for Segment 1.

**Manufacturing:**

- Passenger Vehicle Manufacturing – Continue carshell assembly for the first eight carshells (first two trains).
- Arrival of the third carshell to the Final Assembly Plant in Pittsburg, CA.

**Testing:**

- Traction Power – Design Verification of TPSS Temperature Rise – Fontana, CA (November 2015).
- Traction Power – Design Verification of Negative Ground – Chalfont, CA (October 2015).
- Traction Power – Pre-shipping Inspection Test Waipahu TPSS – Fontana, CA (October 2015).
- Traction Power – Pre-shipping Inspection Test Leeward Gap Breaker Station (GBS) – Fontana, CA (November 2015).
- Traction Power – Pre-shipping Inspection Test East Kapolei TPSS – Fontana, CA (November 2015).

Activities this Month (continued):

**Manufacturing:**

- Performed manufacturing oversight work at the AnsaldoBreda factories. Work completed this month: Final assemblies of the third and fourth carshells are underway; calibration and finishes of carshell # 3; floor and roofing of carshells five and six. (For additional details, please see the Vehicle Carshell Progress Tracker in Appendix E.)
- Participated in the oversight of truck frame production in West Plains, Missouri.

**Testing:**

- Pre-Shipping Inspection Test for ATS/SCADA software – Pittsburg, PA.

**MSF:**

- Ongoing coordinating work with KKJV, and coordinating follow up work by AHJV and On-Call Contractor.
- Yard conduit installation: On-Call Contractor installation of yard conduit extensions is ongoing.
- OSB conduit installation: On-Call Contractor finalizing Public Announcement and Access Control System/Intrusion Detection System (ACS/IDS) conduits at the OSB and the MOW buildings.
- Yard Control Bungalow - completion of the foundation and floor slab.
- AHJV continues walk through activities with KKJV for Share Access for the Wheel Truing Building (WTB) and Operations and Servicing Building (OSB).
- TES Cable Installation is underway at the MSF Traction Power Sub Station.
- Fire Detection wiring at the OSB Mezzanine 2 is ongoing and expected to be complete by the end of October.
- Started construction of foundations for the Closed Circuit Television Cameras poles at the MSF perimeter.

Look Ahead (continued):

- Communication Systems – Design Verification OSB System – Italy (October 2015).
- Communication Systems – Pre-Shipping Inspection Test for Passenger Information System – Plano, TX (October 2015).
- Communications Pre Shipping Inspection of On-Board Systems – Plano, TX (November 2015).
- Communication Systems – Design Verification of Integrated Control and Communication Systems (ICCS) – Italy (November 2015).
- Train Control Systems – Pre-Shipping Inspection Test for LCC Station SCADA Hardware – Batesburg, SC (October 2015).
- Train Control Systems – Pre-Shipping Inspection Test for Waipahu Station SCADA Hardware – Batesburg, SC (October 2015).
- Train Control Systems – Pre-Shipping Inspection Test for West Loch Station SCADA Hardware – Batesburg, SC (October 2015).
- Train Control Systems – Pre-Shipping Inspection Test for LCC Station TCCR Equipment – Batesburg, SC (October 2015).
- Train Control Systems – Vehicle ATC Cabracks 3 & 4 – Batesburg, SC (October 2015).
- Train Control Systems – Pre-shipping Inspection test – Ho’opili TCCR – Batesburg, SC (October 2015).
- Platform Screen Gates Design Verifications – Farmington, CT (October 2015).
- Platform Screen Gates Dynamic Load Tests (October 2015).
- Platform Screen Gates Kinetic Energy Tests – Farmington, CT (October 2015).
- Platform Screen Gates Static Load Tests – Farmington, CT (October 2015).
- Platform Screen Gates Portable Test Unit Tests – Farmington, CT (October 2015).
- Platform Screen Gates Reliability Life Cycle Test – Farmington, CT (October 2015).
- Uninterruptible Power Supply (UPS) First Production Units Test – China, October 2015.

**MSF:**

- Installation of Fire Detection wiring at the OSB Mezzanine Level 1 and second floor.
- Construction of the foundations and conduits for Communication Interface Cabinets at the MSF Yard.

**KEY ISSUES:**

- Revisions to the station and guideway Construction Access Milestone (CAM) dates might affect substantial completion of the Core Systems Contractor’s work. HART and the CSC will evaluate the full extent of potential impact once we have clarity of the expected CAM dates. This issue is being addressed in RFCR # 18.
- Vehicle Production and Testing is an ongoing monitored risk. Carshell production experienced some challenges and delays in the initial assembly of key components that affected the completion and shipment of the first carshell. Final Assembly of the first vehicle may have similar challenges. HART and CSC will continue to work together to plan and respond to the issues as they arise.

- Nine (9) Month Delay Claim: Negotiations took place in June. The proposed settlement was presented to the HART Board in July. Approval of the settlement has been deferred, pending the submittal of additional information to the Board.

**QUALITY MANAGEMENT:**

- Overall quality of the contract is good.

Design Verifications & System Testing		
Subsystem	Test Completed	Date Completed
ATC/SCADA	Factory Acceptance test of MSF Wayside equipment	Aug. 28, 2015

Passenger Vehicle - Oversight		
Facility	Activity	Date Completed
Pittsburg, CA	On-site inspector in place to oversee and report on AnsaldoBreda Final Assembly activities. First and second carshells arrived at the Final Assembly Facility. The third and fourth carshells are in transit.	Ongoing

CSC NCR Log			
	TOTAL	CLOSED	OPEN
AHJV & Subs	23	18	5
AB	220	171	49
<b>TOTAL</b>	<b>243</b>	<b>189</b>	<b>54</b>

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

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

**Contract No.:** MI-930

**Contractor:** Schindler Elevator Corporation

**Contract Start Date:** August 2013

**Contract Substantial Completion:** May 2018

**Projected Substantial Completion:** The May 2018 completion date will change to a later date predicated on the award of the DB contracts for the east portion of the guideway. The Airport Guideway and Stations has been advertised. The City Center Guideway and Station DB contract part 1 was advertised in August, as planned.



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

**Project Overview:** The release to begin manufacturing of the FHSG and WOSG equipment will be scheduled once an approved construction schedule with the respective contractors has been completed. The Notice to Proceed for FHSG was issued in August. The WOSG NTP is pending.

**COST INFORMATION:**

Original Contract: \$50,982,714

Incurred-to-Date: \$4,503,158

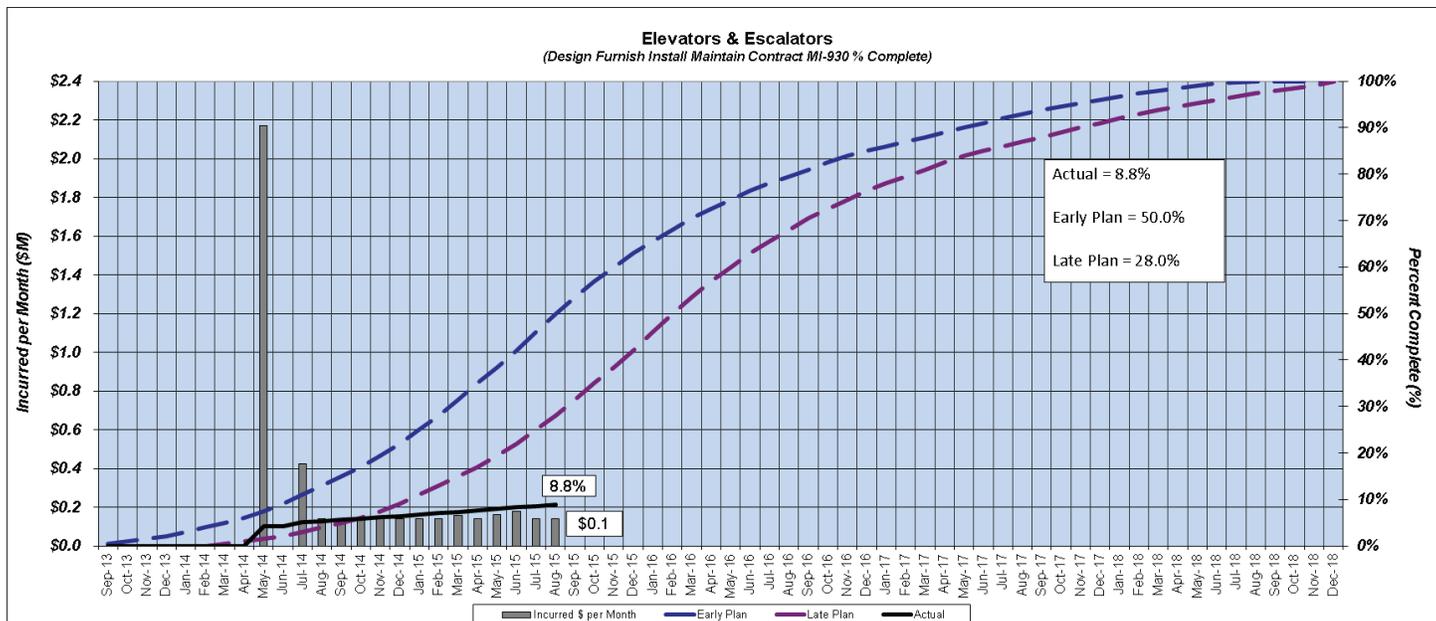
Current Contract Value<sup>1</sup>: \$50,982,714

Incurred in August: \$140,825

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

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

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



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:**

August 2015 Update		Data Date: 28-Aug-15, Printed On: 01-Sep-15														
Activity Name	Start	Finish	2015			2016			2017			2018			2019	
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
<b>Elevators &amp; Escalators</b>																
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>																
<b>W. Oahu Station Group</b>																
Construction - W. Oahu Station Group																
East Kapolei Station																
UH West Oahu Station																
Ho'opili Station																
<b>Farrington Highway Station Group</b>																
Construction - Farrington Highway Station Group																
West Loch Station																
Waipahu Transit Station																
<b>Kamehameha Highway (KH) - Section 2</b>																
<b>Kamehameha Highway Station Group</b>																
Construction - Kamehameha Highway Station Group																
Pearl Highlands Station																
Pearl Ridge Station																
Aloha Stadium Station																
<b>Airport - Section 3</b>																
<b>Airport Station Group</b>																
Construction - Airport Station Group																
Pearl Harbor Station																
HNL Airport Station																
Lagoon Drive Station																
Middle Street Station																
<b>City Center (CC) - Section 4</b>																
<b>Dillingham Station Group</b>																
Construction - Dillingham Station Group																
Kalihi Station																
Kapalama Station																
Iwilei Station																
Chinatown Station																
<b>Kaka'ako Station Group</b>																
Construction - Kaka'ako Station Group																
Downtown Station																
Civic Center Station																
Kaka'ako Station																
Ala Moana Center Station																

**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 might impact the completion of the Elevator Escalator contract.

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 8.8%;** Planned Value: 28%

- Final Design is approximately 40% 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.

Look Ahead:

- Release for manufacturing for the Farrington Highway Station Group and the West O'ahu Station Group elevators and escalators will be scheduled once the respective contractor's schedule has been approved and issued.

**KEY ISSUES:**

- The release to allow manufacturing for FHSG, WOSG and KHSG will be dependent on the acceptance of an approved schedule for each of these contracts.

**C. Fare Collection System**

**Contract No.:** TBD  
**Contractor:** TBD  
**Contract Start Date:** TBD  
**Contract Substantial Completion:** TBD  
**Projected Substantial Completion:** TBD

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

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

**Project Overview:** The Fare Systems RFP was released on Aug. 11, 2015. As a result of potential Offeror requests, the deadline for proposals was extended to Oct. 30, 2015. Best and Final Offer (BAFO) is now anticipated in early December with award in mid –January. An MOU for capital cost sharing with the City has been executed and an MOU for Operations and Maintenance has been drafted and is currently in technical review with DTS, OTS and DIT. 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 is anticipated to start design in March 2016.

**COST INFORMATION:** TBD

**SCHEDULE:**

- RFP released Aug. 11, 2015. Award anticipated in January 2016. System design anticipated to start in spring 2016.
- Manufacture in fall 2016.
- System testing for the back office functions and the bus anticipated in spring 2017.
- Anticipated system pilot launch on TheBus in fall 2017, with full roll out on TheBus (including all central systems) in winter 2017.
- Interim roll out on rail is still scheduled fall 2018.
- Full roll out on rail in late 2019.

**CRITICAL PATH ISSUES:**

- MOU for O&M cost sharing between HART and the City.

**WORK PROGRESS:**

Activities this Month:

- Drafting MOU for Operations and Maintenance.
- Completing contract negotiations and issuing award for Technical Consultant.
- Responding to questions and ATCs from potential Offerors.
- Brief PIG II on fare modeling options.
- Draft Oahu Metropolitan Planning Organization (OMPO) funding request for reimbursement payment for portions of fare modeling efforts.
- Confirm fare modeling approach with consultant.

Look Ahead:

- Respond to any additional RFP questions and ATCs. Deadline for receipt was Sept. 18, and deadline for responses is Oct. 2 and 9 respectively.
- Complete technical review of MOU for Operations and Maintenance and begin legal review.
- Prepare Board briefing with overview of Fare System and how it operates from an end user perspective.
- Begin fare modeling once 60 day review period is completed by OMPO.

**KEY ISSUES:**

- Completing technical and legal review of MOU for O&M cost sharing between HART and the City.
- Assuring response to over 50 vendor questions and 6 ATCs are provided on time.

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: January 2017



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

**Project Overview:** For the September 2015 Report, progress for utilities, shaft, column, segment casting, and span stressing have been updated. The westward heading of the span by span erection through East Kapolei Station has now completed truss work. A new heading is being mounted at Waipahu High School (WHS) to progress westward towards Waipahu Transit Center. Span by span operations are heading eastward by West Loch Station proceeding towards Waipahu Transit Center Station. Maintenance of Traffic action items are being addressed for intersection closures. The Project’s Key Quality Issues continue to focus on drilled shafts and segment repairs, in addition to the repairs of Span 17.

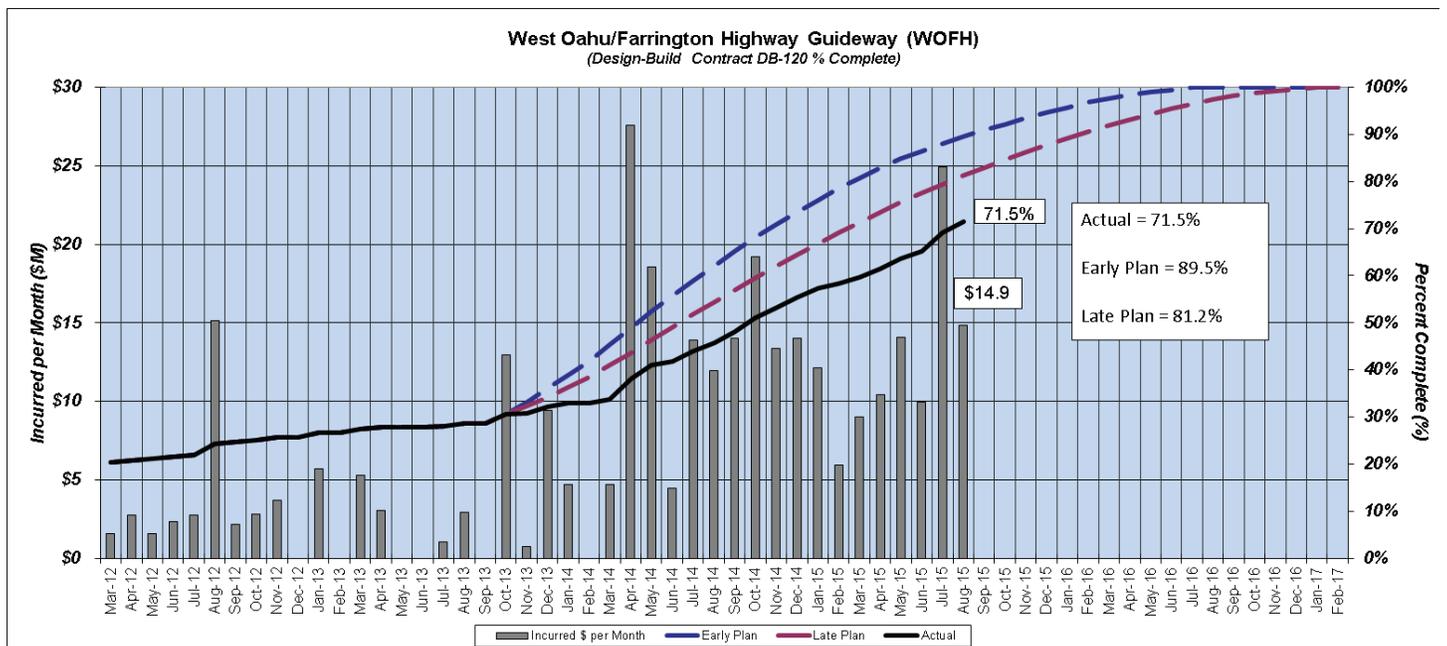
**COST INFORMATION:**

Original Contract:	\$482,924,000	Incurred-to-Date:	\$451,439,511
Current Contract Value <sup>1</sup> :	\$631,206,384	Incurred in August:	\$14,866,827

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

DBE Participation	
Actual DBE Participation:	\$6,339,887
DBE % Attained:	1.31%

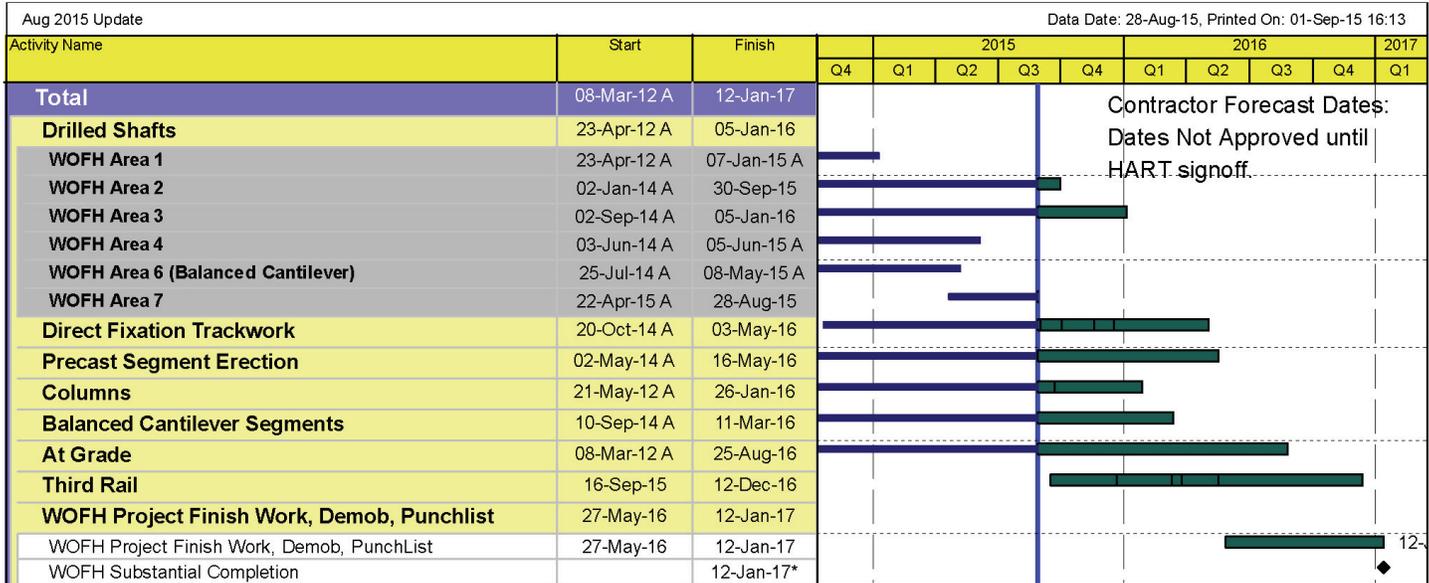
August Change Orders		
Change No.	Description	Amount (\$)
#0068	Delay of NTP 2, 3 and 4 - CMC Escalation	\$6,228,445
<b>Cumulative to Date</b>		<b>\$148,282,384</b>



In September, KIWC submitted Pay Application #70 for the August 2015 billing and the payment is currently being reviewed by HART. Pay Application #69 for July 2015 has been approved and closed. HART maintains that retention will continue to be withheld until such time that progress is satisfactory.

**SCHEDULE:**

- Progress is lagging from the approved planned schedule. HART and KIWC have been working to mitigate impacts to critical path activities. HART reviewed a revised schedule and requested a resubmittal via the Change Order process.



**CRITICAL PATH ISSUES:**

- The lead time for modular buildings at LCC and delays with procurement and LCC ROE Agreement will have an impact to the overall schedule. KIWC has notified HART that a 6 month time extension beyond substantial completion is needed to complete work at LCC due to these impacts. HART is currently working with the contractor to mitigate delays and working to extend the time needed to complete LCC work, which does not affect elevated guideway completion.
- Production rates for span erection continue to reside at or near critical path.
- Work in the Balanced Cantilever System area has slipped from the October 2014 schedule and is at or nearing critical path with minimal total float days available. Follow on track work have been re-sequenced and/or reduced to minimize the slippages in the Balanced Cantilever System area.

**WORK PROGRESS:**

WOFH Construction Status as of 9/18/15									
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	8,858	9,348	95%	Shafts	292	309	272	309	95%
Sewer Line	550	570	96%	Columns	213	228	203	283	75%
Fuel Line	340	340	100%	Segment Casting	3,087	3,209	3,209	3,209	96%
Gas line	1,498	1,591	94%	Spans Stressed	177	201	170	274	65%
Drainage Line	3,325	5,166	64%	* Accepted Schedule was submitted in 2013.					
Elec/Telecom	16,509	21,374	77%	** Revised Unaccepted Schedule was submitted in 2014. Revised schedule reflects a 6 month delay to completion.					
Street Lights	6,335	8,357	76 %	*** Total quantity for the construction items has been revised to reflect the latest Issued for Construction number of shafts, columns, segments and spans.					
Traffic Sig/ITS Duct bank	8,209	10,802	76%						
System Sites	400	7,046	6%						
ITS Systems Devices	821	4,121	20%						

Activities this Month:

**Earned Value: 72%** [(Total Achieved to August 2015 (\$436.6 million) + Projected September 2015 Period (\$17.7 million))/Total Contract Including Executed Change Orders (\$631 million)]. Planned Value: 83.0%

**Shaft/Column**

- Performed drilled shaft construction, drilling, and placing of concrete for a total of 3 drill shafts. Set rebar and placed concrete for 7 columns.

Look Ahead:

**Design Progress**

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

**Shaft/Column**

- Continue with drilled shaft and column production along Farrington between Work Area 2 Phase 6 and 7 (Mukuola Street) continuing towards Waipahu Transit Station. Drilled shaft production has been completed at the Pearl Highlands Station area and column production is proceeding at the eastern end of the alignment, Pearl Highlands Station.

Activities this Month (continued):

**Guideway Segment Erection**

- Eastbound Heading #1 segments were erected from Span 161 through Span 164. Westbound Heading #2 segments were erected from Span 3L through to the end of the westward alignment. KIWC is demobilizing the Heading #2 to move to Span 250. Heading #3 is progressing from Span 258 to the eastern end of the alignment.

**Utility Relocation**

- KIWC continues to relocate third party utilities and is staying out in front of drilled shaft productions.

**Balanced Cantilever Structure**

- Cast 2 new segments downstream at Pier 253 and cast 3 segments upstream at Pier 254. Cast 3 segments, 1 upstream and 2 downstream, at Pier 255. KIWC is preparing the grade for a temporary support to work at Pier 252, and KIWC completed the stressing of the vertical PT bars on Pier Table 256.

**Track Construction**

- Track setting and concrete placing for plinths was completed at the double crossover by East Kapolei Station. Continue to lay track and set to final elevation between UH West O’ahu and Ho’opili Station.

**Precast Yard**

- Precast Yard performed daily segment and sound wall casting at a reduced pace, averaging 3 segments per day or 12-15 segments per week. This reduced pace is to accommodate the available storage at the yard.

**KIWC/Third-Party Coordination**

- HECO and KIWC continue to resolve conflicts with utility relocations.

**Civil Structures**

- Mechanically Stabilized Earth (MSE) Block Wall by Pier 251 continues to progress. Retaining Wall A and B have been completed and work continues on Walls C and D.

Look Ahead (continued):

**Guideway Segment Erection**

- Segment span erection will continue from Span 250 westbound towards Waipahu Transit Center, and from Span 164 eastbound along Farrington Highway to intersect Heading #2 at Waipahu Transit Center Station. The third truss will continue segment erection from Span 257 to Span 266.

**Utility Relocation**

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

**Balanced Cantilever Structure**

- KIWC will continue to cast upstream segments for the balanced cantilever at Pier 253, and downstream segments for Pier 254. Cast segments upstream and downstream for Pier 255. Work to assemble truss at Pier Table 256.

**Track Construction**

- Align and final set of the rail will be performed between UH West O’ahu Station and Ho’opili Station. Welding operations will return in October 2015, east of West Loch Station.

**Precast Yard**

- KIWC will continue to cast segment spans for the area between Work Area 2 Phase 6. Production of segment casting and sound walls will continue for the WOFH segments and is targeting a completion date of November 2015.

**KIWC/Third-Party Coordination**

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

**Civil Structures**

- MSE Block Walls C and D will continue to progress by Pier 251.

**KEY ISSUES:**

- **Design Completion Schedule** – The Project’s design schedule continues to be tracked by HART. Design completion is not impacting construction and the Design-Builder is managing the completion of all design milestones. Comment Disposition and Over-the-Shoulder Meetings also continue to occur. As of mid-September, 121 of 134 design submittals have been accepted. HART will continue to facilitate the third-party review process and will track against KIWC’s design schedule. Department of Transportation Services (DTS) traffic signals account for a majority of the remainder of the design.
- **Leeward Community College (LCC) Portables and Parking Lot Change Order** – A grading permit was executed in August 2015 and KIWC began work at the LCC Station area. KIWC has developed plans which were submitted and accepted by the Honolulu Department of Planning and Permitting (DPP), LCC and HART. HART has completed the review of the Access Structure, and LCC construction is ongoing with grading and excavation work. The delivery of the portable buildings is scheduled to begin in October 2015.
- **Construction Production/Baseline Schedule** – Meeting the project’s schedule will continue to be a challenge. A re-sequenced October 2014 baseline schedule was submitted to HART in December 2014, showing more realistic construction durations. The schedule is being used to track progress against schedule of milestones. KIWC submitted a new July 2015 baseline schedule in August 2015 and it is currently being reviewed by HART.
- **HDOT Traffic Signal Betterments** – HDOT has requested and has recognized various betterments beyond KIWC’s base scope of work. KIWC has presented a list of contract work versus betterments. HART, KIWC and HDOT have reviewed these items and agreed to the final scope of work. HART and KIWC are currently negotiating a final price for the traffic signal betterments and a change order is currently in progress.
- **Intelligent Transportation Systems (ITS) Issue:** As a part of the Transportation Management Plan, it is the responsibility of the Design-Builder to design, procure, install and maintain ITS equipment along Farrington Highway. There are multiple ITS issues and KIWC is currently working to resolve these issues and prevent delays in MOT.
- **Span by Span Operations** – Span erection and stressing operations are proceeding eastward on Heading #1 towards Waipahu Transit Center Station at a steady pace. Erection and post tensioning operations on Heading #2, in the westbound direction towards the beginning of the alignment, was completed in September. With the completion of the spans in the westbound portion of the alignment, Heading #2 is being demobilized to Span 250 to work its way westward to intersect Heading #1 at Waipahu Transit Center. Heading #3 by Pier 257 is advancing eastward towards the eastern end of the WOFH alignment.
- **Intersection Closure for Span by Span** – KIWC successfully completed the temporary intersection closure at Leoku Street for the span erection and post tensioning operations in August. Leoku is the first major intersection closure for the project. The next intersection closure for span by span operations was by the Leokane intersection and work was completed by the end of September. KIWC and HART will continue to evaluate opportunities for minimizing full closures at intersections during span by span operations over intersections along Farrington Highway.

**QUALITY MANAGEMENT:**

- KIWC continues to follow their established quality processes. There have not been any significant findings through quality monitoring and audits.
- **Erosion Control and BMP** – In September, there was a high occurrence of rain and storms on the project, impacting the progress of construction activities and environmental concerns. KIWC has been diligent in repairing and protecting BMPs throughout the project and has an increased protection plan in the Banana Patch and Old Fort Weaver Road area to divert water to streams away from the project site. The installed BMP held up during the storms and there were no reported environmental issues in this period.
- **Span 17 Damage and Repair** – During the erection process of Span 17, segments 17-1, 17-2, 17-11 and 17-12 were damaged due to unbalanced support from the temporary bearings. NCR 00314 was opened to address this issue. This issue has been technically resolved and a recommendation to proceed with the repair has been issued. KIWC began the repair in mid-September and is expected to complete the repair by the end of October. Repair at Span 17 is not on the critical path and KIWC continues to proceed with span by span operations westbound.
- **Drilled Shaft Quality** – HART received 15 additional drill shaft Crosshole Sonic Logging (CSL) Reports in September 2015. Of the 15 reports received, five drilled shafts were found to have velocity reductions outside of the acceptable design criteria limits. The drilled shaft activity continues to progress towards completion and the quality of the shafts have improved substantially.
- **Drill Shaft Repairs** – In September, 4 new CSL related NCRs have been opened and submitted to HART. HART will not close an NCR until KIWC completes another CSL test and demonstrates soundness of the concrete shaft as well as when all HART comments are responded to. The repair procedure for Drilled Shaft Pier 235 has been approved and KIWC is proceeding with the repair. KIWC projects the repair to be done by mid-October.
- **Pre-Cast Segment Progress/Quality** – The Casting Yard has scaled back in production to allow time for span erection efforts to catch up. Production is now averaging 7-10 segments per week and is currently about 96% complete with segment production for the overall project. Although 131 of the total 447 NCRs (29.3%) have been related to segmental issues like damaged shear keys, concrete voids and spalls, proper correction procedures have already been developed and are being implemented.
- **Closing Out NCRs** – NCRs are being promptly corrected, validated, and closed out during this period. Both KIWC and HART have been working together to complete all the needed processes for timely validation and closeout of NCRs. A total of 12 NCRs have been closed since last month. Of the 12, three were related to drilled shaft issues, two Balanced Cantilever System (BCS) cracking/tensioning issues, two out of tolerance rebar issue, one concrete design strength issue and track plinth cracking issue.
- **Track Welding and Track Construction Operations** – KIWC has completed the concrete plinth trackwork for double crossovers Span 15 and 16 east of East Kapolei Station (the second of five crossovers for the project). HART and KIWC continue to have discussions on Direct Fixation Shim Tolerances, and KIWC is working on resolving some outstanding issues on the shim tolerances with HART. KIWC has decided to halt installation of direct fixation trackwork until these issues are resolved.
- **Balanced Cantilever System (BCS) Form Advancement** – KIWC continues BCS construction with minimal quality issues. In September, two NCRs related to Balanced Cantilever segments were created. On average, two Balanced Cantilever segments are cast and stressed per week. As of mid-September, 46 of 84 BCS segments have been stressed (54.8%).

WOFH NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
447	384	63

**PROJECT PICTURES:**



Demobilizing truss at Span 1L, end of westbound heading, Work Area 1.



Epoxy segments for Span 161, eastbound, Work Area 2.



Concrete placement at Column 175, WA 3.



Concrete placement at Utility Conflict 406-E1.

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

**Contract No.:** FD-140  
**Contractor:** URS Corporation, Final Design Consultant (Engineer of Record)  
**Contract Start Date:** June 2012  
**Construction Docs Bid-Ready:** April 2015 (awarded July 2015)



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

**Project Overview:** The WOSG construction contract was awarded to Nan, Inc. on July 1, 2015. HART will be evaluating the Project schedule and anticipates issuing the Notice to Proceed shortly.

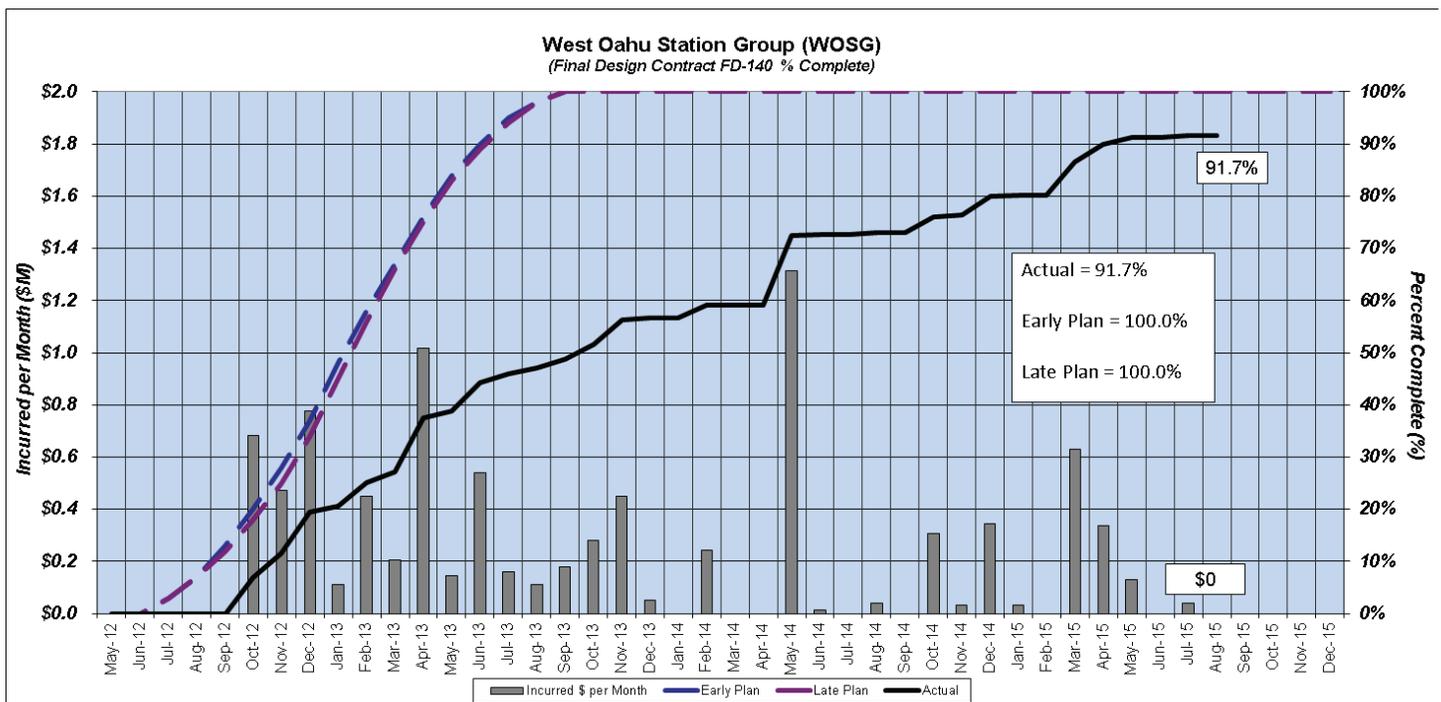
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$7,789,000</u>	<u>Incurred-to-Date:</u>	<u>\$9,094,052</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$10,014,305</u>	<u>Incurred in August<sup>2</sup>:</u>	<u>-\$93</u>

<sup>1</sup> Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed Change Orders  
<sup>2</sup> Incurred amount modified due to payment request adjustment

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

August Change Orders/Amendment		
Change No./Amend	Description	Amount (\$)
CA0017	Power to UHWO Station / Electrical Bonding	\$48,000
<b>Cumulative to Date</b>		<b>\$2,825,305</b>



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

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

**SCHEDULE:**

August 2015 Update				Data Date: 28-Aug-15, Printed On: 20-Aug-15													
Activity ID	Activity Name	Start	Finish	2015				2016				2017					
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
	<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	28-May-13 A	29-Sep-17														
	<b>W. Oahu Station Group</b>	28-May-13 A	29-Sep-17														
	Design - W. Oahu Station Group	28-May-13 A	29-Sep-17														
	Design - Bid Support	28-May-13 A	28-Aug-15														
	Design - Construction Support	28-Aug-15	29-Sep-17														
	Construction - W. Oahu Station Group	28-Aug-15	29-Sep-17														
	East Kapolei Station	15-Jan-16	29-Sep-17														
	UH West Oahu Station	01-Oct-15	31-Jul-17														
	Ho'opili Station	28-Aug-15	17-Apr-17														

**CRITICAL PATH ISSUES:**

- Approval by HECO of all power service connections.
- Resolution of all HDOT comments.

**WORK PROGRESS:**

Activities this Month:

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

Look Ahead:

- Document design interface agreements with CSC, WOFH and EE contracts.
- Finalize third-party agreements and approvals.
- HDOT and DPP sign-off on construction plans.

**KEY ISSUES:**

- Coordinating with HDOT to resolve policy level design review comments.
- Coordinating holding tank approvals from the Department of Health (DOH).
- Confirmation of irrigation water source for Ho’opili landscaping.

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

**Contract No.:** DBB-271

**Contractor:** Hawaiian Dredging Construction Company, Inc.

**Contract Start Date:** August 2015

**Substantial Completion:** September 2017

**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 (WL), Waipahu Transit 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. Preliminary discussions with the Hawaiian Dredging Construction Company (HDCC) introduced two (2) Value Engineering (VE) concepts – soil mixing for foundations and platform girder construction. HDCC has received HART’s feedback regarding the concepts and intends to submit an official VE proposal to HART. HDCC is currently working on the project plans, baseline schedule and contractual submittals.

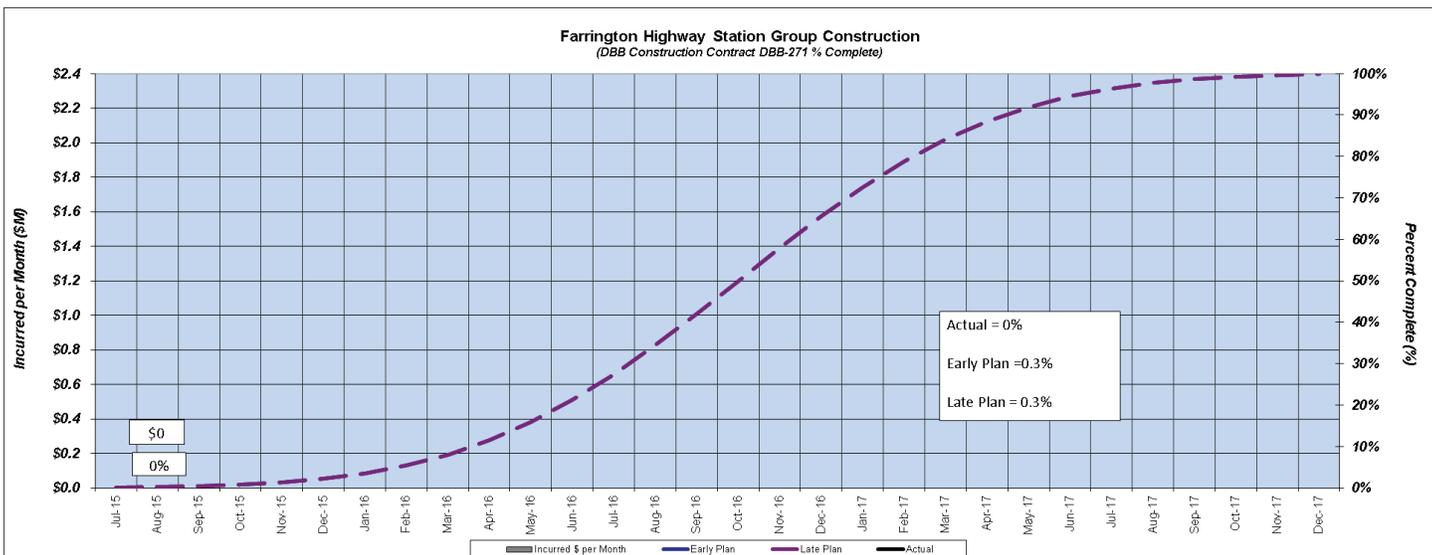
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$78,999,000</u>	<u>Incurred-to-Date:</u>	<u>\$0</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$78,999,000</u>	<u>Incurred in August:</u>	<u>\$0</u>

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

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

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



**SCHEDULE:**

August 2015 Update		Data Date: 28-Aug-15, Printed On: 20-Aug-15															
Activity Name	Start	Finish	2015				2016				2017						
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	28-Jan-13 A	15-Aug-17															
Farrington Highway Station Group	28-Jan-13 A	15-Aug-17															
Design - Farrington Highway Station Group	28-Jan-13 A	15-Aug-17															
Design - Bid Support	28-Jan-13 A	14-Aug-15 A															
Design - Construction Support	14-Aug-15 A	15-Aug-17															
Construction - Farrington Highway Station Group	17-Aug-15 A	15-Aug-17															
West Loch Station	17-Aug-15 A	12-May-17															
Waipahu Transit Station	17-Aug-15 A	15-Aug-17															
Leeward Community College Station	01-Dec-15	30-Jun-17															

**CRITICAL PATH ISSUES:**

- Obtaining NPDES permit.
- Baseline Schedule approval.
- Review and approval of contractor’s administrative plans and procedures as required by the contract.

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 0%; Planned Value: 0%**

- Developing Baseline Schedule.
- Preliminary discussions for two (2) Value Engineering concepts proposed by HDCC.
- Drafting HDCC’s Quality Assurance Plan, Public Awareness & Community Relations Plan.
- Submission of required contractual documents such as resumes and personnel directory.

Look Ahead:

- Value Engineering proposals.
- Baseline Schedule approval.

**KEY ISSUES:**

- HDOT approval and DPP grading plan approval.
- Baseline Schedule.

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

**Contract No.:** DB-200  
**Contractor:** Kiewit/Kobayashi Joint Venture (KKJV)  
**Contract Start Date:** July 2011  
**Contract Substantial Completion:** April 2016  
**Projected Substantial Completion:** April 2016



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

**Project Overview:** MSF substantial completion is April 21, 2016. The MSF-HART team is evaluating a one week time extension requested by KKJV due to weather events to date in 2015.

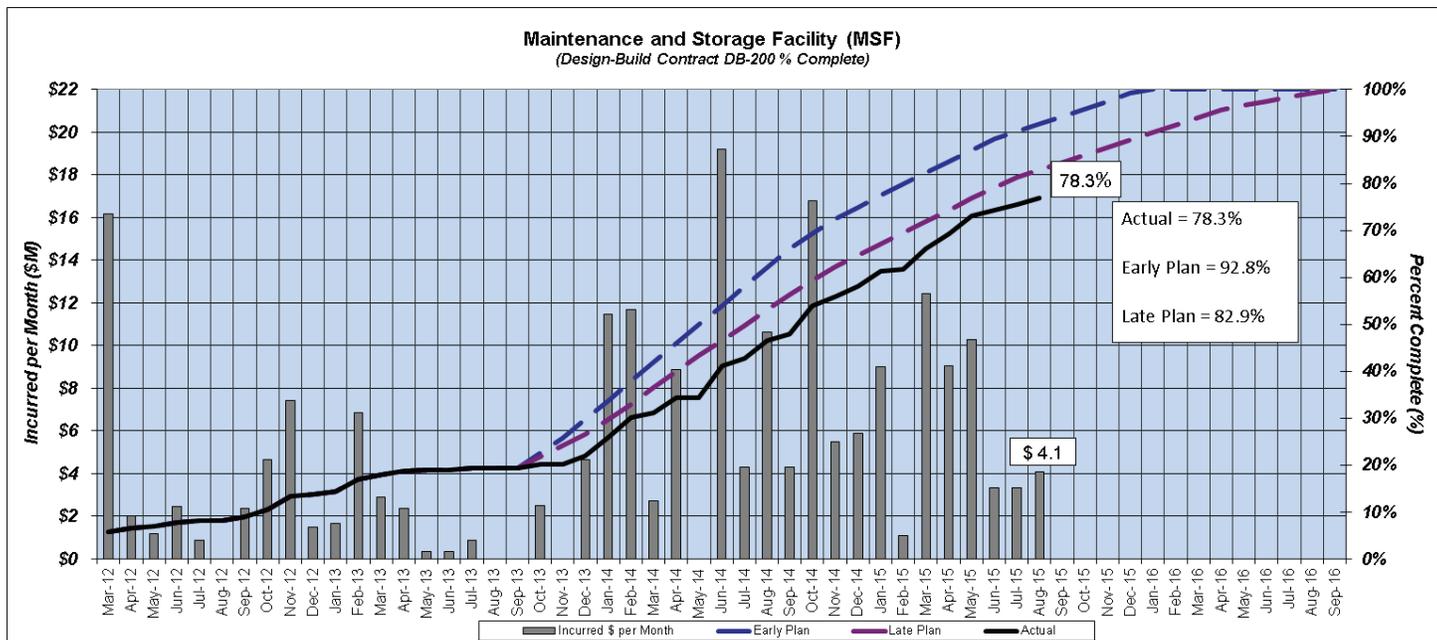
**COST INFORMATION:**

Original Contract:	\$195,258,000	Incurred-to-Date:	\$215,270,970
Current Contract Value <sup>1</sup> :	\$274,878,772	Incurred in August:	\$4,076,622

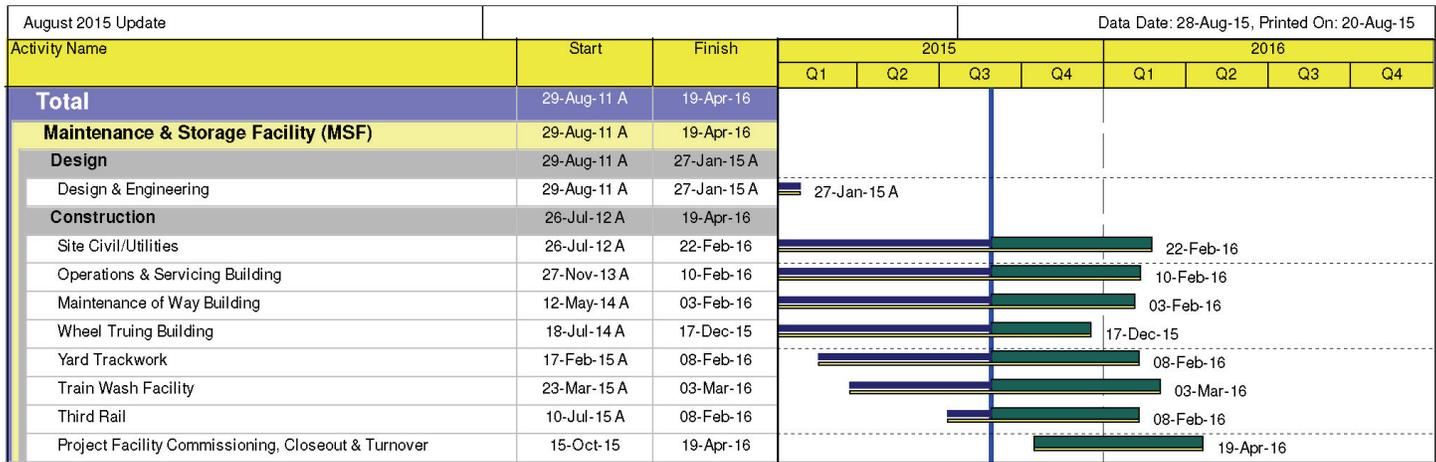
<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

DBE Participation	
Actual DBE Participation:	\$337,114
DBE % Attained:	0.17%

August Change Orders		
Change No.	Description	Amount (\$)
CO0033	Electrical Operational Switch (EOS) Foundation	\$44,179
<b>Cumulative to Date</b>		<b>\$79,620,772</b>



**SCHEDULE:**



**CRITICAL PATH ISSUES:**

- Scheduling work related to test track and functional track to support program opening dates.
- Coordination with abutting WOFH main line contract for completion of track work in west yard, and utilities and site access in the east yard.

MSF Construction Status 80% Complete Overall as of 9/30/15	
Element	% Complete
OSB	85%
MOW Building	87%
WTB	96%
TWF	40%
Rail Procurement	98%

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 79%** [(Total Achieved to August 2015 (\$209 million) + Projected September 2015 Period (\$7.5 million))/Total Contract Including Executed Change Orders (\$275 million)]. Planned Value: 85%

**Yard/Utilities**

- Completed testing and checking switchgear, and HECO provided power for MOW, OSB, WTB and TWF.
- Installing conduit for systems, communications, train control, traction power, site electrical and exterior lighting.
- Construction of storm water outfall is ongoing.
- Completed utility installation for fire pump.

**Operations and Servicing Building (OSB)**

- Completed installation of rail on pillars for the M-6 and M-7 tracks, painted support pillars and extended conduits.
- Completed installing handrail and placing concrete for the car access platforms.
- Installation of mechanical/electrical/plumbing is ongoing.
- Installing service and emergency lighting.
- Installing drywall and interior and exterior building finishes.
- Installing framing for fixed ceilings.
- Installing exterior metal siding and ventilation louvers.
- Installation of turntables and hydraulic lifts.
- Installing conduit inside OSB subgrade ahead of slab on grade.
- Installing metal door frames and glazing.
- Installing power distribution cabinets.

Look Ahead:

**Yard/Utilities**

- Continue train wash and ready track work.
- Continue contact rail installation.
- Continue installation of exterior yard and perimeter lighting.
- Complete Signal and Control Raceway.
- Complete construction of storm water outfall.

**OSB**

- Continue installation of turntables and hydraulic lifts.
- Complete slab on grade in OSB 1<sup>st</sup> Floor.
- Complete interior partitions.
- Interior finishes/HVAC.
- Install elevator.

**MOW**

- Complete power distribution.
- Interior and exterior finishes.
- Continue electrical, mechanical and plumbing.
- Complete installation of roll up and personnel doors and glazing.

Activities this Month (continued):

**Maintenance of Way (MOW)**

- Installing drywall and interior and exterior building finishes.
- Installing mechanical/electrical/plumbing systems.
- Installing power distribution cabinets.
- Installing doorframes for passage/personnel doors.
- Completed sprinkler system installation.
- Completed demonstration for polished floors.

**Wheel Truing Building (WTB)**

- Installing personnel doors, interior partitions and interior finishes.
- Installed crane.
- Installing framing for wheel lathe.
- Installing mechanical/electrical/plumbing.
- Installing power distribution.

**Train Wash Facility (TWF)**

- Completed underground utility installation.
- Trench drain system installation is complete.
- Structural steel delivered to site.
- Completed embedded track foundation and grade beam construction.

**Rail Procurement and Installation**

- Installation of contact rail is ongoing.
- Receiving materials and installing turnouts is ongoing.
- Distributing rail materials to WOFH is ongoing.
- Installation of pre-curved rail is ongoing.
- Preparing subgrade for ready tracks RL1 – 3 and W1.
- Formed and poured hosteler pad for test track.

**Administration**

- Continued working with the CSC to resolve design interface issues and turned over raceways for CSC cable pulling activities.

Look Ahead (continued):

- Elevator installation.
- Tile floor installation.

**WTB**

- Release Building Systems raceway to CSC.
- Install wheel truing lathe.

**Train Wash Facility**

- Begin structural steel installation.
- Begin masonry wall installation.

**KEY ISSUES:**

- **Joint Occupancy with Core Systems Contractor** – weekly meetings are held and details are being worked out for systematic release of areas and infrastructure whereby the Core Systems Contractor can commence work.
- **Coordination with the abutting main line contract** – for completion of site access in the east and west yards, including rail, vehicular access and utility interconnection.
- **Train Car Delivery and Assembly** – Rail, access and building completion in support of train car delivery and assembly, including site access and internal movement of assembled rail cars.
- Orderly completion of traction power, train control and building services conduits.

**QUALITY MANAGEMENT:**

- Overall quality of the contract is good.
- NCR 27 concerns additional reinforcing required around HVAC opening cut in CMU wall.
- NCR 28 concerns application of fire stops and seals in rated walls.

MSF NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
28	26	2

**PROJECT PICTURES:**



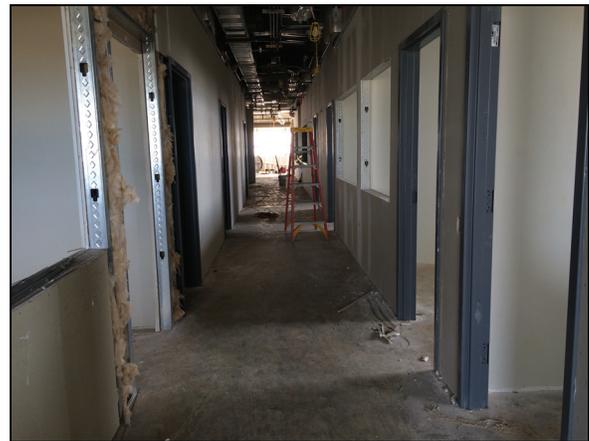
Placed concrete for the hosteler pad soffit slab and staircase landing along east side of M 7 track.



Installing strut brackets in traction power pull boxes.



OSB exterior metal panel installation.



MOW metal door frame installation.



WTB wheel truing machine jack assembly.



TWF direct fixation slab concrete placement.

### 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:** June 2017

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



**Project Overview:** Construction of the drilled shafts has moved to the balanced cantilever area east of the H-1 overpass in order to maintain progress while HECO clearance issues are resolved. Discussions with HECO are being held at an elevated level to resolve concerns about horizontal/vertical clearances and schedule certainty. Permanent ITS work continues to be installed along with traffic signals. Temporary ITS work has been completed and is operational, as of Sept. 16, 2015. Utility relocations along the alignment continue to progress, but may be impacted by third-party schedules, primarily HECO.

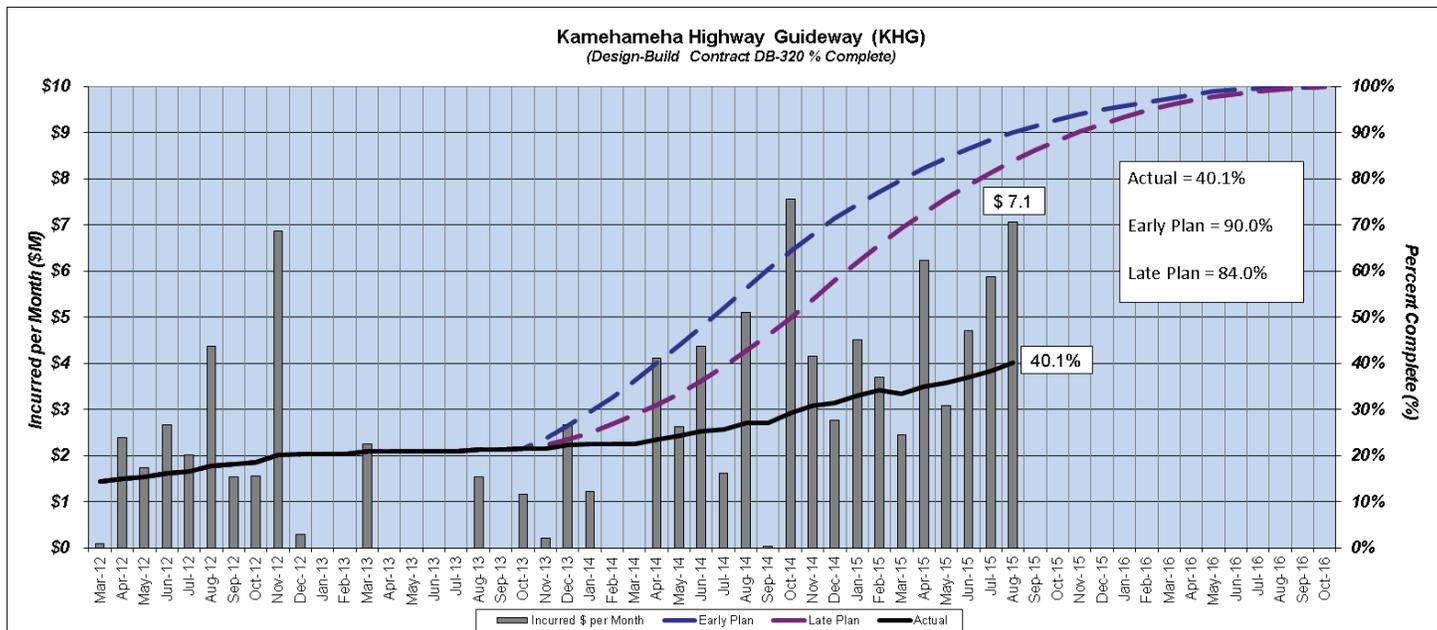
#### COST INFORMATION:

<u>Original Contract:</u>	<u>\$372,150,000</u>	<u>Incurred-to-Date:</u>	<u>\$159,847,073</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$388,817,654</u>	<u>Incurred in August:</u>	<u>\$7,064,882</u>

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

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

August Change Orders		
Change No.	Description	Amount (\$)
CO0017	Relocate Sewer Near 935+00 to 947+00; DSC Buried Bone at 94	\$181,291
<b>Cumulative to Date</b>		<b>\$16,667,654</b>



Progress payment 48 (July 2015) has been processed.

**SCHEDULE:**

- The approved re-baselined schedule was dated Oct. 28, 2013, and KIWC submitted a schedule revision on Dec. 5, 2014 with a data date of October 2014. This schedule showed a revised Substantial Completion date of April 4, 2017. HART has requested re-submittal via the change order process. KIWC is reflecting additional delay to complete the civil portion of the Work.
- Schedule has continued to slip due to various factors including, but not limited to, weather, lower productivity rates on structures, and third-party construction of utility relocation work. HART has noted that KIWC's lack of coordination with third-parties contributed to the schedule slip.

Aug 2015 Update		Data Date: 28-Aug-15, Printed On: 01-Sep-15 16:16										
Activity Name	Start	Finish	2015		2016				2017			
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
<b>Total</b>	03-Nov-14 A	18-Sep-17										
<b>Drilled Shafts</b>	03-Nov-14 A	15-Nov-16										
KHG Area 1	03-Nov-14 A	22-Dec-15										
KHG Area 2 (Balanced Cantilever)	12-Aug-15 A	13-Jan-16										
KHG Area 3	31-Aug-15	15-Nov-16										
KHG Area 4	03-Mar-15 A	01-Aug-16										
<b>Precast Segment Erection</b>	24-Aug-15 A	22-Feb-17										
KHG Area 1	24-Aug-15 A	06-Apr-16										
KHG Area 3	06-May-16	22-Jan-17										
KHG Area 4	24-Sep-15	22-Feb-17										
<b>Columns</b>	05-Aug-15 A	23-Jan-17										
KHG Area 1	05-Aug-15 A	18-Jan-16										
KHG Area 2 (Balanced Cantilever)	03-Sep-15	02-Feb-16										
KHG Area 3	24-Sep-15	23-Jan-17										
KHG Area 4	14-Aug-15 A	18-Aug-16										
<b>Cast BC Segments</b>	19-Oct-15	19-Oct-16										
KHG Area 2 (Balanced Cantilever)	19-Oct-15	19-Oct-16										
<b>Trackwork</b>	26-Jan-16	18-Sep-17										
Direct Fixation Trackwork	26-Jan-16	17-Apr-17										
Third Rail	10-Feb-16	13-Apr-17										
<b>KHG Project Finish Work, Demob, Punchlist</b>	21-Jun-17	18-Sep-17										
KHG Project Finish Work, Demob, Punchlist	21-Jun-17	18-Sep-17										
KHG Substantial Completion		21-Jun-17										◆

Contractor Forecast Dates:  
Dates Not Approved until  
HART signoff.

**CRITICAL PATH ISSUES:**

- Start of column work at Phase 1 had been delayed by over 9 months from the October 2014 schedule, which resulted in float for columns going from 69 days to -143 days in the most recent update.
- HECO forecasts at conflicts 11-920-M1 and 8-860-M1 has resulted in further delays to the project. The delays have been partially mitigated through resequencing of the road widening work.
- In the most recent schedule submitted, the longest path increased to -277 days of total float. The total float was at -223 days in the previous month and -200 days in the October 2014 update.

**WORK PROGRESS:**

**KHG Construction Status as of 9/18/15**

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	4,269	4,362	98%	Shafts	69	93	55	186	37%
Gas Line	12,097	12,641	96%	Columns	10	68	36	168	6%
Sewer Line	429	492	87%	Segment Casting	282	911	507	2,075	14%
Drainage	586	2,081	28%	Spans Stressed	0	58	4	166****	0%
Elec/Telecom	14,759	19,455	76%	* Accepted Schedule was submitted in 2013.					
Signals/ITS/Lights	13,293	18,486	72%	** Revised Unaccepted Schedule was submitted in 2014. Revised schedule shows a 7 month delay in completion.					
				*** Total quantity for the construction items has been revised to reflect the latest Issued for Construction number of shafts, columns, segments and spans.					
				**** During QA audit updated spans stressed.					

Activities this Month:

**Earned Value: 43.6%** [(Total achieved to July 2015 (\$152.6 million) + August and September projection (\$17 million))/Total contract including executed Change Orders (\$389 million)]. Planned Value: 86.3%

Look Ahead:

**Design Progress**

- HART and KIWC are working together to complete final design. To date, 38 of 49 drawing packages have been issued for construction.

Activities this Month (continued):

**Shaft/Column/Segments**

- 69 of 186 shafts have been installed.
- 10 of 168 columns have been constructed.
- 282 of 2,075 segments have been cast.
- Column construction has halted on KHG. Column crews have remobilized to WOFH.
- Continued construction of footings for “C” piers at shafts 277, 278 and 279.

**Utility Relocation Progress**

- Wall 8 fiber optic bypass and drainage continue.
- Fuel line tie-ins in Phases 6, 7 and 12.
- 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.
- Pile driving for streetlights continues at various intersections
- Fuel Line D relocation and tie-in completed.
- Fuel line “O” tie-in in front of Pearl Kai Shopping Center is being finalized.
- Fuel line “D” tie-in has been completed.
- Installation of Waimalu drain line in Phase 5.

**Balanced Cantilever Structure**

- KIWC completed the shafts west of the H-1 and has placed footings at Piers 305 and 306.
- All but one of the BCS shafts east of the H-1 overcrossing has been completed.

**Precast Yard**

- KIWC has cast 282 of the 2,075 segments.

**Traffic Signals**

- Traffic signal installation is ongoing at various intersections throughout the alignment.

**Roadway Widening**

- Roadway widening is ongoing in Phases 9 and 11.

Look Ahead (continued):

**Shaft/Column/Segments**

- Construction of shafts will continue. There are currently 6 more shafts to place and all shafts will have been completed between the west end of the project and the H-1 overcrossing.
- Shaft construction in front of Pearl Kai Shopping Center will begin in January 2016 to minimize impacts to merchants along the corridor in this area.

**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**

- KIWC will finish drilling shafts at the BCS east of the H-1, and begin footing installations at shafts 307 and 308.

**Precast Yard**

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

**Roadway Widening**

- Roadway widening will continue throughout the alignment.
- HART has issued RFCRs to the contractor for identified HDOT betterments. Work is anticipated to begin after issuance of a change order.

**KEY ISSUES:**

- **Community Noise Complaints** – Mitigation measures for noise, dust and traffic impacts continue to be explored. HART will continue to work with the community.
- **HDOT Betterments** – HART has issued eight RFCRs to date for HDOT betterments. Negotiations with KIWC, concurrence from HDOT, and source of funding all need to be finalized.
- **HECO Clearance and Schedule Issues** – HART is working together with HECO to resolve clearance issues. This issue, along with the lack of HECO schedule certainty, may impact the project schedule.

**QUALITY MANAGEMENT:**

- **Quality Process** – KIWC continues to follow an established quality process. There have not been any significant findings through quality audits.
- **Latest Construction Plans** – Current shaft, column, and footing construction is proceeding with only minor quality issues.
- **Drilled Shaft Quality** – KIWC currently has 13 open NCRs due to velocity reduction exceeding 10%. KIWC has been reviewing their means and methods for placing concrete to reduce the issue with velocity reduction.
- **Flatwork Audit** – A field audit for KHG flatwork was completed on Sept. 17, 2015, between KIWC and HART.

KHG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
80	57	23

PROJECT PICTURES:



Placing concrete Column 267, Phase 1.



Constructing Shaft 278 C-Pier footing, Phase 1.



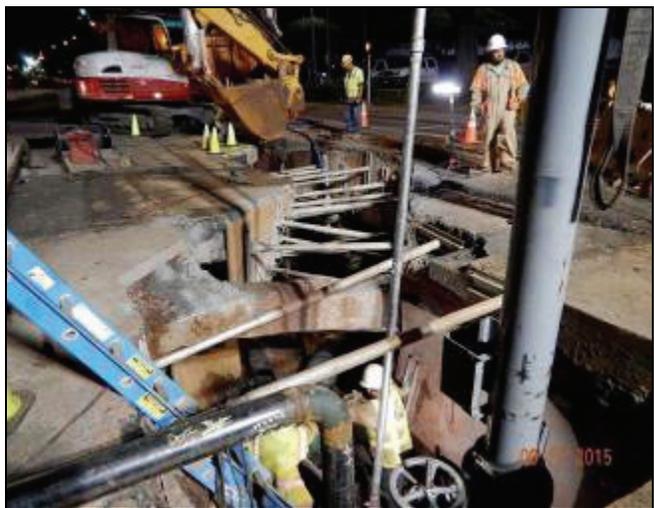
Balanced cantilever footing reinforcement, Phase 4.



Installation of signal foundation piles, Phase 5.



Drilling shaft Pier 294, Phase 3.



Tying in Gasline O, Phase 10.

**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:** June 2016



**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.

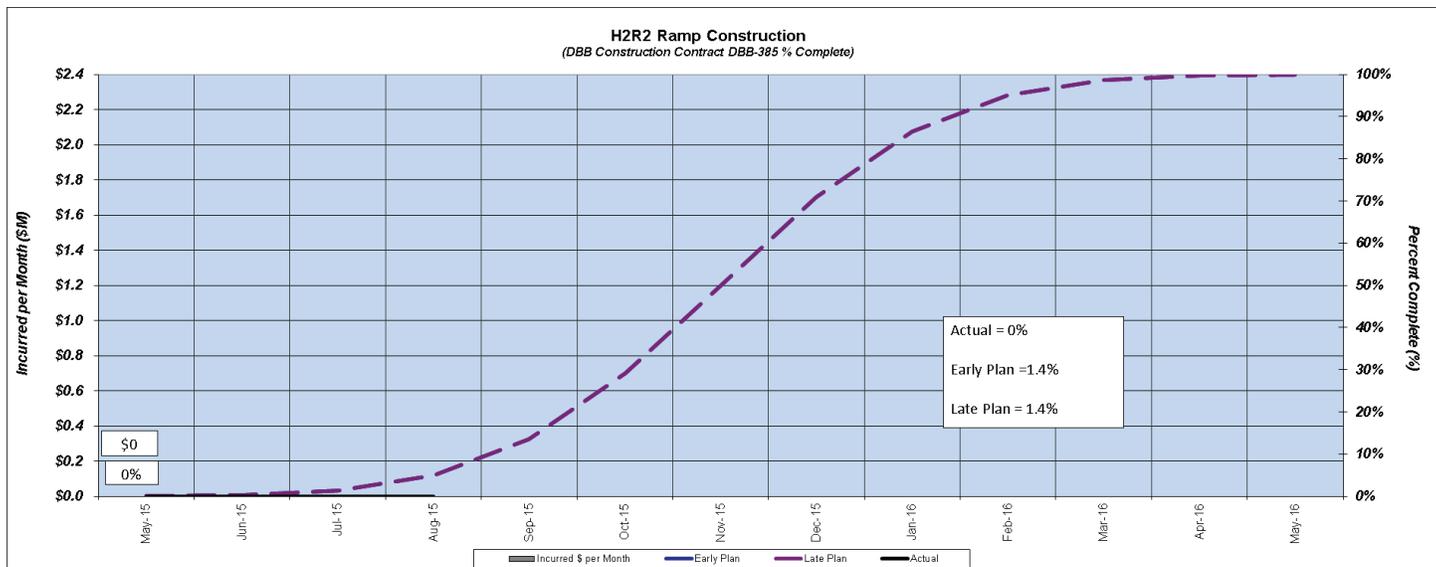
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$5,203,646</u>	<u>Incurred-to-Date:</u>	<u>\$0</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$5,203,646</u>	<u>Incurred in August:</u>	<u>\$0</u>

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

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

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



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

**SCHEDULE:**

August 2015 Update			Data Date: 28-Aug-15, Printed On: 01-Sep-15																	
Activity Name	Start	Finish	2015				2016				2017				2018				2019	
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
<b>Kamehameha Highway (KH) - Section 2</b>	18-May-15 A	17-Jun-16																		
H2R2 Ramp Construction	18-May-15 A	17-Jun-16																		
H2R2 Ramp Construction	18-May-15 A	17-Jun-16																		
H2R2 Ramp Construction	18-May-15 A	17-Jun-16																		
Substantial Completion	17-Jun-16																			

**CRITICAL PATH ISSUES:**

- DPP has signed-off on Final Design documents. Contractor to apply for NPDES permit.
- A Contractor Schedule and Organization Chart were submitted and returned with revisions required.
- Waiting for FTA approval to allow TMK 9-6-004:006 to proceed with soil remediation process.

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 0%; Planned Value: 0%**

- Required Forms, Reports and Certifications continue to be submitted.
- Review of revised baseline schedule based on restricted work area.

Look Ahead:

- Complete all required submittals.
- Site mobilization planned for November 2015.

**KEY ISSUES:**

- Contractor to obtain NPDES permit and submit revised work schedule.

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

**Contract No.:** FD-340

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

**Contract Start Date:** November 2012

**Construction Docs Bid-Ready:**

H2R2 Highway Ramp: January 2015 (in construction)

Kamehameha Highway Stations: August 2015



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

**Project Overview:** The KHSG design has incorporated value engineering changes and was advertised in a construction solicitation on Aug. 18, 2015. In addition, the H2R2 Ramp was broken out and expedited under a separate Design-Bid-Build contract that was awarded in May 2015.

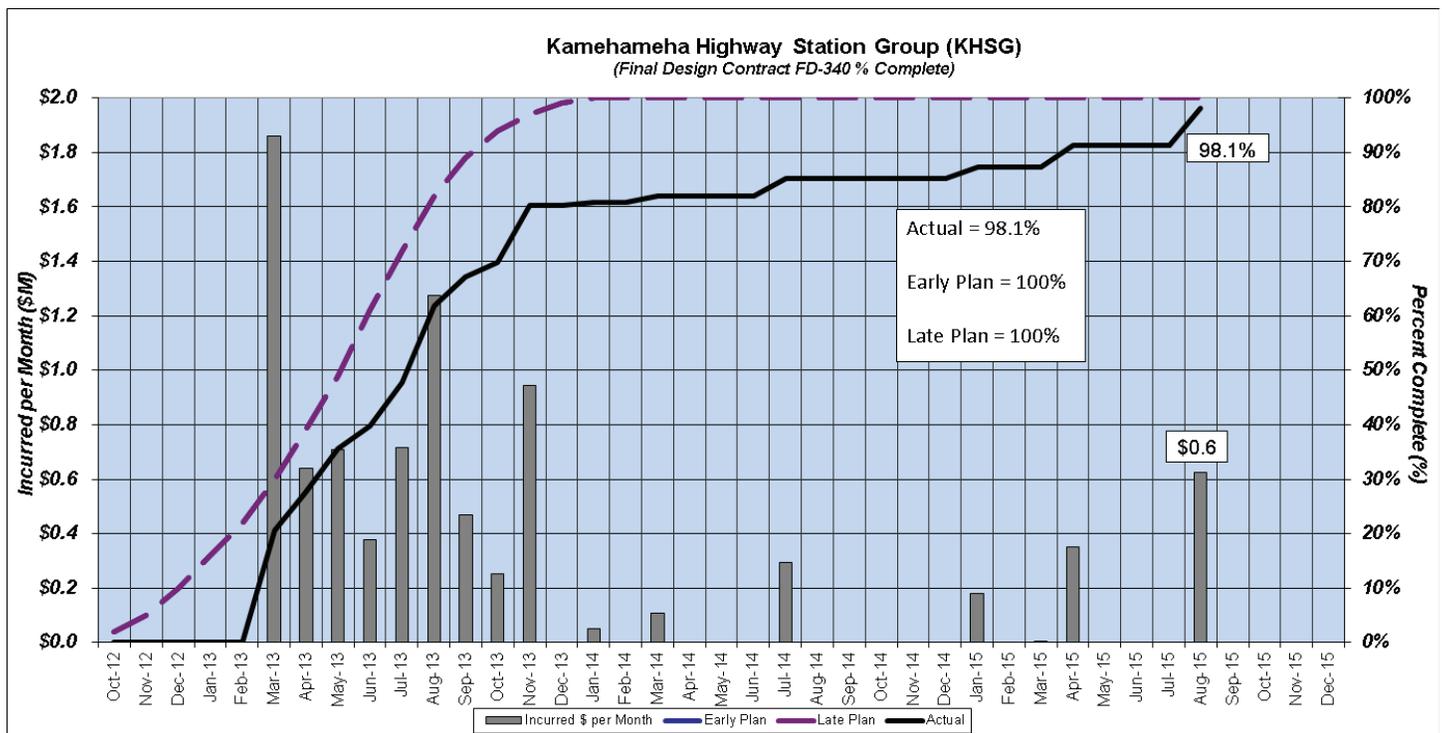
**COST INFORMATION:**

Original Contract: \$8,702,592	Incurred-to-Date: \$8,843,841
Current Contract Value <sup>1</sup> : \$9,636,290	Incurred in August: \$624,522

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

DBE Participation	
Actual DBE Participation:	\$3,503,139
DBE % Attained:	40.25%

August Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
CA0007	PH Coord PB&BC&NHC/Bike Ramps/PH PR AS Canopy/PR TO	\$624,522
<b>Cumulative to Date</b>		<b>\$976,698</b>



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

The design phase of this contract is substantially complete.

**SCHEDULE:**

August 2015 Update			Data Date: 28-Aug-15, Printed On: 20-Aug-15															
Activity Name	Start	Finish	2015				2016				2017				2018			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Kamehameha Highway (KH) - Section 2</b>	16-May-14 A	29-Jun-18																
<b>Kamehameha Highway Station Group</b>	16-May-14 A	29-Jun-18																
<b>Design - Kamehameha Highway Station Group</b>	16-May-14 A	29-Jun-18																
Design - Bid Support	16-May-14 A	30-Nov-15	█	█														
Design - Construction Support	01-Dec-15	29-Jun-18					█	█	█	█	█	█	█	█	█	█	█	█
<b>Construction - Kamehameha Highway Station Group</b>	01-Dec-15	29-Jun-18																
Pearl Highlands - Station	04-Apr-16	29-Jun-18					█	█	█	█	█	█	█	█	█	█	█	█
Pearl Ridge Station	01-Jul-16	29-Jun-18																
Aloha Stadium Station	01-Dec-15	29-Sep-17					█	█	█	█	█	█	█	█	█	█	█	█

**CRITICAL PATH ISSUES:**

- HART is overseeing the finalization of design interface agreements between the final design consultant and the WOFH, CSC and EE contracts.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 99%.
- Responding to Requests for Information (RFIs) from prospective bidders.

Look Ahead:

- Obtain third-party final approvals on remaining construction documents.

**KEY ISSUES:**

- Supporting ongoing active procurement.

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

#### A. Airport Section Guideway and Utilities

Contract No.: FD-430

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

Contract Start Date: January 2012

Construction Docs Bid-Ready:

- Guideway, Stations and Utilities (DB)
  - In active DB procurement

Currently in Construction:

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

Construction Completed:

- Airport 7-Piers (DBB-525 – Hawaiian Dredging):
  - Project acceptance on May 2, 2015; currently in project closeout



**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). Therefore, the remainder of this section focuses solely on the remaining portions, which have been combined with the Airport Stations in an active design-build procurement.

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). Therefore, the remainder of this section focuses solely on the remaining portions, which have been combined with the Airport Stations in an active design-build procurement.

**Project Overview:** This section of the guideway has been combined into a single Airport Guideway and Stations (AGS) design-build package. The AGS package is currently in active procurement.

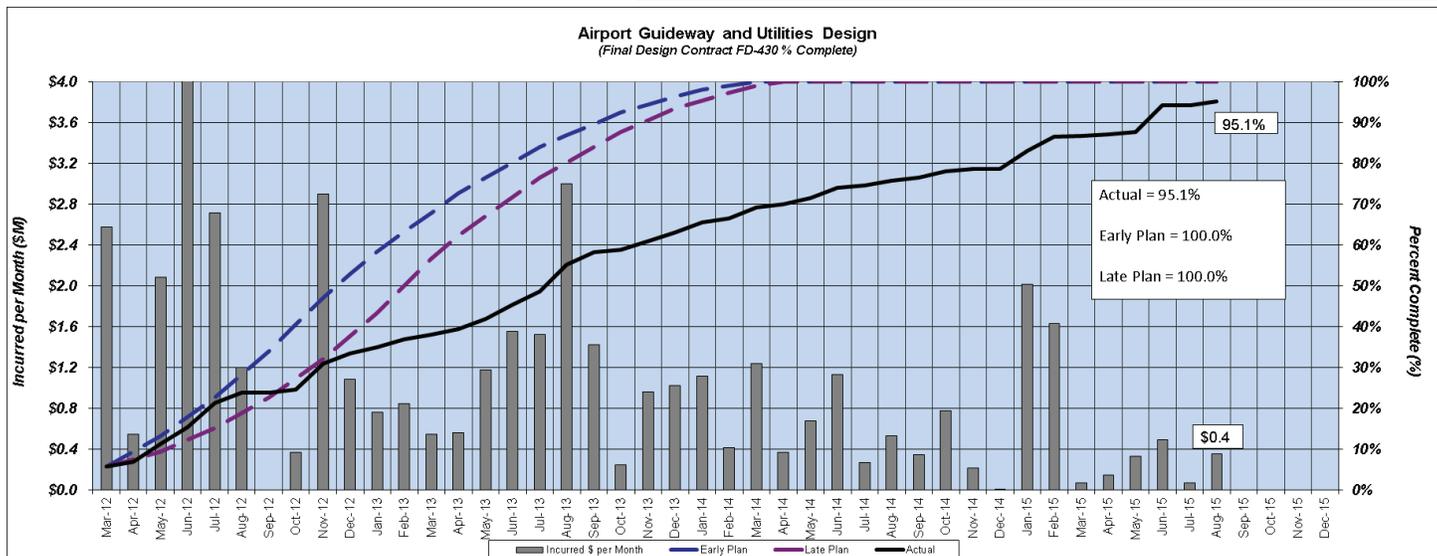
**COST INFORMATION:**

<u>Original Contract:</u> \$38,840,960	<u>Incurred-to-Date:</u> \$41,008,758
<u>Current Contract Value<sup>1</sup>:</u> \$43,134,472	<u>Incurred in August:</u> \$352,779

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

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

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



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.



**B. Airport Section Utilities Construction**

**Contract No.:** DBB-505

**Contractor:** Nan, Inc.

**Contract Start Date:** July 2014

**Contract Substantial Completion:** February 2016

**Projected Substantial Completion:** August 2016

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



**Project Overview:** Nan, Inc. continues with utility relocation work along Kamehameha Highway. ITS installation work along Kamehameha and Nimitz Highways is completed at 3 of the 4 sites. The 4<sup>th</sup> site needs power which is outside of this contract. Three of the 4 sites are operational and undergoing commissioning. Utility work was impacted due to lack of Navy ROE, however ongoing coordination with the Navy has allowed them to grant access. Details are still being finalized at this time. Meanwhile, Nan, Inc. continues to develop and submit outstanding submittals.

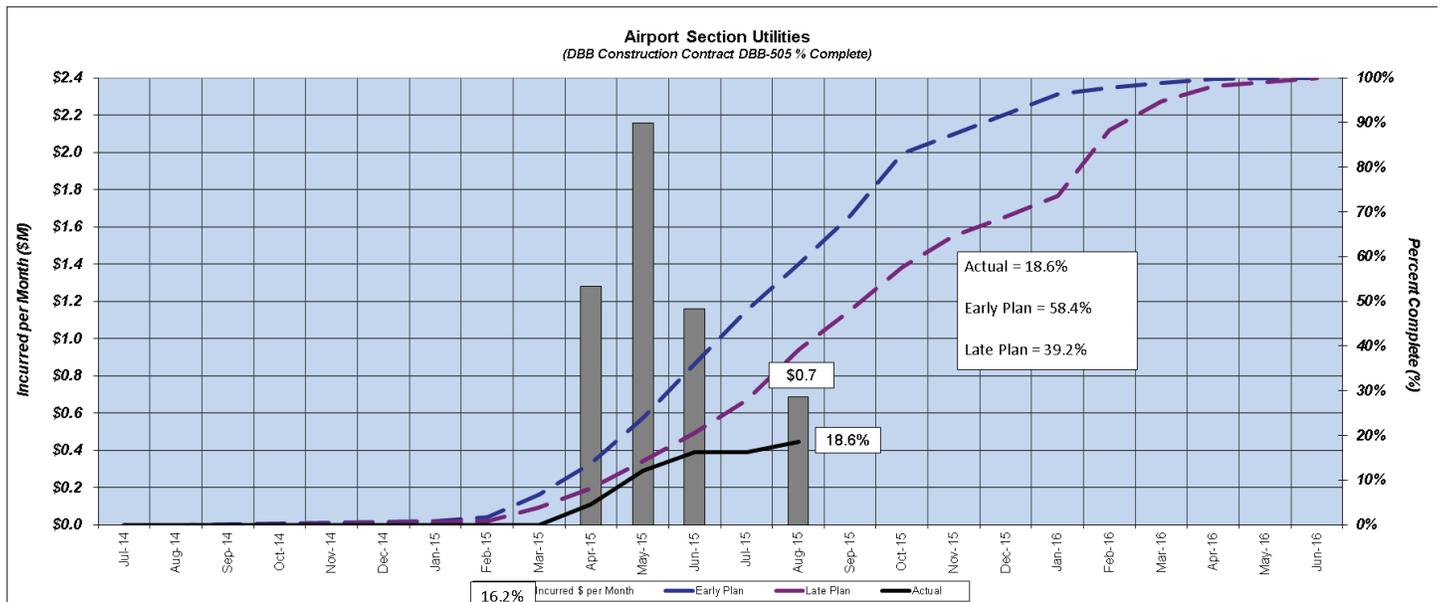
**COST INFORMATION:**

Original Contract:	\$28,413,974	Incurred-to-Date:	\$5,279,921
Current Contract Value <sup>1</sup> :	\$28,413,974	Incurred in August:	\$684,728

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

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

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



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

**SCHEDULE:**

August 2015 Update							Data Date: 28-Aug-15, Printed On: 01-Sep-15			
Activity Name	Start	Finish	2015			2016				
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>Airport Section Utilities</b>	30-Jun-14 A	17-Feb-16								
<b>Airport - Section 3</b>	30-Jun-14 A	17-Feb-16								
<b>Airport Utility Relocation</b>	30-Jun-14 A	17-Feb-16								
<b>Construction - Airport Utilities Relocation</b>	30-Jun-14 A	17-Feb-16								
<b>Construction - Airport Utilities Relocation</b>	30-Jun-14 A	12-Feb-16								
Airport Utilities Relocation - Execute Contract	30-Jun-14 A	30-Jun-14 A								
Permits for Airport Utilities Construction	22-Jan-15 A	16-Mar-15 A								
Airport Utilities Construction	16-Mar-15 A	06-Feb-16								
Airport Utility Relocation - Substantially Complete		12-Feb-16								
<b>Utility Relocation Inspection</b>	29-Jan-16	17-Feb-16								
Inspect and Accept Airport Section Utilities Relocations	29-Jan-16	17-Feb-16								

**CRITICAL PATH ISSUES:**

- No critical path issues at this time.

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 18.5%;** Planned Value: 20%

- Nan, Inc. has received approved permits to work in DOT-Airport property. (Revocable staging permit still pending.)
- Nan, Inc. is finalizing coordinating to bring LPR’s online.
- Nan, Inc. has submitted a baseline construction schedule, which has been approved. They are working on a revised baseline schedule based on deductive RFCRs that have been issued.
- Inspection and Testing Plan (ITP) has been submitted by Nan and returned by HART with comments.

Look Ahead:

- Ongoing utility work on Kamehameha Highway (24-inch waterline and connection, telecom duct line and gas line).
- Summarizing descoped items to be added to the guideway contract.
- Installation of new sewer line.

**KEY ISSUES:**

- Nan has submitted a construction delay claim due to the delay in access to Navy right of entry to perform work.
- Nan, Inc. is presently 7 months behind schedule; due to the delay in access to construction sites as well as other factors.
- Navy sewer line repair is concurrently being coordinated with the Navy and could potentially result in a claim.

**QUALITY MANAGEMENT:**

- HART performed a Combined QA and Buy America Compliance Audit of Nan, Inc. on Aug. 13, 2015.

Airport Utilities NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
15	13	2

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

**Contract No.:** DBB-525  
**Contractor:** HDCC/CJA JV  
**Contract Start Date:** September 2014  
**Contract Substantial Completion:** April 24, 2015  
**Declared Substantial Completion:** April 22, 2015



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

**Project Overview:** HDCC/CJA JV substantially completed the project on April 22, 2105. The site, along with maintenance of existing BMPs and traffic control measures were turned over to the HDOT-A. Generated punch list items were completed and accepted as of May 2, 2015, by HDOT-A.

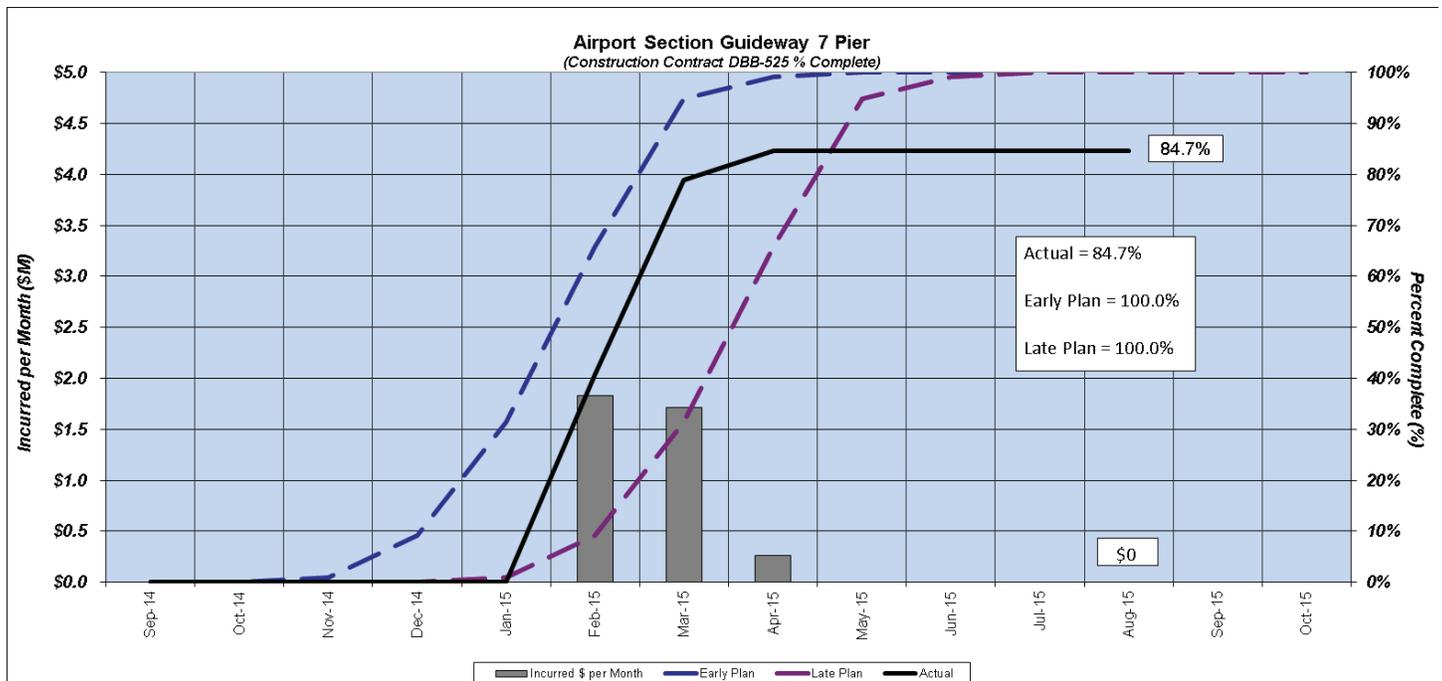
**COST INFORMATION:**

Original Contract:	\$3,973,000	Incurred-to-Date:	\$3,796,241
Current Contract Value <sup>1</sup> :	\$4,481,241	Incurred in August:	\$0

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

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

August Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$508,241</b>



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

**CRITICAL PATH ISSUES:**

- None - All work has been completed; currently in the process of processing a final Change Order and closing the contract out.
- 

**WORK PROGRESS:**Activities this Month:

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

- As-builts have been submitted.
- CIL's and Spec Conformance checklist have been signed.

Look Ahead:

- HART is processing a change order for:
    - Change proposal for Temporary Fill at Piers 551R and 550.
    - Double handling of drilling spoils.
    - Additional core sample test to confirm Pier 551R concrete.
    - Force Account work for Pier 548 Utility Conflicts.
  - HDCC/CJA JV has the following items to submit for Contract Closeout:
    - Complete entering Certified Payrolls to LCP Tracker.
    - Provide Release of Liens.
    - Submit final DBE forms.
    - Submit final invoice.
- 

**KEY ISSUES:**

- None.

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

**Contract No.:** FD-440  
**Contractor:** AECOM Technical Services, Inc., Final Design Consultant (Engineer of Record)  
**Contract Start Date:** November 2012  
**Construction Docs Bid-Ready:**

- Airport Guideway and Stations DB
  - In active DB procurement



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

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

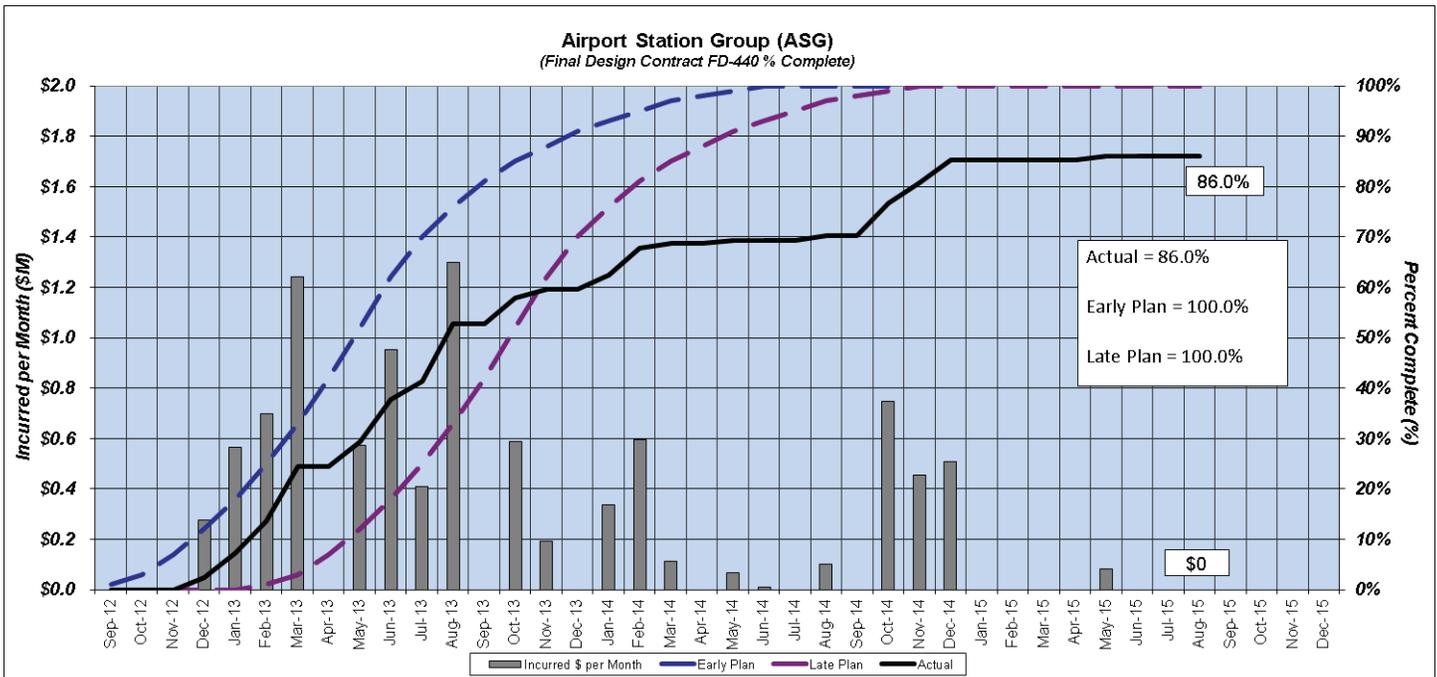
**COST INFORMATION:**

Original Contract:	\$10,177,365	Incurred-to-Date:	\$9,801,978
Current Contract Value <sup>1</sup> :	\$11,672,205	Incurred in August:	\$0

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

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

August Change Orders		
Change No.	Description	Amount (\$)
CA0005	Design-Build Bridging Documents	\$270,000
<b>Cumulative to Date</b>		<b>\$1,514,840</b>



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.

**SCHEDULE:**

August 2015 Update			Data Date: 28-Aug-15, Printed On: 01-Sep-15																
Activity Name	Start	Finish	2015			2016				2017				2018				2019	
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
<b>Airport - Section 3</b>	02-May-11 A	17-Apr-18																	
<b>Airport Station Group</b>	02-May-11 A	17-Apr-18																	
Design - Airport Station Group	02-May-11 A	14-Jul-17																	
Construction - Airport Station Group	02-Mar-16	17-Apr-18																	
Pearl Harbor Station	02-Mar-16	05-Jan-18																	
HNI Airport Station	31-May-16	06-Apr-18																	
Lagoon Drive Station	18-Apr-16	23-Feb-18																	
Middle Street Station	15-Jul-16	17-Apr-18																	

**CRITICAL PATH ISSUES:**

- HART is pursuing access to a small number of remaining properties.
- HART is coordinating with project stakeholders to monitor the relocation of an AM radio tower currently located near Middle Street Station.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 88%.

Look Ahead:

- Award DB contract.
- Monitor relocation of AM antenna.

**KEY ISSUES:**

- Maintain procurement schedule and deliver on all HART responsibilities under the future contract.

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

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

**Contract No.:** FD-530

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

**Contract Start Date:** July 2012

**Construction Docs Bid-Ready:**

- Guideway, Stations and Utilities (DB)
  - In active DB procurement
- Potential Expedited Utilities Package (DBB): January 2016



**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 first part of the two-part CCGS procurement was advertised on Aug. 4, 2015. Part 2 is scheduled for December 2015. An expedited package consisting of early utility and roadway widening work is anticipated for January 2016.

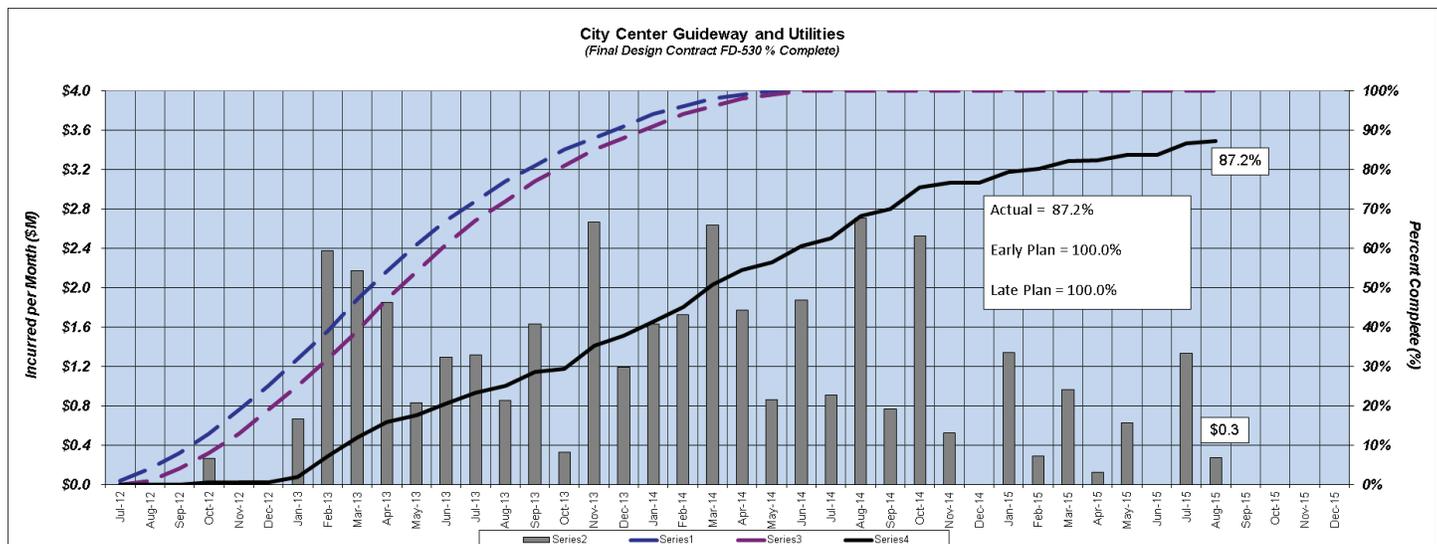
**COST INFORMATION:**

<u>Original Contract:</u> \$43,948,220	<u>Incurred-to-Date:</u> \$40,284,180
<u>Current Contract Value<sup>1</sup>:</u> \$46,183,523	<u>Incurred in August:</u> \$270,154

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

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

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



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:**

August 2015 Update			Data Date: 28-Aug-15, Printed On: 01-Sep-15																											
Activity Name	Start	Finish	2014				2015				2016				2017				2018				2019				20			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	21			
<b>City Center Section Guideway and Utilities Design</b>	19-Aug-11 A	31-Dec-19																												
City Center Programmatic	01-Nov-11 A	05-Oct-15																												
City Center Permits	19-Aug-11 A	08-Dec-16																												
Design - City Center Guideway & Utilities	01-Jul-12 A	28-Aug-15																												
Construction - City Center Guideway and Utilities	01-Jun-16	31-Dec-19																												

**CRITICAL PATH ISSUES:**

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

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 93.0%.
- Coordinating with HDOT, HECO and other stakeholders.
- Pursuing rights-of-way and rights of entry.
- Demolition of various properties (On-Call Contractor).

Look Ahead:

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

**KEY ISSUES:**

- Coordinating with HECO to establish appropriate clearance requirements for electrical lines.

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

**Contract No.:** FD-550

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

**Contract Start Date:** August 2013

**Construction Docs Bid-Ready:**

- Guideway, Stations and Utilities
  - In active procurement

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

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



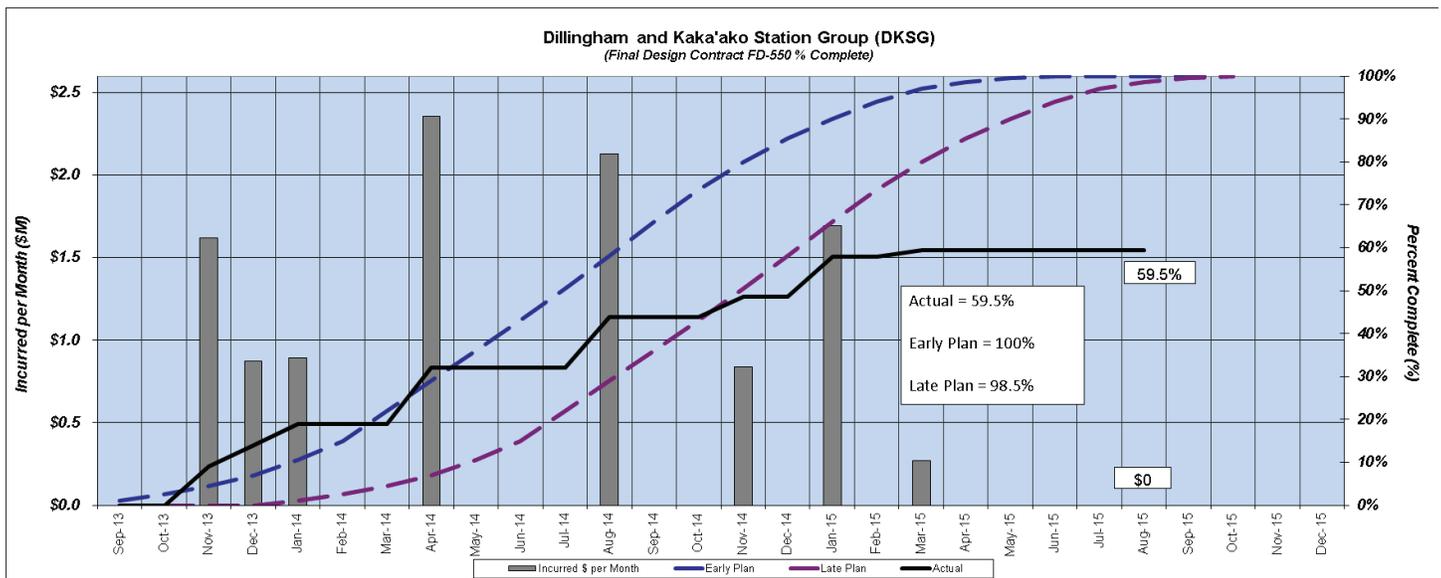
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$18,321,918</u>	<u>Incurred-to-Date:</u>	<u>\$10,667,500</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$19,308,042</u>	<u>Incurred in August:</u>	<u>\$0</u>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed Change Orders  
<sup>2</sup>Actual amount adjusted due to incorrect value of pay request #08

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

August Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$1,046,743</b>



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

The consultant is currently supporting HART with preparing the technical requirements for the DB procurement package.



### 4.6 Project-Wide

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

**Contract No.:** MM-901

**Contractor:** InfraConsult LLC

**Contract Start Date:** March 8, 2012

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

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

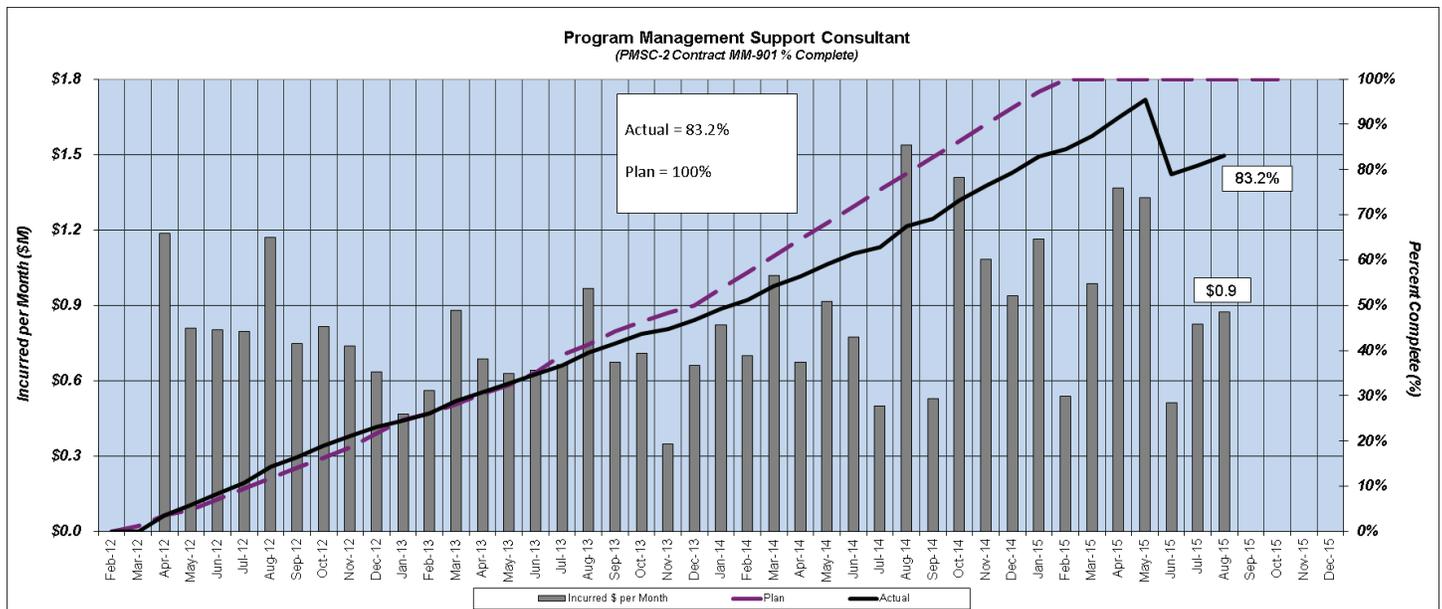
#### COST INFORMATION:

<u>Original Contract:</u>	<u>\$33,376,897</u>	<u>Incurred-to-Date:</u>	<u>\$34,090,427</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$40,993,274</u>	<u>Incurred in August:</u>	<u>\$874,004</u>

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

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

August Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$7,616,377</b>



#### KEY ISSUES:

- No Issues.

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

**Contract No.:** MM-913

**Contractor:** CH2M HILL

**Contract Start Date:** December 2013

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

**Project Description:** HART GEC III support services include: schedule and estimating, interface coordination, 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.

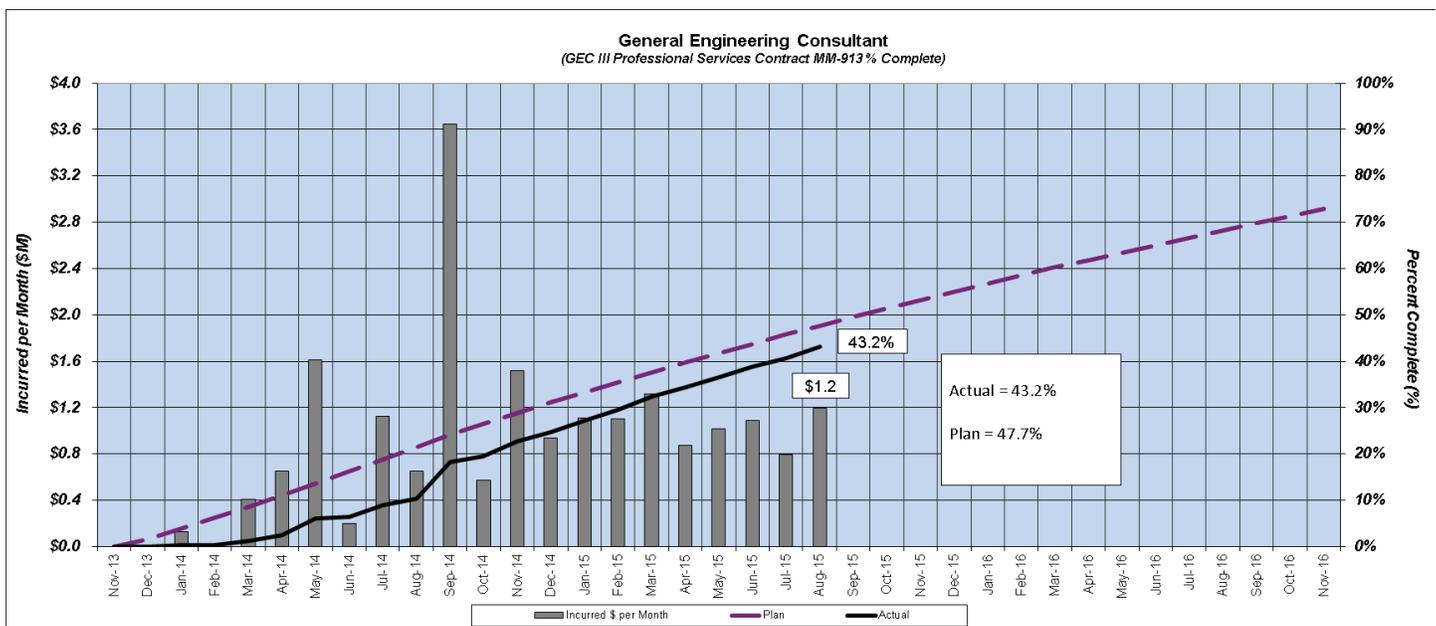
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$46,143,277</u>	<u>Incurred-to-Date:</u>	<u>\$19,945,438</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$46,143,277</u>	<u>Incurred in August:</u>	<u>\$1,198,938</u>

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

DBE Participation	
Actual DBE Participation:	\$1,471,081
DBE % Attained:	3.2%

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



**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 KHSG, Airport Guideway and Stations (AGS), and City Center Guideway and Stations.

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

**Contract No.:** MM-290

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

**Contract Start Date:** January 2014

**Contract Completion:** January 2020

**Projected Substantial Completion:** December 2018

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

The West CE&I team provides HART staff augmentation for construction management and administration services to monitor and observe the design-build and design-bid-build construction work such that the projects are constructed in general conformity with the plans, specifications, and special provisions for the WOFH, KHG, MSF, 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.

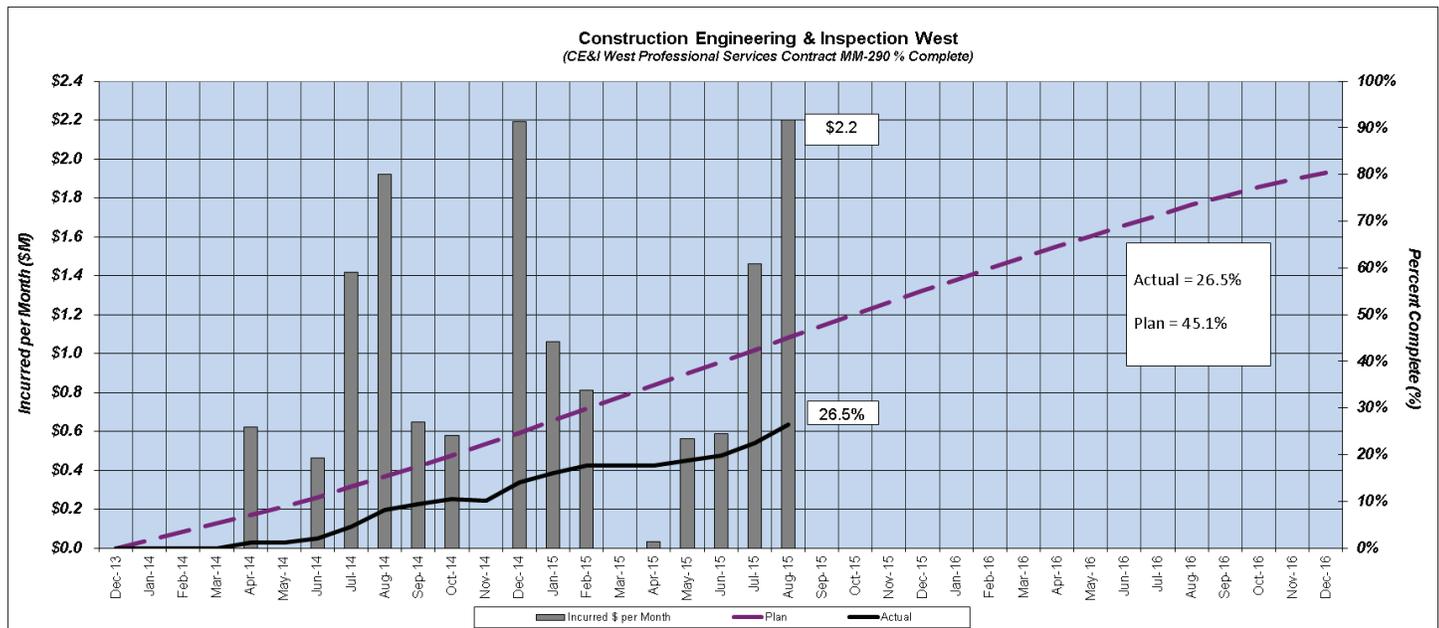
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$54,232,480</u>	<u>Incurred-to-Date:</u>	<u>\$14,390,510</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$54,232,480</u>	<u>Incurred in August:</u>	<u>\$2,199,798</u>

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

DBE Participation	
Actual DBE Participation:	\$981,762
DBE % Attained:	1.81%

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



**KEY ISSUES:**

- In the process of procuring a combined field office space to support the staffing requirements for the west section station group’s multiple procurement contracts. A contract amendment will be required to increase the other direct cost reimbursement allowance.
- Recent schedule discussions on guideway and stations contracts need to also be aligned with anticipated West CE&I staffing durations.

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

**Contract No.:** MM-595  
**Contractor:** URS Corporation  
**Contract Start Date:** January 2014  
**Contract Completion:** December 2015 (MOD no. 1)  
**Projected Substantial Completion:** August 2018

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

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

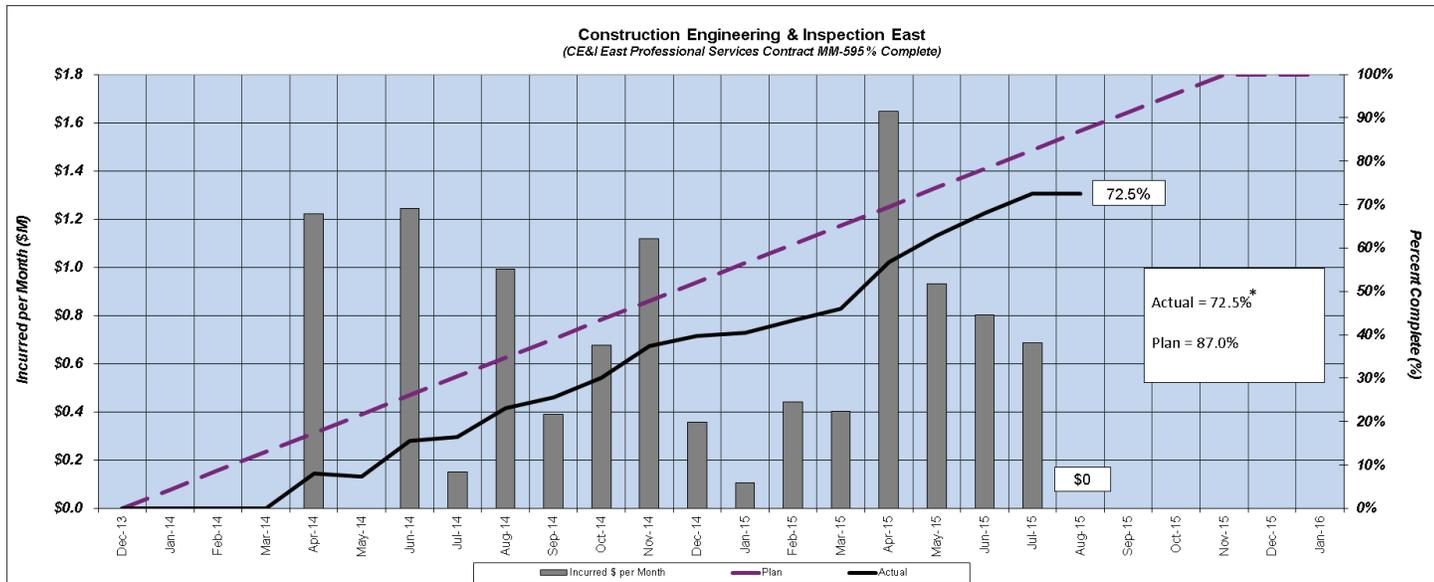
**COST INFORMATION:**

<u>Original Contract:</u> \$63,083,417	<u>Incurred-to-Date:</u> \$11,059,211
<u>Current Contract Value<sup>1</sup>:</u> \$15,257,000	<u>Incurred in August<sup>2</sup>:</u> <b>-\$17,243</b>

<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders  
<sup>2</sup>Incurred amount modified due to payment request adjustment

DBE Participation	
Actual DBE Participation:	\$1,323,195
DBE % Attained:	2.1%

August Change Orders		
Change No.	Description	Amount (\$)
CA0001	Reduce Scope and Funding	<b>-\$47,826,417</b>
<b>Cumulative to Date</b>		<b>-\$47,826,417</b>



\*Actual percentage adjusted due to reduced scope and funding.

**KEY ISSUES:**

- Construction continues on ASU with the primary focus being the installation of the water and sewer lines along Navy property. Nan has submitted a delay claim as a result of the Navy ROE issue which is under review by HART.
- Final project closeout of the A7 Shafts project is expected to be completed soon, and will include HART processing the last change order submitted by Hawaiian Dredging.
- Construction continues on the Royal Contracting On-Call Construction activities in support of the overall H RTP.
- Placement of contaminated soils on ASU project by Nan from HDOT Airport projects is being monitored, reviewed, and mitigation discussions are ongoing with Nan.
- The new CE&I consultant for the East Section was issued NTP in September. The URS team immediately began a transition that will occur from NTP through Oct. 9, 2015. The URS project closeout is expected to be complete 30 days after the completion of the transition.

**E. Core Systems Contract Oversight Consultant**

**Contract No.:** MM-962

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

**Contract Start Date:** February 2014

**Contract Completion:** August 2019

**Projected Substantial Completion:** N/A

**Project Description:** Provide professional services for design and construction management and testing/commissioning 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.

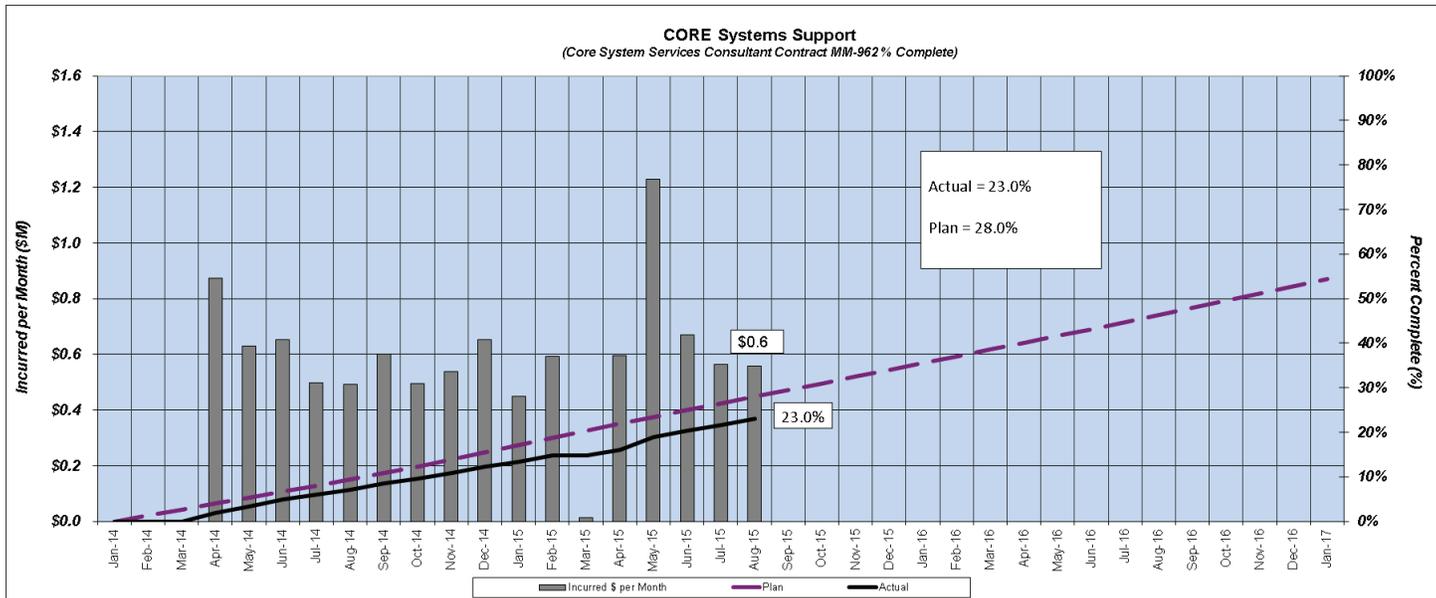
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$43,988,989</u>	<u>Incurred-to-Date:</u>	<u>\$10,101,405</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$43,988,989</u>	<u>Incurred in August:</u>	<u>\$557,751</u>

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

DBE Participation	
Actual DBE Participation:	\$251,920
DBE % Attained:	0.57%

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



**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.

**F. On-Call Construction Contractor**

**Contract No.:** MM-945

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

**Contract Start Date:** August 2014

**Contract Completion:** July 2019

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

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

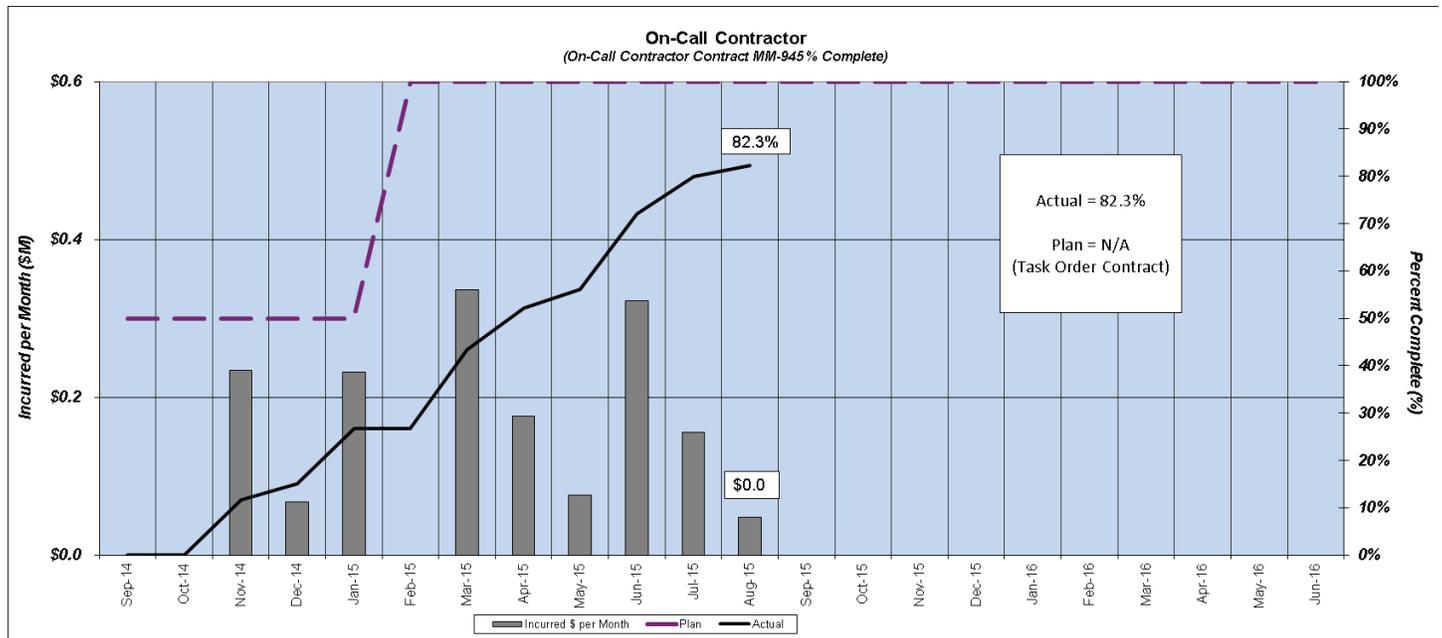
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$1,000,000</u>	<u>Incurred-to-Date:</u>	<u>\$1,646,552</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$1,999,951</u>	<u>Incurred in August:</u>	<u>\$48,494</u>

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

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

August Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$999,951</b>



**KEY ISSUES:**

- The On-Call Contractor has successfully:
  - demolished twenty-four buildings located in the WOFH, KHG and City Center right-of-way
  - relocated/removed more than 70 trees in the Airport right-of-way. Twenty trees located at the Pearl Harbor Interchange will be relocated in October. An additional 80 trees will also be relocated in October
  - repaired/protected multiple facilities owned by HART
- The On-Call Contractor is in the process of working with HART’s right-of-way group and owners in providing cost to cure solutions to properties which will need modification in achieving cleared right-of-way in the Airport and City Center sections of the guideway.
- Demolition of HART owned facilities in the Airport and City Center sections of the right-of-way have been resolved and demolition activities have resumed. Twenty-five (25) of the 28 buildings targeted for demolition were completed by the end of September. All demolition work includes the abatement of any hazardous materials identified prior to demolition. Two remaining structures are scheduled for demolition in January 2016, as the current tenant has not yet relocated from the building.

## 5 OVERALL PROJECT-WIDE ACTIVITIES

### Permits (Section 5.1)

#### OVERVIEW

- HART and Kiewit have increased noise monitoring and associated mitigation efforts in order to address resident concerns about noise levels in construction areas along the West O'ahu/Farrington (WOFH) and Kamehameha Highway Guideway (KHG) sections.

#### KEY ISSUES

- HART continues to work with Hawai'i Department of Health (HDOH) regarding ongoing community noise issues in the WOFH and KHG sections.
- HART is working with the Navy and HDOH on monitoring and mitigation of known contaminated sites along project construction areas.

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

#### OVERVIEW

- Ongoing coordination for ITS, MOT and final operational expectations. Temporary ITS is almost fully operational and temporary Closed Circuit Cameras are in place to observe traffic and make appropriate adjustments to signal timing as necessary.

#### KEY ISSUES

- Discussions begin with HDOT to include project funding for betterments being requested by HDOT. An MOU is drafted and being transmitted for HDOT comment.
- Ensure all agreement requirements have been met for HDOT Airports.

### Utility Agreements (Section 5.3)

#### OVERVIEW

- Draft City Center Construction Agreements have been issued to HTI, TW telecom, and Oceanic for review and comment. Review of current status and outstanding comments to be addressed this month.
- Executed Memorandum of Understanding (MOU) between HECO and HART regarding Rights-of-Entry (ROEs) associated with the HECO Rearranged Facilities.
- The Utility Agreements Status table (Section 5.3) is being updated to reflect outstanding agreements, pending amendments, and any applicable MOUs to better communicate the full scope of work pending and accomplished in the agreement section.
- Some issues in construction of utility work may necessitate additional amendments to clarify and include utility work not originally anticipated, especially in the Airport Utility contract. As these are unknown, they have not yet been reflected in Section 5.3.

#### KEY ISSUES

- HART continues to address multiple issues with HECO that may affect the design and construction of planned work. HART is continuing to meet with HECO on a weekly basis to resolve the issues. Executive meetings are now being conducted to include HART's Executive Director and CEO, and HECO's President.
- Researching required amendments or new agreements necessary for temporary pole relocations in City Center guideway work.

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

(Data as of Sept. 17, 2015)

#### OVERVIEW

- Currently, there are no ROW actions impeding construction work, although the ROW team continues to seek site access or complete acquisitions to ensure construction is not delayed. The process has started for parcels that may require eminent domain proceedings, although HART is simultaneously continuing negotiations with owners to obtain access.

KEY ISSUES

- Working to resolve third-party agreements with UH West O'ahu and Honolulu Community College (HCC) in order to allow construction to proceed without delay.
- Working to obtain right of entry from Aloha Stadium for station park-and-ride construction.
- HART proposed the use of irrevocable right of entry documents (Right-of-Entry, Possession and Use Agreement) to gain control of a parcel prior to eminent domain. However, the use of the irrevocable right of entry has been delayed due to concerns expressed by owners regarding liability arising from third parties. This approach is a modification of the current procedures, and HART has updated the Real Estate Acquisition and Relocation Management Plan (RAMP) to include this approach. HART is refining the proposal to address the owners' concerns.
- Eminent Domain:
  - Five cases were forwarded by staff to the HART Board of Directors on May 21, 2015, to support the schedule for the Airport Guideway and Stations DB contract. Although the HART Board approved the resolutions and the Honolulu City Council had no objections, the HART staff is striving to reach an agreement with each owner.
  - Twenty (20) cases were forwarded to the HART Board on June 25, 2015, primarily to support the schedule for the City Center Guideway and Stations DB contract. Although the HART Board approved the resolutions and the Honolulu City Council had no objections, HART is striving to reach an agreement with each owner.
  - Four cases were presented to the HART Board on July 30, 2015, primarily to support the City Center Guideway and Stations DB contract. The HART Board approved the resolutions. Staff forwarded the matter to the Honolulu City Council, which rejected one of the cases. HART anticipates bringing the remaining cases back to the HART Board on Sept. 24, 2015.
  - Seven cases were presented to the HART Board on Aug. 27, 2015, primarily to support the schedule for the City Center Guideway and Stations DB contract. The HART Board approved the resolutions and six of the cases were forwarded to the Honolulu City Council. One case required an amendment and was withheld. HART anticipates bringing these cases back to the HART Board for their October meeting.
  - Four cases will be presented to the HART Board on Sept. 24, 2015, to support the Airport, and the City Center Guideway and Stations DB contracts. HART anticipates bringing these cases back to the HART Board for their November meeting.
  - HART continues to negotiate with each property owner in an attempt to reach mutual agreement. However, several more parcels may be proposed to the HART Board of Directors for eminent domain to support east DB contracts.

## 5.1 Permits

### • Permits Submitted and In-Progress

- HART completed an over-the-shoulder review for the West O'ahu Station Group (WOSG) National Pollutant Discharge Elimination System (NPDES) construction permit and Municipal Separate Storm Sewer System (MS4).
- HART has notified the HDOH to authorize the WOSG and the Pearl Highlands Garage and Transit Center (H2R2) contractors to represent HART for the submittal of the NPDES permit.
- HART submitted a Notice of Non-Compliance submittal to the Hawai'i Department of Health Clean Water Branch for a waterline break that occurred on Aug. 11, 2015, along Kamehameha Highway in Halawa.
- ASU contractors have submitted a permit application for their staging area to Hawai'i Department of Transportation, Highways Division.

### • Permits and Approvals Granted

- HART received a "No Permit Required" determination for the Aolele Ditch Stream Channel Alteration Permit (SCAP).
- HART received an approval from HDOH for the Airport Section Utilities (ASU) Noise Variance permit, which enables night construction work in the section.

### • Look Ahead

- Upcoming significant permit activity:
  - HART will submit a letter requesting determination of permit required to the US Army Corps of Engineers (USACE) for Nuuanu Stream.
  - HART will submit the extension for the KHG Noise Variance permit, which expires in December 2015.

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

### • Activities this month

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

### • Look Ahead

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

5.3 Utility Agreements

Figure 13. Utility Agreements Status

Utility Agreements Status Matrix									
Utility Owner	Status	WOFH		KHG		Airport		City Center	
		ESA	UCA	ESA	UCA	UCA	COMBINED ESA	UCA	
AT&T (Corporation)	Executed	5/11/11	12/20/11	5/18/12	Including with Airport	Combining KHG & City Center and AT&T Gov	12/26/13		Including with Airport
	NTP	5/12/11	12/21/11						
	Amd 01	7/1/11							
AT&T (Government Solutions)	Executed			12/26/13		Combining with AT&T Corp	12/26/13		Combining 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
	NTP	6/14/10	11/18/14						
	Amd 01	7/1/11		4/13/15					
	Amd 02	5/10/12							
HECO	Executed		4/20/12 (to be vacated once Design and Construction Services Agreements Executed)	7/12/12 (Agreement to be vacated once Design and Construction Services Agreements are Executed)		Airport Bridging Agreement (superseded by Design Services Agreement) City Center Bridging Agreement (superseded by Design Services Agreement)			
	NTP	By Agreement with PB							
		Pre-Construction		Pre-Construction		Pre-Construction			
	Executed	10/30/13		10/4/13					
	Expired	11/29/13		11/29/13					
		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	Clarifying Schedule	11/25/13	Clarifying Schedule
NTP	11/20/13	11/29/13	11/20/13	11/29/13	11/20/13		11/25/13		
Oceanic Time Warner Cable	Executed	12/8/09	12/21/11	1/9/12	6/2/14	12/19/14	4/3/13		Draft sent to Oceanic
	NTP	12/22/09					4/4/13		
	Amd 01	7/1/11	2/27/14						
	Amd 02	10/7/13							
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							
Sandwich Isle Communications	Executed	5/20/10		4/20/12					
	NTP	6/8/10							
	Amd 01	7/1/11							
Hawai'iGAS	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				
TW telecom	Executed	12/2/09		2/14/12	Oceanic to relocate for TW telecom for KHG		10/11/12		Draft sent to TW telecom
	NTP	12/22/09		2/16/12					
	Amd 01	7/1/11							
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				

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

WOFH

- All WOFH agreements have been executed.

KHG

- All KHG agreements have been executed.
- Processing Hawai'i Gas UCA Amendment No. 02.

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.

HECO

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

**5.4 Right-of-Way (data as of Sept. 17, 2015)**

**BUDGET**

	Baseline Budget	Expended	Remaining Budget Balance	Estimate to Completion	Forecast Variance
Acquisition	\$ 201.70	\$ 75.70	\$ 126.00	\$ 112.30	\$ 13.70
Relocation	\$ 20.50	\$ 8.20	\$ 12.30	\$ 16.90	\$ (4.60)
<b>Total (Million)</b>	<b>\$ 222.20</b>	<b>\$ 83.90</b>	<b>\$ 138.30</b>	<b>\$ 129.20</b>	<b>\$ 9.10</b>

Note

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

**ACQUISITIONS**

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

	No. of Parcels Impacted	Current No. of Parcels Needed	Appraisals In Process	Appraisals Completed or N/A	Letters of Offer Sent or N/A	Offers Accepted or N/A	Possession Granted For Condemnation	Agreements Completed	Site Control Obtained	Relocations Completed	Properties Available for Contractor	Acquisitions Completed
<b>Full Acquisition</b>												
W.Oahu\Farrington	16	16		16	14	13	1	2	16	12	16	15
Kamehameha	3	3		3	3	3			3	1	3	3
Airport	5	5		5	5	5			4	3	4	4
City Center	20	18		18	16	16			16	14	13	16
<b>TOTAL</b>	<b>44</b>	<b>42</b>		<b>42</b>	<b>38</b>	<b>37</b>	<b>1</b>	<b>2</b>	<b>39</b>	<b>30</b>	<b>36</b>	<b>38</b>
<b>Partial Acquisition</b>												
W.Oahu\Farrington	11	3		3	2	2			3		2	2
Kamehameha	19	4		4	3	2	1		3		3	1
Airport	11	11		11	5	1		1	6		4	1
City Center	94	79	1	77	63	13			7		3	2
<b>TOTAL</b>	<b>135</b>	<b>97</b>	<b>1</b>	<b>95</b>	<b>73</b>	<b>18</b>	<b>1</b>	<b>1</b>	<b>19</b>		<b>12</b>	<b>6</b>
<b>Easement</b>												
W.Oahu\Farrington	19	17		17	1	1		6	12		10	6
Kamehameha	6	6		6				1	6		6	1
Airport	50	34		34	7	1		2	27		27	2
City Center	44	29		29	5			1	1		1	1
<b>TOTAL</b>	<b>119</b>	<b>86</b>		<b>86</b>	<b>13</b>	<b>2</b>		<b>10</b>	<b>46</b>		<b>44</b>	<b>10</b>
<b>GRAND TOTAL</b>	<b>298</b>	<b>225</b>	<b>1</b>	<b>223</b>	<b>124</b>	<b>57</b>	<b>2</b>	<b>13</b>	<b>104</b>	<b>30</b>	<b>92</b>	<b>54</b>

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

**WEST O'AHU/FARRINGTON**

- Issues:
  - Obtained site control for nearly all needed properties for the WOFH section.
  - Continuing negotiations with UH West O'ahu to secure construction right of entry for the WOFH guideway.

**KAMEHAMEHA**

- Issues:
  - Site access is complete for all right-of-way private property for Kamehameha.
  - Continuing 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.

- In order to support the relocation of utility easements in the Kamehameha section, eminent domain proceedings have been initiated. Negotiations are continuing with the private property owner in the Kamehameha section in an attempt to reach mutual agreement.
- The HART Board of Directors approved this case in August, and the resolution – which allows staff to forward the matter to the Honolulu City Council for consideration – was forwarded to the City Council. HART anticipates bringing the matter back to the HART Board in October.

#### AIRPORT

- Issues:
  - Negotiations are continuing with the Post Office.
  - Continuing to monitor the Airport Station mapping process.
  - In order to support the upcoming procurement for the Airport Guideway and Station Design-Build contract, eminent domain proceedings have been initiated. Negotiations are continuing with all private property owners in the Airport section in an attempt to reach mutual agreement.
  - The HART Board approved five cases in May and the Honolulu City Council had no objections. While HART has received eminent domain approval, HART continues to strive to reach an agreement with each owner.
  - The HART Board approved one case in June and the Honolulu City Council had no objections. While HART has received eminent domain approval, HART continues to strive to reach an agreement with the owner.
  - The HART Board approved one case in July, and the resolution – which allows staff to forward the matter to the Honolulu City Council for consideration – was forwarded to the City Council. HART anticipates bringing the matter back to the HART Board on Sept. 24, 2015.
  - The HART Board approved one case in August, and the resolution – which allows staff to forward the matter to the Honolulu City Council for consideration – was forwarded to the City Council. HART anticipates bringing the matter back to the HART Board in October.
  - One case will be forwarded to the HART Board of Directors on Sept. 24, 2015, for eminent domain. HART anticipates bringing the matter back to the HART Board in November.
- Look Ahead:
  - Continue to work towards completing Post Office acquisition and Airport agreements.

#### CITY CENTER

- Issues:
  - Continuing to place priority on obtaining site control and acquiring parcels in the Dillingham section.
  - In order to support the upcoming procurement for the City Center Guideway and Station Design-Build contract, eminent domain proceedings have been initiated. Negotiations are continuing with all private property owners in the City Center section in an attempt to reach mutual agreement.
  - The HART Board approved eighteen cases in June and the Honolulu City Council had no objections. While HART has received eminent domain approval, HART continues to strive to reach an agreement with each owner.
  - The HART Board approved three cases in July, and the resolutions – which allow staff to forward the matter to the Honolulu City Council for consideration – were forwarded to the City Council. The City Council rejected one of the cases. HART anticipates bringing the matter on the two cases back to the HART Board on Sept. 24, 2015.
  - The HART Board approved five cases in August, and the resolutions – which allow staff to forward the matter to the Honolulu City Council for consideration – were forwarded to the City Council. HART anticipates bringing the matter back to the HART Board in October.
  - Two cases will be forwarded to the HART Board of Directors on Sept. 24, 2015, for eminent domain. HART anticipates bringing the matter back to the HART Board in November.
  - Other parcels may be presented to the HART Board for eminent domain in the coming months, to ensure that the construction schedule is maintained. HART continues to negotiate with each property owner in an attempt to reach mutual agreement.
- Look Ahead:
  - Evaluate and address the need to advance additional recommendations for eminent domain in order to achieve the Project's schedule.
  - Closely monitor the acquisitions in relation to construction schedules for City Center.

**RELOCATIONS**

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

Section	Residential Relocations (a)	Business Relocations (b)	Not-For-Profit Relocations (c)	Total Relocations (a+b+c)	Relocation Assessment Completed	90-Day Notice Sent	30-Day Notice Sent	Relocations Completed for Occupants
W.Oahu\Farrington	18	6	1	25	12	12	8	25
Kamehameha		4		4	4	3	3	4
Airport		13		13	5	10		7
City Center	16	66		82	31	46	23	49
<b>Grand Total:</b>	<b>34</b>	<b>89</b>	<b>1</b>	<b>124</b>	<b>52</b>	<b>71</b>	<b>34</b>	<b>85</b>

WEST O’AHU/FARRINGTON

- Look Ahead:
  - The Phase II ESA report has been received for TMK 9-6-004-006. A tentative settlement has been reached and is subject to FTA concurrence.

AIRPORT

- Look Ahead:
  - Plans are continuing for several relocations by October.

CITY CENTER

- Look Ahead:
  - Planning and monitoring several relocations.

**THIRD-PARTY AGREEMENTS**

Figure 16. Third-Party Agreement Status

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
University of Hawai’i (UH) Master Agreement	Pending	November 2015	WOFH, KHG, City Center	Final negotiations are ongoing. Will secure Right of Construction as not to delay the project.
UH -West O’ahu (UHWO) Pre-Construction Right of Entry	Executed		WOFH	
UH - West O’ahu (UHWO) Construction Right of Entry for Station	Pending	November 2015	WOFH	In negotiations. Concerted effort is being made to finalize.
Leeward Community College (LCC) Pre-Construction Right of Entry	Executed		WOFH	
Leeward Community College (LCC) Construction Right of Entry for Guideway	Executed		WOFH	
Leeward Community College (LCC) Construction Right of Entry for Station	Executed		WOFH	
UH Urban Garden Pre-Construction Right of Entry	Executed		KHG	
UH Urban Garden Construction Right of Entry	Executed		KHG	Consent to construct in place.
UH Urban Garden Kiewit Construction Right of Entry	Executed		KHG	
D.R. Horton Agreement for Construction	Executed		WOFH	Allows for construction to proceed.
D.R. Horton Final Easement Agreement	Pending	December 2015	WOFH	Document in process.
Honolulu Community College (HCC) Pre-Construction Right of Entry	Executed		City Center	

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
Honolulu Community College (HCC) Construction Right of Entry for Station	Pending	November 2015	City Center	In negotiations. Concerted effort is being made to finalize.
Department of Land and Natural Resources (DLNR) Right of Entry (Kapolei)	Executed		WOFH	Consent to construct in place.
Department of Land and Natural Resources (DLNR) Easement (Kapolei)	Pending	November 2015	WOFH	Easement documents in process.
City Dept. of Parks & Recreation (MSF drainage)	Executed		WOFH	Consent to construct in place.
Department of Land and Natural Resources (DLNR) Keehi Lagoon Right of Entry	Executed		Airport	Consent to construct in place.
Department of Land and Natural Resources (DLNR) Keehi Lagoon Easement	Pending	November 2015	Airport	Process Easement Agreement.
Department of Education Master Agreement and Consent to Construct (Waipahu H.S.)	Executed		WOFH	Consent to construct in place. Jurisdictional Transfer in process.
Aloha Stadium / Department of Accounting & General Services (DAGS) MOU for guideway & station	Executed		KHG	
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry for guideway	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	Construction ROE in place.
Aloha Stadium / Department of Accounting & General Services (DAGS) Easement for guideway	Pending	November 2015	KHG	Easement in process.
Aloha Stadium / Department of Accounting & General Services (DAGS) Right of Entry for station park and ride	Pending	November 2015	KHG	In negotiations.
Aloha Stadium / Department of Accounting & General Services (DAGS) Easement for guideway	Pending	November 2015	KHG	Process Easement Agreement.
DHHL Master Agreement	Executed		WOFH, MSF	
DHHL License	Executed		WOFH, MSF	Consent to construct in place.
HDOT Master Agreement	Executed		WOFH	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Executed		WOFH	Consent to construct in place.
HDOT Master Agreement for KHG, Airport and City Center	Executed		KHG, Airport, City Center	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Executed		KHG	Consent to construct in place.
HDOT Joint Use & Occupancy (JU&O) Sub-agreement for Airport Division parcels	Executed		Airport	Consent to construct in place.
HDOT Easement Agreement for Airport Division parcels	Pending	December 2015	Airport	Process Easement Agreement.
HDOT Joint Use & Occupancy (JU&O) Sub-agreement for Airport leased/revenue parcels	Pending	November 2015	Airport	Sub-agreement in process.
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Pending	November 2015	City Center	Sub-agreement in process.
HDOT SOA MOU	Executed		Program	
OCDC/Hawai'i Department of Public Safety Agreement Dillingham Blvd.	Pending	December 2015	City Center	Finalizing requirements.
HI Community Development Agreement (HCDA)	Pending	November 2015	City Center	Coordination is ongoing.

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
Department of Accounting & General Services (DAGS)/HHFDC Right of Entry	Pending	November 2015	City Center	Consent to construct in process.
Department of Accounting & General Services (DAGS)/HHFDC Easement	Pending	November 2015	City Center	Process Easement Agreement.
City Dept. of Transportation Services (DTS) (Middle St.)	Pending	November 2015	Airport	Joint Use MOU in process. Pending design.
U.S. Navy Licenses	Executed		WOFH, KHG, Airport	Consent to construct received. Formal notification is forthcoming, however, immediate access is granted.
U.S. Navy	Pending	December 2015	WOFH, KHG, Airport	Land court documents processed and awaiting recordation and filing.
U.S. Navy Pearl Harbor Station	Adopted		Airport	Congressional approval received and immediate access is granted.
U.S. Post Office Honolulu Processing Center acquisition	Pending	December 2015	Airport	In negotiations.
U.S. Gov't/GSA/Federal Courthouse Agreement & Landscape Plan	Pending	December 2015	City Center	Draft agreement is under review and discussions are ongoing.
City Dept. of Transportation Services (DTS) (Middle St./Kamehameha Hwy)	Pending	November 2015	Airport	Joint Use MOU in process.
City Dept. of Facility Maintenance (DFM) (Kamehameha Hwy/Makalapa Manor)	Executed		Airport	
City Dept. of Facility Maintenance (DFM) (N. Nimitz & Awa St.)	Pending	November 2015	City Center	Joint Use MOU in process.
City Dept. of Facility Maintenance (DFM) (Kohou St.)	Pending	November 2015	City Center	Joint Use MOU in process.

## 6 MANAGEMENT AND ADMINISTRATIVE UPDATES

### Safety and Security (Section 6.1)

#### OVERVIEW

- **S&S Certification Program**
  - **Certification documents:** See status chart.
  - **Design Criteria Conformance Checklists (DCCC) development and verification:** See status chart.
  - **Civil – Construction Spec Conform Checklist (CSCC) development/verification:** See status chart.
  - **Core Systems – Spec/Testing Conform Checklists (STCC) development/verification:** See status chart.
  - **Base Operational Readiness Conformance Checklists (ORCC):** Being reviewed and revised – projected for Oct./Nov. SSRC approval.
  - **PHAs and Core Systems SSHAs/O&SHAs:** (See certification document status chart)
  - **TVA:** No changes – on hold.
  - **Open Items List (OIL):** See new status chart.
  - **Hazard Tracking Log:** No changes.
  - **Interim Certification Requirements:**
    - A review of the MSF and rail yard completion status along with the projected PV delivery date is planned for October 2015 that will refine actual interim certification requirements.
    - HART Safety's "Interim Certification Guidance Document" was updated on Sept. 14, 2015, to reflect current status.
  - **Key S&S Certification related meetings held in September 2015:**
    - Safety and Security Certification Working Group (SSCWG) meetings, Sept. 1 and 30, 2015
    - Fire Life Safety Working Group (FLSWG) meeting, Sept. 8, 2015
    - Core Systems PM Certification Training, Sept. 15, 2015
    - PV Certification Meeting, Sept. 15, 2015
    - Safety and Security Review Committee (SSRC) meeting, Sept. 23, 2015
    - Bi-weekly and/or monthly project coordination meetings with Core Systems, MSF, WOFH and KHG
    - HART Safety and Security weekly meeting with HDOT
  - The SSRC reviewed and approved, on Sept. 23, 2015, the following certification documents:
    - CSC – Wayside ATC Operations and Support Hazards Analysis (O&SHA)
    - CSC – Central ATC O&SHA
    - MOW Vehicles Base DCCC
    - WOFH, North Road Underpass DCCC design verification
- **S&S Certification Certificates:**
  - DBB-525 Airport Section 7-Piers Contract S&S Certification Certificate and Certificate of Conformance for the Certifiable Element "Guideway" was signed on Sept. 21, 2015.
- **Construction Safety and Security:** See status chart.

#### KEY ISSUES

- At the recent FTA Quarterly Meeting, FTA noted:
  - HART needs to ensure that HART Safety and Security needed to be integrated into the review and approval process for deviations and design/construction change orders. HART is accomplishing that now.
  - The construction submittal review and approval process needs to be consistent across contracts to facilitate HART Safety and Security Certification verification.
- The nature of Design-Build contracts could potentially make DCCC and CSCC lag behind DBB certification activities. HART is taking steps to pro-actively mitigate these concerns.
- The rail plinths remain an outstanding issue. 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 acceptance.

## Quality Management (Section 6.2)

### OVERVIEW

- The HART QMP and HART-approved QAPs of contractors, consultants and suppliers have been assimilated by their respective employees and are being implemented as standard operating procedures. Therefore, less and less Nonconformance Reports (NCR) are reported or encountered.
- Overall quality of the Project is good.
- There are two (2) major NCRs remaining on the WOFH and KHG contracts that need to be addressed and corrected to prevent recurrence and mitigate impact on the overall progress of the project. These NCRs are discussed in more detail in the Key Issues of Section 6.2.
- Closed Combined QA and Buy America (BA) audit of Nan, Inc. on Airport Section Utility (ASU), on Sept. 22, 2015.
- Closed QA audit of KIWC and KKJV on WOFH, KHG and MSF on Survey Work, on Sept. 1, 2015.
- Performed Combined QA and Buy America Audit of Schindler Elevators and Escalators on the DFIM contract, on Sept. 10, 2015.

### KEY ISSUES

- Erection of spans (12-segments) and installation of permanent “shear keys” between the WOFH guideway columns and spans.
- Construction of KHG drilled shafts, columns and segments (Casting Facility).
- Resolution of two (2) major NCRs: cracked segments 1, 2, 11 and 12 of Span 17 repair, and Drilled Shafts [Crosshole Sonic Logging Reports] quality and repairs.
- Construction of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, etc.
- Installation and welding of rails and turnouts on top of the WOFH guideway.
- Construction of WOFH Balanced Cantilever Segmental Span.
- Manufacturing of Carbody(s) at AnsaldoBreda and its subcontractor manufacturing facilities in Italy.
- Final Assembly of passenger vehicles at AB Inc. facility in Pittsburg, CA.
- Pre-shipment, I&T and First Article Inspections (FAI) of wayside core system and passenger vehicles materials, parts and components.
- Close-out of A-7 contract to include review of “Lifetime” Quality Records including NCRs, if any, and As-built Drawings.

## Buy America Compliance (Section 6.3)

### OVERVIEW and KEY ISSUES

- On Aug. 4, 2015, all Buy America “observation” findings made previously by HART were closed. There are no new issues this month.

## Disadvantaged Business Enterprise (Section 6.4)

### OVERVIEW

- \$27,876,272 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 9/30/15.

## Planning and Environment (Section 6.5)

### OVERVIEW

- HART’s Planning and Environmental team continues to collaborate with city, state, and federal agencies to ensure proper environmental review occurs in front of procurement and construction activities.

### KEY ISSUES

- HART is completing final review of environmental documentation and requirements for Airport and City Center Stations and Guideway bid packages.

**Risk Management (Section 6.6)**OVERVIEW

- There are a total of 148 risks in the September 2015 risk register. There were 2 risks deleted and 1 new risk added for the month. Reviews were conducted for Core Systems, Kamehameha Highway Station Group, H2R2 Ramp, Maintenance and Storage Facility, West O'ahu Station Group and Farrington Highway Station Group contracts.

KEY ISSUES

- Risks associated with the market, right-of-way, utilities and third parties remain at the top of the list of concerns.
- The construction market represents a particularly challenging situation for HART. The GET extension to cover capital cost overruns due to court and procurement protest delays has made it through the Legislature and Governor's approvals.
  - All that remains is City Council approval to once again fund the capital construction and provide replacement funding for the 5307 bus monies. Without City Council approval, there is an emerging risk that HART will experience increased costs and delay in advertisement of the City Center Guideway and Stations procurement.
  - Construction escalation is expected to continue to be high for 2015 and 2016, as growth in island permitted work continues at a faster rate than completion of construction work.
  - HART construction contracts are a major contributor of the construction market and may contribute as much as 25% of the total construction volume (private and public) in 2015 and 2016.
- Third party actions are taking longer than expected to resolve, exposing HART's contractors to potential delay in the performance of their work unless there are work around alternatives available to minimize risk impacts to cost or schedule.
  - HECO and University of Hawai'i issues remain critical as well as various required permits for noise and in water work.

**Community Outreach (Section 6.7)**OVERVIEW

- HART achieved a key milestone with the completion of four miles of guideway in West O'ahu.
- HART's business outreach programs continue to grow. Since the launch of the Shop & Dine on the Line program in August, businesses continue to sign up for the program. More than 85 businesses are now participating in the discount program.
- HART's outreach team participated in nearly two dozen presentations, meetings and events this month, including construction updates in the Waipahu and Pearl City areas. Meetings with businesses and stakeholders in the urban core also continued this month.

KEY ISSUES

- Traffic and traffic management continue to be key issues surrounding construction work in the project's corridor. HART's public outreach team responded to more than 170 public inquiries. Inquiries were related to traffic, construction and business outreach programs.
- Business mitigation remains a priority for HART's outreach team. With several door-to-door canvassing efforts this month, HART connected with dozens of businesses to provide information about construction, upcoming Business Alliance meetings, and to listen to feedback on how to enhance existing business mitigation programs.

**Staffing (Section 6.8)**OVERVIEW

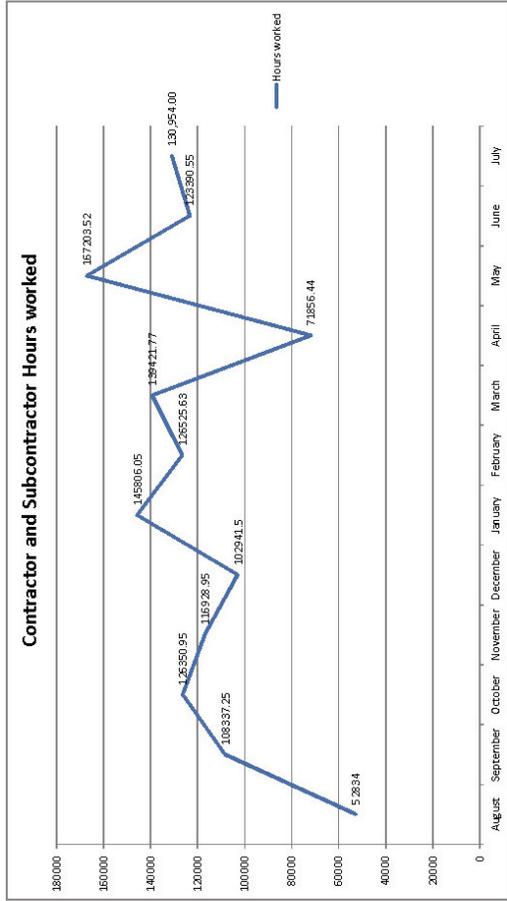
- The Deputy Director of Procurement and Contracts started on Sept. 4, 2015.
- The Safety Certification Manager position was filled on Sept. 28.
- The Director of Planning, Permitting and Right-of-Way will be departing the project at the end of October. Recruitment has commenced and interviews will be conducted in early October.
- The HART Safety Specialist departed the project and the need for a replacement is currently being evaluated.
- HART prioritizes filling all vacancies with City employees and supplements the City staff with consultants when required and appropriate.

KEY ISSUES

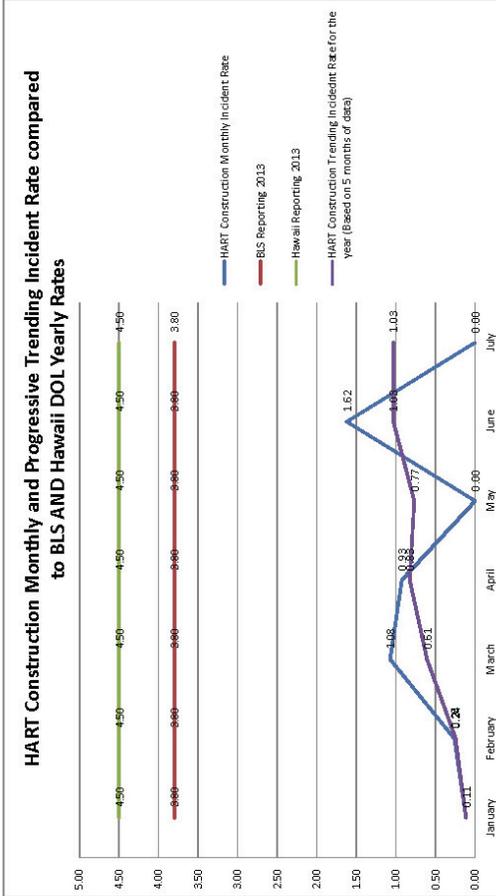
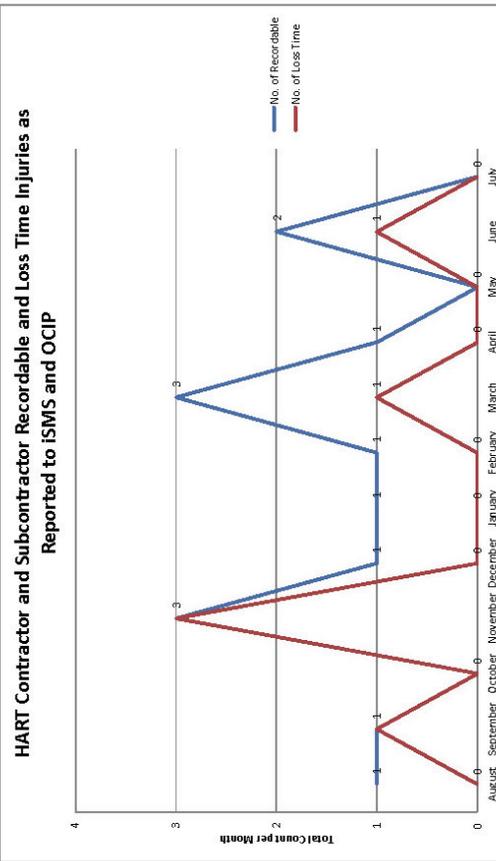
- The revised organization chart was submitted at the Project Quarterly Meeting and is included with this report.

6.1 Safety and Security

	2014		2015	
	Hours worked	No of Recordable	Hours worked	No of Recordable
January	52834	1	145806.05	1
February	106337.25	1	126525.63	1
March	126350.95	0	139421.77	3
April	118928.95	3	71856.44	1
May	102941.5	1	167203.52	0
June	102941.5	1	123390.85	2
July	52834	0	130954.00	0
August	52834	1	130954.00	0
September	106337.25	1		
October	126350.95	0		
November	118928.95	3		
December	102941.5	1		
<b>Total</b>	<b>905157.96</b>	<b>6</b>	<b>905157.96</b>	<b>8</b>



Work Hours for WOFH, KHG, MSF, Air Port, CORE System as reported to OCIP and certified.



Project-Wide Incident Activity					
Event Type	Total Number of Events since 1/1/2007	Total Number of Events for September 2015	Loss Type	Date	Event Description
Environment	15	1	Minor Damage	9/30/2015	KHG - Hydraulic leak occurred on a drill rig at Pearl City Plaza.
Loss or Damage	21	1	Minor Damage	9/8/2015	Airport Utilities - Contractor damaged newly installed 2" lateral on 6" irrigation line by equipment tracking over it.
*Reportable Occupational Injury/Illness	0	0			
Security	54	1	Theft	9/8/2015	KKJV - Subcontractor A1 Electrician material container and work truck broken into.
**Loss Time Occupational Injury/Illness	6	0			
Road/Vehicle - Driving	79	1	Minor Damage	9/2/2015	WOFH - Employee backed a front end loader into the truck bed and trailer of a subcontractors.
Service Strike	62	2	Minor Damage	a) 9/4/2015	a) Airport Utilities - While digging a diversion channel to address a leaking 2" irrigation line, contractor struck 6" irrigation line.
			Minor Damage	b) 9/29/2015	b) Airport Utilities - While excavating for new 16" waterline, an existing 6" transite irrigation pipe was struck.
*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.					

<b>HART S&amp;S Certification "Open Items List"</b>						
<i>Last 3 Months Status</i>						
<b>"Open Items" - Design/Construction and Verification Issues</b>						
Month - 2015	Total #	Total # Open	Total # Closed	% Closed Overall	# closed In Month	% Closed In Month
July	<b>143</b>	<b>81</b>	<b>62</b>	<b>43%</b>	<b>48</b>	<b>34%</b>
August	<b>154</b>	<b>88</b>	<b>66</b>	<b>43%</b>	<b>4</b>	<b>3%</b>
September	<b>155</b>	<b>88</b>	<b>67</b>	<b>44%</b>	<b>1</b>	<b>1%</b>

<b>Key HART S&amp;S Certification Documents</b>			
<i>Update &amp; Approval Status</i>			
<b>S&amp;S Project Plans, PHAs, Core Systems SSHA and O&amp;SHA, and TVA</b>			
Documents	Revision #	Date Approved	Comments
Safety and Security Management Plan (SSMP)	Rev 5	Pending	Update completed - under internal review
Safety and Security Certification Plan (SSCP)	Rev 4	Pending	Update underway to reflect updated PMP and SSMP
WOFH SSCP	Rev 0	10/22/2014	SSRC approved - No future updates: HART SSCP in affect
Construction Safety & Security Plan (CSSP)	Rev 2	10/22/2014	SSRC approved - Pending signatures
Security Sensitive Information (SSI) Plan	Rev 0	7/22/2015	SSRC approved - Pending signatures
Project Preliminary Hazard Analysis (PHAs)	Rev 2A	Pending	Rev 2A – DRAFT annual update completed 9/3/2015
- MSF – Yard and Shop	Rev 2A	-	3/30/2015 A – Presented to SSRC as IFO 8/26/2015
- Alignment	Rev 2A	-	3/30/2015 A – Update completed – under internal review
- Tracks	Rev 2A	-	3/30/2015 A – Update completed – under internal review
- Stations	Rev 2A	-	6/22/2015 A – Update completed – under internal review
- Traction Power	Rev 2A	-	Update on-hold - Pending approval of TES SSHA and O&SHA
- Train Control	Rev 2A	-	Update on-hold - Pending approval of ATC related SSHA & O&SHA
- Vehicles	Rev 2A	-	Update on-hold - Pending approval of PV related SSHA & O&SHA
- Communications	Rev 2A	-	Update on-hold - Pending approval of Comms SSHA and O&SHA
Core Systems Contract (CSC) PHAs (DBOM)	Rev D	-	9/14/2015 – under review
- Central ATC O&SHA	Rev C	9/23/2015	SSRC approved
- Wayside ATC SSHA	Rev B	-	11/14/2014 – CSC Revise & Re-submit (R&R)
- Wayside ATC O&SHA	Rev D	9/23/2015	SSRC approved
- Wayside/ATC SHA	Rev C	-	1/6/2015 – CSC R&R
- SCADA O&SHA	Rev D	-	7/14/2015 – CSC R&R
- SCADA SSHA	Rev C	-	3/10/2015 – CSC R&R
- Vehicle Fire Hazard Analysis (FHA)	Rev B	-	8/28/2015 – CSC R&R
- Vehicle SSHA	Rev A	-	8/31/2015 – CSC R&R
- Vehicle O&SHA	Rev A	-	Under development – high priority - vehicle under production
- Vehicle/ATC SSHA	Rev D	-	7/16/2015 – CSC R&R
- Vehicle/ATC O&SHA	Rev D	-	6/9/2015 – CSC R&R
- TES SSHA	Rev A	-	11/17/2014 – CSC R&R
- TES O&SHA	Rev A	-	5/22/2015 – CSC R&R
- PSGS PHAs	Rev A	-	Under development
- PSGS O&SHA	Rev A	-	12/8/2014 – CSC R&R
- PSGS SSHA	Rev B	-	9/21/2015 – Under review
- UPS O&SHA	Rev B	-	8/19/2015 – CSC R&R
- Communications SSHA	Rev A	-	8/14/2015 – CSC R&R
- Communications O&SHA	Rev A	-	8/14/2015 – CSC R&R
- FDAS SSHA	Rev A	-	7/28/2015 – under review
- FDAS O&SHA	Rev A	-	8/17/2015 – CSC R&R
- MOW Support Vehicles O&SHA	Rev A	-	Under development
Threat & Vulnerability Assessments (TVAs)			
- Project TVA	Rev 1	1/16/2015	On hold pending contract restructure & re-design

<b>S &amp; S Design Criteria Conformance Checklist (DCCC)</b>						
<i>Civil and Core Systems Contracts</i>						
<b>Verification Status</b>						
<b>Design Phase</b>				<b>Construction / Installation /Testing</b>		
Contracts: FD, DB, DBOM	% Verified	+ / - % Change	Comments: Design SSRC Approval Date	% Verified	+ / - % Change	Comments: C/I/T SSRC Approval Date
<b>Civil Contracts Under Construction</b>						
FD-430, 7 – Shafts	100%	N/A	6/17/2015	100%	N/A	8/26/2015
FD-430, Airport Utilities	100%	N/A	6/25/2014			
DB-200, MSF	99%	-	1/28/2015			
DB-120, WOFH Guideway - 38 total – Sub CEL/CIL Packages	99%	-	34 Sub - CELs/CILs SSRC approved	20%	+20%	
DB-320, KHG Guideway - 40 total – Sub CEL/CIL Packages	97%	-	32 - Sub CELs/CILs, SSRC approved			
FD H2R2 Ramps	96%	-	5/27/2015			
FD-240, Farrington Hwy Station Group	94%	-	1- station- 6/17/2015			
FD-140, West Oahu Station Group	46%		Waiting for DCCC update			
<b>Civil Contracts Under Design or in Pre-bidding Status</b>						
FD-340, Kamehameha Highway Station Grp	99%	-	3 Stations – 8/26/2015			
FD-530, City Center Utilities	-	-	On hold – re-designing			
MI-930, Elevators & Escalators	-	-	Base DCCC 8/26/15			
Transit ART Program, 23 artists/contracts	-	-	Base DCCC under review			
DB-xxx Fare Collection System	-	-	Under Development			
DB-275, Pearl Highlands PS/BTC	-	-	Base DCCC under review			
FD-600, West O’ahu Park & Ride	-	-	Base DCCC under review			
DB-xxx, Traction Power Generator System	-	-	Base DCCC under review			
DB-xxx, Airport Guideway & Stations Grp	-	-	On hold re-designing			
DB-xxx, City Center Guideway & Stations Grp	-	-	On hold re-designing			
<b>DBOM-920 Core Systems Contracts Under Procurement - Production - Manufacture - Installation</b>						
DBOM-920, Core Systems						
- Passenger Vehicles	-	-	Designer input underway			
- Traction Electrification System (TES)	-	-	Designer input underway			
- Yard Control Bungalow (YCB)	64%	-	Base DCCC – 5/27/2015			
- MOW Vehicles	-	-	Base DCCC 9/23/2015			
<b>DBOM-920 Core Systems Contracts Under Design</b>						
DBOM-920, Core Systems						
- Traction Power Generator Back-up System	-	-	Base DCCC under review			
- Communication System	-	-	Designer input underway			
- Fire Detection Alarm System	-	-	Designer input underway			
- Train Control System (TCS)	-	-	Designer input underway			
- SCADA	-	-	Designer input underway			
- Platform Screen Gate System (PSGS)	-	-	Designer input underway			

<b>S &amp; S Construction Specification Conformance Checklists (CSCC)</b>			
<i>Civil - Contracts</i>			
<b>Verification Status</b>			
<b>Construction - Installation – Start-up &amp; Testing Phases</b>			
Contracts	% Verified	+ / - % Change	Comments
<b>Civil Contracts Under Construction</b>			
DBB-525, Airport Section, 7 - Drilled Shafts	98%	-	1-open item – As-Built Drawings, 8/26/2015 SSRC approved
DB-200, MSF	33%	<b>+2%</b>	Verification underway
DB-120, WOFH Guideway	37%	-	Verification underway
DB-320, KHG Guideway	4%	-	Verification underway
DBB-505, Airport Utilities	23%	-	Base CSCC approved 8/26/2015 – verification underway
DBB-385, H2R2 Ramps	-	-	Base CSCC approved, 5-27-2015
DBB-271, Farrington Hwy Station Group	-	-	Base CSCC approved 7/22/2015
DBB-171, West O’ahu Station Group	-	-	Draft Base CSCC updated 8/6/2015 under PM review
<b>Civil Contracts Under Design or in Bidding - Pre-bidding Phases</b>			
DBB-371, Kamehameha Hwy Stations Grp	-	-	Draft Base CSCC Updated 8/20/2015 under PM review
MI-930, Elevators & Escalators	-	-	Base CSCC SSRC approved 8/26/2015
Transit Art Program, 23 Artists/contracts	-	-	Draft Base CSCC under review
DBB-xxx, Dillingham Utilities & Road Widening	-	-	Draft Base CSCC in hand – on hold pending re-design
DB-275, Pearl Highlands PS/ Bus Transit Center	-	-	TBD
DB-xxx Fare Vending System	-	-	Under Development
DBB-600, West O’ahu Park & Ride	-	-	TBD
DB-xxx, Airport Guideway & Stations Grp	-	-	On hold pending re-design
DB-xxx, City Center Guideway & D&K Stations Grp	-	-	On hold pending re-design

<b>S &amp; S Specification/Testing Conformance Checklists (STCC)</b>			
<i>Core Systems - Contracts</i>			
<b>Verification Status</b>			
<b>Procurement - Production - Manufacture - Installation - Start-up &amp; Testing Phases</b>			
Contracts	% Verified	+ / - % Change	Comments
<b>DBOM-920 Core System Contracts under Procurement - Production - Manufacture - Installation - STCC</b>			
<b>Passenger Vehicles/Cars</b>			
1) General Requirements – Applies to all PVs	-	-	Draft base STCC under review, pending Oct/Nov SSRC approval
2) Vehicle - Interim Cert – for Dynamic Testing	-	-	Draft base STCC under review, pending Oct/Nov SSRC approval
3) Train/4-PV Cert for Pre-revenue Service	-	-	Base STCC under development
<b>Traction Electrification System (TES)</b>			
1) General Requirements – Project Wide	-	-	Draft base STCC under review
2) MSF – Rail Yard	-	-	Draft base STCC under review
3) Functional Track – WOFH Guideway	-	-	Draft base STCC under review
4) WOFH and KHG Guideways	-	-	Draft base STCC under review
5) Airport and City Center Guideways	-	-	Draft base STCC under review
<b>Yard Control Bungalow (YCB) Civil</b>	-	-	Draft base STCC under review
<b>MOW Vehicles</b>	-	-	Draft base STCC under review
<b>DBOM-920 Core Systems Contracts Under Design- STCC</b>			
- System Integration Testing (SIT)	-	-	Draft base STCC under review
- Traction Power Generators Back-up System	-	-	Draft base STCC under review
- Communication Systems	-	-	Base STCC under development
- Fire Detection Alarm System (FDAS)	-	-	Base STCC under development
- Train Control System (TCS)	-	-	Base STCC under development
- Supervisory Control & Data Acquisition (SCADA)	-	-	Base STCC under development
- Platform Screen Gate System (PSGS)	-	-	Base STCC under development
- Operational Readiness Conformance Checklists	-	-	Draft base ORCC under review

## 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.
- Overall quality of the Project is good.
- Review and approve contractors, consultants and suppliers new and updated QAPs including Inspection and Test Plans (ITP). Currently reviewing QAP of Nan, Inc. for the WOSG contract and QAP of Hawaiian Dredging for the FSHG contract.
- Conducted biweekly Quality Task Force (QTF) meetings with CE&I, contractors and consultants QA teams to discuss the status of: design and construction activities; procurement activities; inspection and testing; NCRs; Corrective Actions (CARs) and Preventative Actions (PARs); quality compliance; various process improvements; quality economics, and Buy America compliance.
- Participated in Pre-Activity Meeting for scheduled construction activities: MSF (Cable Pulling and Testing by AHJV/Watts); ASU (HTI Duct Line Demolition); and CSC (Pre-Shipment and testing of NGD DVT and Waipahu TPSS).
- Perform Management System Audits (QA, Environmental and Buy America); 2015 Combined Management System Audit Schedule as shown below:



HONOLULU AUTHORITY for RAPID TRANSPORTATION

### COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: 2015 Rev 10

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
CCH-100	Honolulu Authority for Rapid Transportation (HART)	HART	15-009 QA	12/01 - 12/08		
	Honolulu Authority for Rapid Transportation (HART) -Security & Safety Only		15-009 SS	12/01 - 12/08		
CT-HRT-10HO137	West O'ahu/Farrington Highway Guideway Design-Build (WOFH)	KWC - HI	15-001 QA	2/17 - 2/19	2/17 - 2/18	4/17/15
CT-HRT-11HO195	Kamehameha Highway Guideway Design-Build (KHG)		15-001 BA	2/17 - 2/19	2/17 - 2/18	4/17/15
CH-HRT-10HO449	Maintenance and Storage Facility Design-Build (MSF)	KKJV - HI	15-003 QA	2/25 - 2/26	2/25 - 2/26	4/14/15
			15-003 BA	2/25 - 2/26	2/25 - 2/26	8/4/15
CT-HRT-10HO137	WOFH & KHG Casting Facility	KWC - HI	15-011	7/15 - 7/16	7/15 - 7/16	
CT-HRT-11HO195						
CH-HRT-10HO449	WOFH Surveying, KHG and MSF Audit and Alignments	KWC/KKJV - HI	15-013	8/20 - 8/21	8/20	9/1/15
CT-HRT-11HO195						
CT-HRT-10HO137						
CT-HRT-1200106	Core Systems Contract (CSC) & AB Design-Build-Operate-Maintain	ASTS Italy	TBD	TBD		
		AB Italy	TBD	TBD		
		AB USA	TBD	TBD		
CT-HRT-1200106	Core Systems Contract (CSC)	AHJV - HI	15-010	7/06 - 7/07	7/6	7/14/15
SC-HRT-1200116	West O'ahu Station Group Final Design (WOSG)	AECOM - HI	15-005	3/18 - 3/19	3/18 - 3/19	5/18/15



HONOLULU AUTHORITY for RAPID TRANSPORTATION

## COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: **2015** Rev 10

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
SC-HRT-1200111	Kamehameha Highway Station Group Final Design (KHSG) PH, PR, AS	AVA - HI AVA - CA	15-002	6/3 - 6/04	6/3	6/8/15
SC-HRT-1200111	H2R2 Final Design	AVA - HI AVA - CA	15-004	1/28	1/28	2/3/15
SC-HRT-1400049	CSC Support Services	L + E	15-016	11/23 - 11/24		
DB	Pearl Highlands Parking Structure/Bus Transit Center Construction	TBD	TBD	TBD		
CR-HRT-1500309	H2R2 Ramp Construction	Royal Contracting	TBD	TBD		
CR-HRT-1500503	West Oahu Station Group Construction	NAN, Inc	TBD	TBD		
CT-HRT-1500236	Farrington Hi-way Station Group Construction FHSG	Hawaiian Dredging	TBD	TBD		
DB	Kamehameha Hi-way Station Group Construction	TBD	TBD	TBD		
SC-HRT-14000323	Airport Section Utilities Construction	NAN, Inc	15-012	8/13 - 8/14	8/13 - 8/14	9/22/15
CT-HTR-1500080	Airport Section Guideway Seven Pier Construction	HDCC/CJA JV	15-006 QA	3/11	3/11 - 3/24	3/31/15
			15-006 BA	3/11	3/11 - 3/24	3/31/15
DB-	Airport Section Guideway and Stations	TBD	TBD	TBD		



HONOLULU AUTHORITY for RAPID TRANSPORTATION

## COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: **2015** Rev 10

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
DB-	City Center Section Guideway and Stations	TBD	TBD	TBD		
DB	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes Construction	TBD	TBD	TBD		
CT-HRT-1300318	Elevator and Escalator - Manufacture, Install and Maintain	US Schindler - HI	15-015	9/10 - 9/11	9/10	
		US Schindler - NJ				
SC-HRT-1400050	West Side Station Group CE&I	PGH Wong - HI	TBD	TBD		
	West Oahu Farrington Highway and Kamehameha Highway Guideways CE&I		15-014	10/21 - 10/23		
	MSF CE&I		15-014	10/21 - 10/23		
	Elevator and Escalator - CE&I		15-014	10/21 - 10/23		
	Pearl Highlands Parking Structure/Bus Transit Center CE&I		TBD	TBD		
	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes CE&I		TBD	TBD		
SC-HRT	Airport Section Guideway & Stations CE&I	TBD	TBD	TBD		
	City Center Section Guideway & Stations CE&I		TBD	TBD		
SC-HRT-1400027	General Engineering Consultant Final Design and Construction (GEC 3)	CH2M Hill	15-007	5/20 - 5/21	5/20 - 5/21	7/14/15

• **Key Issues**

HART NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
<b>33 (Audits)</b>	<b>33</b>	<b>0</b>
<b>1 (Construction)</b>	<b>1</b>	<b>0</b>

- 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 must be performed in order to assure competency and proficiency.
- Resolution of two (2) major NCRs on the DB Contracts (WOFH and KHG) that need to be addressed and corrected to prevent recurrence and to mitigate impact on the overall progress of the project. The following are the major NCRs identified on the DB Contracts:

- **Drilled Shafts:** To date, there are 15 Open NCRs (opened two) on WOFH and 13 NCRs (closed two) on KHG, which are related to CSL Reports. It is a QA Hold Point. To date, there are 292 (added four) and 69 (added eleven) drilled shafts completed as of this reporting period on WOFH and KHG, respectively. The contract requires that deep foundation elements (drilled shafts) integrity must be tested in accordance with ASTM D6760-14 Standard Test Method for Integrity Testing of Deep Foundations by Ultrasonic Crosshole Testing, and HART will determine the final acceptance of each shaft based on the Crosshole Sonic Log (CSL) report, which includes: test result, drilled shaft installation information, and analysis for the tested shaft. The evaluation of testing results will be based on the percentage decrease in velocity as correlated to the Concrete Condition Rating Criteria detailed in specification Section 31 63 30 G. If the test results do not meet the allowable requirements, a minimum 2-3-inch diameter cores per shaft will be performed by KIWC to intercept the suspected or defective zones. The disposition and corrective actions will be agreed with KIWC EOR and HART. Closing of NCRs related to the drilled shafts is a prerequisite for the construction of transition zones and the columns.
- **Span 17 – NCR 00314:** The procedure for lowering a heavier and wider span was not followed during the setting of the span to the columns. The result of the error was cracked segments 17-1, 17-2, 17-11 and 17-12. KIWC has evaluated the damages, disposition and the proposed corrective actions. KIWC has submitted a Remediation Plan to HART, which was approved by HART (CE&I, Design and Construction Department, and GEC-3). Therefore, the disposition on the NCR is Repair. KIWC is currently preparing for the Pre-Activity meeting on the repair of the cracked segments. Repair completion of Span 17 is not in the critical path.
  - o Timely closeout of contractors, consultants and suppliers open NCRs.
  - o QA Audit of PGH Wong (CE&I West) on WOFH, KHG, MSF and E&E contracts.
  - o Erection of spans (12-segments) and construction of “shear keys” between columns and spans on WOFH guideway.
  - o Resolution of two (2) major NCRs: cracked segments 1, 2, 11 and 12 of Span 17 repair, and Drilled Shafts [Crosshole Sonic Logging Reports] quality and repairs.
  - o Construction of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, etc.
  - o Installation and welding of rails and turnouts on top of the WOFH guideway.
  - o Construction of WOFH and KHG Balanced Cantilever Segmental Spans.
  - o Manufacturing of Carbody(s) at AnsaldoBreda and its subcontractor manufacturing facilities in Italy.
  - o Final Assembly of Passenger Vehicles in Ansaldo Breda, Inc. facilities in Pittsburg, CA.
  - o Pre-shipment, I&T and FAI of wayside core system and passenger vehicles materials, parts and components.
  - o Close-out of A-7 contract to include review of “Lifetime” Quality Records including NCRs, if any, and As-built Drawings.

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

- **Look Ahead**
  - o Will provide updates on any new construction agreements HART enters into with a utility company.
  - o Cargo Preference: Will provide updates and written assurances from AHJV that it will satisfy the Cargo Preference requirements set forth in the contract; AHJV will use privately-owned United States Flag commercial vessels to ship equipment, material or commodities for the Project.

**6.4 Disadvantaged Business Enterprise (DBE)**

- **Activities this month**
  - o \$27,876,272 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 9/30/15
    - 6.2% = DBE utilization on total disbursed FTA funds received to date (\$27,876,272 divided by \$449,705,091)
    - 1.58% = DBE utilization to date on total Project FTA funds (\$27,876,272 divided by \$1,763,903,901)

*Total DBE Participation = \$27.9M  
(previous report = \$26.1M)*

Figure 17. DBE Participation this Month

DBE Participation in September		
DBE Firm	Contract Number	Participation
Lawson & Associates	SC-HRT-1400061 MM-964	\$57,521
ADS System Safety Consulting	SC-HRT-1400061 MM-964	\$88,599
LKG-CMC	SC-HRT-1400049 MM-962	\$17,409
PAC Electric	CT-HRT-10H0137 DB-120	\$1,000,557
AMR Estimating Services	SC-HRT-1400027 MM-913	\$55,963
The Solis Group	SC-HRT-1400027 MM-913	\$85,487
PSC Consultants	SC-HRT-1400051 MM-595	\$6,063
FIC, LLC	SC-HRT-1400051 MM-595	\$236,809
LKG-CMC	SC-HRT-1400051 MM-595	\$37,699
Don's Makiki	CT-HRT-10H0449 DB-200	\$34,159
David's Fencing	CT-HRT-10H0449 DB-200	\$10,313
Island Hauling	CT-HRT-10H0449 DB-200	\$146,823
<b>TOTAL FOR THE MONTH</b>		<b>\$1,777,402</b>

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

## 6.5 Planning and Environment

### • Activities this month

- Programmatic Agreement Activities:
  - HART's Programmatic Agreement (PA) team met with Hawai'i State Historic Preservation Division (SHPD) on Tuesday, Sept. 8, 2015, as part of ongoing consultation with the division.
  - A selection team is currently reviewing submittals from the RFP to award the new contract for the Kāko'o Programmatic Agreement Manager II.
  - A site visit to rail construction sites in Ewa, O'ahu was held in consultation with Kanehili Cultural Hui (KCH), a Consulting Party (CP) to the PA, on Sept. 2, 2015. This visit allowed KCH to indicate specific points where they were concerned HART's construction activities were having direct, indirect, and cumulative effects on historic resources in the area. HART planning and engineering staff attended this site visit accompanied by the project Kāko'o, SHPD staff, and Kanehili. On Sept. 22, 2015, the Kāko'o released a report documenting the field visit (*Results of Field Visit to Address Kanehili Cultural Hui Concerns at Specific Areas in Honouliuli, Ewa, O'ahu*), concluding that "no issues of historic concern were validated."
  - HART attended the monthly Kāko'o Meeting with PA Signatory and Consulting Parties on Sept. 24, 2015.
- Planning, Environmental, and Cultural Activities:
  - HART is awaiting FTA review of the Project's voluntary Cultural Monitoring Plan.
  - HART continues to assist the Oahu Metropolitan Planning Organization (OMPO) in updating the regional long-range travel demand forecasting model.
  - HART met with recognized cultural descendants on Sept. 2, 2015, to notify them of the implementation of burial treatment plan actions and permanent protective measures for iwi kupuna.

- HART began the implementation of permanent protective measures for all burials identified during AIS, on Sept. 14, 2015.
  - HART led an alignment tour for the Asia-Pacific Real Estate Conference on Sept. 12, 2015.
- **Looking Ahead**
    - Ongoing coordination with DTS to ensure consistent planning of seamless bus and rail services focusing on rail's interim opening date.
    - HART's next consultation meeting with recognized cultural descendants is scheduled for Wednesday, Oct. 7, 2015.
    - HART's next consultation with the O'ahu Island Burial Council (OIBC) is scheduled for Wednesday, Oct. 14, 2015.
    - Conduct regular monthly HART/SHPD consultation meetings.
    - Attend monthly scheduled Kāko'o Meetings with Programmatic Agreement Signatory and Consulting Parties.
    - Continue resolution of Post-ROD documentation, including submittals for Hōlau Market and the related Ai-Goto Building.
    - Continue coordination with DPP and HCDA regarding transit-oriented development.

## 6.6 Risk Management

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

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

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

### **NOTES OF SIGNIFICANCE**

- Corrective actions to improve cost estimates and forecasting methods as well as cost containment measures are paying dividends. Bids have been received within a reasonable range of the Engineer's Estimate.
- Industry outreach efforts last winter appear to be paying off as there are more bidders per solicitation than there was prior. This is an indication that HART has responded to industry feedback about the quality of contract documents and incremental improvements in the procurement process. Subcontractor coverage remains a concern as does the supply of qualified craft labor to meet the ultimate demand of 100% of contracts in place.
- Additional focus is being placed on Hawaiian Electric Co. coordination and issue resolution.

### **ADDITIONAL BACKGROUND**

The narrative below provides additional background on the mitigation actions being taken to control and contain cost and schedule impacts to the Project. Provided below are the risk category and specific actions being taken. Dates are tracked separately. Based on the effectiveness of the mitigation efforts, more actions may be required to further contain cost and schedule impacts in future months. The major risks covered this month are: A) Market Conditions, B) Utilities, and C) Right-of-Way.

**A) Market Conditions** – The construction market in Hawai'i is similar to the conditions experienced in 2005-07. The year 2015 is expected to set a new record for construction in the state. This translates to increased escalation of about 1% per month for late 2014 and through 2016, according to the Rider Levett Bucknall, Quarterly Construction Cost Report. The escalation in each of the first two quarters of 2015 was over 3%. These conditions may impact the supply of experienced craft labor which will in turn affect contractor productivity rates and traffic mobility issues.

Mitigation Plan:

- Refine list of primary and secondary mitigation measures.
  - **Finalize recommendations for primary and secondary mitigation measures and submit to Project Director for Action based on an approved Revised Financial Plan.**
- Identify opportunities within project scope for alternative funding sources.
  - **Reach agreement on possible HDOT betterment projects to funding of utility, widening, ITS and Intersection Improvements.**
  - **Research State Law relative to Public Private Partnership funding relative to TOD and parking opportunities. Pursue alternative funding for the Pearl Highlands Parking Structure.**
- Seek additional GET extension of funding to close the gap for market conditions and delay beyond HART's control. **Actions: The GET extension to cover capital cost overruns due to court and procurement protest delays has made it through the Legislature and Governor's approvals. All that remains is City Council approval.**
  - **Work with Board, City/County Honolulu and respond to frequently asked questions as needed. – Ongoing.**

**B) Utilities** – Utilities continue to be an issue for the project. Mitigation Plan:

- Resources to relocate HECO facilities are not readily available to resolve utility conflicts. HART is subject to availability of resources and schedules are frequently set for relocation contractors to be deployed on other islands. This has had an impact on cost and schedule. **Actions:**
  - **Seek commitment from HECO (senior, mid and front line management) to dedicate adequate resources for relocation work, design work to ensure opening. Executives agree to continue meeting weekly to coordinate efforts.**
  - **Revise Utility Agreements accordingly to respond to revised dates for service connections, utility/rail conflict resolution, and resolution of overhead clearance requirements.**
- Site specific solutions with respect to the 138kV, 46kV and 12kV vertical and horizontal clearance need to be agreed upon by Hawaiian Electric and HART. Affected contracts are KHG, Airport Guideway and City Center Guideway. **Action:**
  - **HART to define and evaluate relocation options due to horizontal and vertical clearance requirements and seek HECO input on relocation options. Options include relocate to a new corridor, attach to the guideway or underground. HART to make recommendation to Executive Management for discussions with HECO.**

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

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

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

Figure 18. Risk Matrix

RISK MATRIX					
Legend	Low (1)	Med (2)	High (3)	Very High (4)	Significant (5)
Probability	< 10%	10><50%	50><75%	75%><90%	>90%
Cost	< \$250K	\$250K><\$1M	\$1M><\$3M	\$3M><\$10M	>\$10M
Schedule	< 1 Mths	1><3 Mths	3><6 Mths	6><12 Mths	>12 Mths
Rating	<=3	3.1-9.49		>=9.5	

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

Figure 19. Top Project Risks

Top Risks September 2015								
Current Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	Sep '15 Risk Rating	Aug '15 Risk Rating
111.05	Airport Guideway	Estimates for remaining guideway contracts may be low compared to current market conditions.	90%	5	5	4	22.5	22.5
111.06	City Center Guideway	Cost estimates for remaining guideway contracts may be low due to adjustments using pricing from WOFH Bid.	90%	5	5	4	22.5	22.5
6.06	City Center Guideway	Insufficient utility company resources available to meet the design, approvals, and/or construction schedule. (Dillingham bottleneck)	75%	4	4	5	18	18
34.06	City Center Guideway	Traffic disruptions may result in revised constraints imposed by City or HDOT due to pressure from Third Parties.	75%	4	5	4	18	18
36.06	City Center Guideway	Cost exposure from unexpected utility replacements and/or relocations.	75%	4	5	4	18	18
65.06	City Center Guideway	The relocation of the 138 kv overhead power lines may require new lines erected to provide redundancy during the 'outage.' (Temporary diversion of the 138kV line may be required if grid capacity is insufficient.)	75%	4	5	4	18	18
110.06	City Center Guideway	Real Estate market could rebound before purchase of all needed properties, greatly increasing cost of property and delaying construction if legal actions are pursued.	75%	4	5	4	18	18
6.04	Kamehameha Highway Guideway	Insufficient utility company resources available to meet the design, approvals, and/or construction schedule.	75%	4	5	4	18	18
68.14	Dillingham Kaka'ako Stations	Downtown Station planned to be integrated into Pacific Guardian Center; agreement with owner yet to be proposed. PGC demands could extend negotiations and delay construction or increase construction costs.	75%	4	5	3	16	16
37.06	City Center Guideway	Additional utility easements may be required for private utility companies.	50%	3	5	5	15	15
6.13	Airport Station Group	Insufficient utility company resources available to meet the design, approvals, and/or construction schedule.	75%	4	3	4	14	14
34.04	Kamehameha Highway Guideway	Traffic disruptions may result in revised constraints imposed by City or HDOT due to pressure from Third Parties and elected officials.	75%	4	4	3	14	14
34.05	Airport Guideway	Traffic disruptions may result in revised constraints imposed by City or HDOT due to pressure from Third Parties and elected officials.	75%	4	4	3	14	14
83.06	City Center Guideway	Delay of utility easement identification for City Center Guideways may result in a delay of ROW acquisition and ultimately the start of construction.	75%	4	4	3	14	14
16.03	West Oahu/Farrington Highway Guideway	Permits and approvals by other agencies may not be provided in a timely manner and delay the project.	75%	4	4	3	14	14

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

Figure 20. Risks Added

Risks Added in September 2015							
Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	Risk Rating
188.18	H2R2	Hazardous Material clean up of +/-20 Cubic Yards is necessary to clear right of way.	25%	2	2	2	4

Figure 21. Risks Deleted

Risks Deleted in September 2015					
Current Risk ID	Contract Package	Risk Description	Comments	Risk Rating	
				Sep. '15	Aug. '15
72.12	Kamehameha Highway Station Group	Interface - Systems interfaces at West Side stations may result in schedule delay by Station designer.	Design is complete and interface coordinated. All that remains is sign off on documentation.	0	3
146.07	Maintenance Storage Facility	Utilities - HECO Connections (Traction Power and Facilities) are not in place for MSF to test vehicle on test track.	HECO provided connections.	0	10

### 6.7 Community Outreach

• **Activities this month**

- HART’s public outreach included presentations to business organizations, school leaders and community groups. Presentations included construction and financial updates provided to the Japanese Chamber of Commerce, several neighborhood boards, and the Native Hawaiian Convention.

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

- *1,873 presentations and events*
- *1,016 Neighborhood Board meetings*

• **Construction Outreach**

- HART canvassed several retail and business centers along Kamehameha Highway and in the Waipahu area to provide the latest construction information and to hear feedback on what additional programs are needed to enhance the agency’s Business Outreach Program. The Business Outreach Program includes ensuring proper access, signage and collateral for businesses in the project’s construction zones. In addition, HART created a Business Alliance partnership, which includes more than 400 businesses in the construction corridor. The program provides tailored construction briefings, free business development workshops, and regular contact with HART to jointly develop additional programs to assist local businesses during construction.
- HART’s public outreach team continues its work with businesses along the alignment, including school officials and businesses in the Dillingham and Kaka’ako areas in preparation for construction in the urban core.

Figure 22. HART participated in nearly two dozen community events, workshops and meetings to discuss the progress of the rail project.



HART provided a project update at state Sen. Will Espero’s Town Hall meeting in Ewa. The update included the latest construction information.

**Community Input**

- HART’s public information team responded to more than 170 inquiries and requests in September that came in via the agency’s website, email and 24-hour hotline. Inquiries this month primarily focused on construction activities, particularly traffic impacts, and requests for information regarding HART’s Shop & Dine on the Line program.

**Look Ahead**

Coming in October:

- HART provides a media tour of the project’s 43-acre Rail Operations Center.
- HART continues its Business Outreach program, and expands its Shop & Dine on the Line program to assist businesses along the rail route during construction.

**6.8 Staffing**

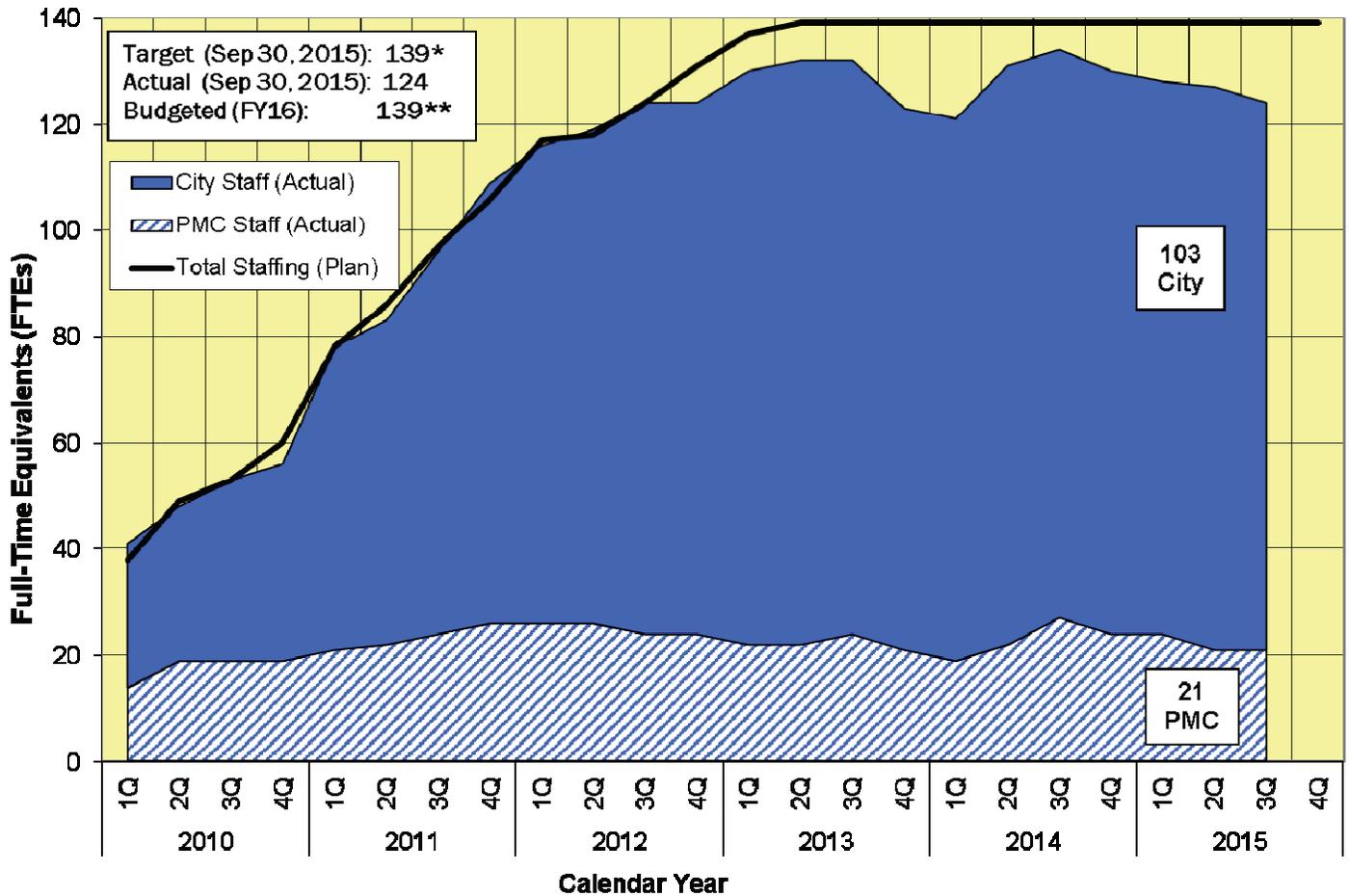
Figure 23. Staffing Activities

Staffing Activities				
Title	Group	New/Existing HART position (City or PMC)	Position Status	Start Month
<b>System Safety &amp; Security</b>				
Safety Certification Manager	System Safety & Security	Existing (PMC)	Filled	Sep
Safety Specialist	System Safety & Security	Existing (City)	Evaluating position	
<b>Design and Construction</b>				
West Area Construction Manager	Construction	New (City)	Creating Position	
Project Manager (KHSG/H2R2 Ramp)	Construction	New (City)	Recruiting	
Project Manager (City Center DB)	Construction	New (City)	Creating Position	
Assistant Project Manager (City Center DB)	Construction	New (City)	Creating Position	
Traffic Engineer	Utilities & Traffic Engineering	Existing (PMC)	Filled	Sep
Utilities Engineer	Utilities & Traffic Engineering	Existing (City)	Filled	Sep
Electrical Engineer	Core Systems	Existing (City)	Selected/Processing	Oct
<b>Budget and Finance</b>				
Accountant II	Budget and Finance	Existing (City)	Recruiting/Interviewing	
<b>Procurement</b>				
Deputy Director of Procurement & Contracts	Procurement & Contracts	Existing (City)	Filled	Sep
<b>Planning, Permits &amp; Right-of-Way</b>				
Director of Planning, Permits & ROW	Planning, Permits & ROW	Existing (City)	Recruiting/Interviewing	
Planner III* (Environmental)	Planning	Existing (City)	Recruiting	
<b>Operations and Maintenance</b>				
Director of Operations & Maintenance	Operations & Maintenance	Existing (PMC)	Recruiting/Interviewing	
<b>Quality Assurance</b>				
Quality Assurance Engineer * (Civil)	Quality Assurance	Existing (City)	Recruiting	
<b>Administrative Services</b>				
Personnel Clerk	Administrative Services	New (City)	Recruiting via Civil Service	
<b>Public Information</b>				
Information Specialist II	Public Information	Existing (City)	Recruiting/Interviewing	
<b>Project Controls</b>				
Lead Scheduler	Project Controls	Existing (City)	Recruiting	

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

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

Figure 24. 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.  
 Note: For a project organization chart, see Appendix H.

# APPENDICES

## Appendix A. Action Items

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

Action Items						
Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	Resolve HECO issue with Davis-Bacon requirements	HART/FTA	Mar 2014	On-going		Open – HECO waiver is pending document review. HART provided MOU to PMOC.
2	<b>Updates resulting from Risk Refresh:</b>					
2a	Update the Contract Packaging Plan	HART	Aug 2014	Dec 2015		In progress – Draft provided to PMOC but changes may be incorporated on updated estimate and schedule.
2b	Re-baseline Financial Plan	HART	Apr 2014	TBD		Pending final update of budget and schedule.
2c	Re-baseline budget	HART	Apr 2014	Dec 2015		In progress. (EAC will be available in October, but an approved re-baseline budget will not occur until late 2015.)
2d	Re-baseline MPS	HART	Apr 2014	TBD		In progress – PMOC is reviewing draft update; will be discussed at Monthly Progress Meetings.
2f	Update RCMP (including Hold Points and Secondary Mitigation Measures)	HART	Sept 2013	TBD		In progress – PMOC provided review comments on early draft, but updated draft will be prepared to reflect revised budget and schedule.
3	MPS Workshop	HART/PMOC	Feb 2015	Sep 2015	Sep 2015	Held during week of September Progress Meeting.
4	Provide OP 54 (Readiness for Revenue Operations) checklist/roadmap	FTA/PMOC	Apr 2015	Sep 2015		OP 54 provided to HART; PMOC to provide sample report.
5	Hold conference call to discuss use of P3 for Pearl Highlands Parking Structure	FTA/HART	Aug 2015	Nov 2015		
6	Provide list of HART procedures that are to be updated	HART	Aug 2015	Oct 2015		
7	Provide EAC in SCC format	HART	Aug 2015	Oct 2015		
8	HART to provide updated list of Post-Rod changes	HART	Sep 2015	Oct 2015	Sep-15	Completed.
9	HART to provide target date for Federal Courthouse resolution/sign-off	HART	Sep 2015	Dec 2015		

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

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

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

*Current Contingency Balance = \$492.9M*

*Current Known Changes Contingency = \$0M*

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

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

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

### Changes Identified and Project Performance

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

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

### Known Changes Contingency

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

# HART Project Contingency Drawdown with Details

Data as of 09/25/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (+/-)	Contingency Code
<b>July '12 (Bottoms-Up Estimate)</b>					
1)	FD-240	Farmington Highway Stations Group FD	Budget Transfer for Contract Award from Project Scope to Contingency (contract allowance)	\$59,443	90103 - Contract Allowance
2)	FD-430	Aliponi Section Guideway Utilities FD	Budget Transfer for Contract Award less than the ASGU FID contract budget	\$7,054,106	90102 - Allocated Contingency
3)	MM-975	LEED Commissioning Services	Budget Transfer for Contract Award above the LEED Comm. Services contract budget	(\$55,623)	90102 - Allocated Contingency
4)	DB-320	Kamehameha Highway Guideway DB	Budget Transfer for Contract Award above the KHG DB contract budget	(\$274,863)	90102 - Allocated Contingency
5)	DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer for Ins. Covrg per executed CO No. 004	\$3,955,230	90102 - Allocated Contingency
			July '12 Contingency Drawdown	\$5,851,273	
			<b>July '12 - Ending Contingency Balance</b>	<b>\$649.4</b>	
1)	FD-140	West Oahu Stations Group FD	Budget Transfer for Contract Award under KHSG FD contract budget	\$1,009,700	90102 - Allocated Contingency
2)	FD-530	Cap-Cover Stations Utilities FD	Budget Transfer for Contract Award under COGU FD contract budget	\$5,975,695	90102 - Allocated Contingency
3)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 17 - Procure and Install Portable Substation	(\$7,674,000)	90102 - Allocated Contingency
			August '12 Contingency Drawdown	\$5,665,145	
			<b>August '12 - Ending Contingency Balance</b>	<b>\$654.5</b>	
	N/A	N/A	No Contingency Drawdown	\$0	
			<b>September '12</b>	<b>\$654.5</b>	
			September '12 Contingency Drawdown	\$0	
			<b>September '12 - Ending Contingency Balance</b>	<b>\$654.5</b>	
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 21 - Builders Risk Insurance Coverage	(\$56,889)	90102 - Allocated Contingency
			October '12 Contingency Drawdown	(\$56,889)	
			<b>October '12 - Ending Contingency Balance</b>	<b>\$654.4</b>	
			October '12 Contingency Drawdown	\$0	
			<b>November '12</b>	<b>\$654.4</b>	
1)	FD-440	Aliponi Stations Group FD	Budget Transfer for Contract Award under ASIG FD the contract budget	\$277,784	90103 - Contract Allowance
2)	FD-340	Kamehameha Highway Stations Group FD	Budget Transfer for Contract Award under KHSG FD the contract budget	\$202,489	90103 - Contract Allowance
3)	MM-905	General Engineering Consultant	Budget Transfer to align contract budget with Committed value	(\$120,630)	90102 - Allocated Contingency
			No vendor '12 Contingency Drawdown	\$309,623	
			<b>November '12 - Ending Contingency Balance</b>	<b>\$654.7</b>	
1)	FD-440	Aliponi Section Guideway Utilities FD	Executed Contract Amendment No. 01 - Design & Engineering Cost Estimates	(\$275,000)	90102 - Allocated Contingency
			December '12 Contingency Drawdown	(\$275,000)	
			<b>December '12 - Ending Contingency Balance</b>	<b>\$654.4</b>	
			December '12 Contingency Drawdown	\$0	
			<b>January '13</b>	<b>\$654.4</b>	
1)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 01 - Acacia Rd alternative analysis	(\$19,981)	90102 - Allocated Contingency
			January '13 Contingency Drawdown	(\$19,981)	
			<b>January '13 - Ending Contingency Balance</b>	<b>\$654.4</b>	
			January '13 Contingency Drawdown	\$0	
			<b>February '13</b>	<b>\$654.4</b>	
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 28 - Ins. Covrg Requirement Additional BCGV at Ft. Weaver Rd	(\$1,670,178)	90102 - Allocated Contingency
			February '13 Contingency Drawdown	(\$1,670,178)	
			<b>February '13 - Ending Contingency Balance</b>	<b>\$652.8</b>	
			February '13 Contingency Drawdown	\$0	
			<b>March '13</b>	<b>\$652.8</b>	
1)	FD-240	Farmington Highway Stations Group FD	Executed Contract Amendment No. 03 - Waiapahu Station sewer	(\$2,895)	90103 - Contract Allowance
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 06 - Ins. Covrg Requirements/ DBI Crossovers Insulated Joints	(\$464,876)	90102 - Allocated Contingency
			March '13 Contingency Drawdown	(\$467,771)	
			<b>March '13 - Ending Balance</b>	<b>\$652.3</b>	
			March '13 Contingency Drawdown	\$0	
			<b>April '13</b>	<b>\$652.3</b>	
1)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 01 - Second elevator provision	(\$81,013)	90103 - Contract Allowance
2)	DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer to offset Ins. Covrg Requirement for Change Order No. 26	\$1,670,178	90102 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Budget Transfer to offset Ins. Covrg Requirement for Change Order No. 06	\$434,000	90102 - Allocated Contingency
4)	DB-320	Kamehameha Highway Guideway DB	Budget Transfer to Align current budget to contract Schedule of Milestones	\$600	90102 - Allocated Contingency
			April '13 Contingency Drawdown	\$2,025,765	
			<b>April '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	
			April '13 Contingency Drawdown	\$0	
			<b>May '13</b>	<b>\$654.3</b>	
	N/A	N/A	No Contingency Drawdown	\$0	
			May '13 Contingency Drawdown	\$0	
			<b>May '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	
			May '13 Contingency Drawdown	\$0	
			<b>June '13</b>	<b>\$654.3</b>	
	N/A	N/A	No Contingency Drawdown	\$0	
			June '13 Contingency Drawdown	\$0	
			<b>June '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	

# HART Project Contingency Drawdown with Details

Data as of 08/25/15

Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (#)	Contingency Code
<b>July '13</b>				
FD-430	Airport Section Guideway, Utilities FD	Executed Contract Amendment No. 04 - Antenna Engineering Design Services	\$654.3	90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 07 - Archeological Inventory Survey (AIS) Provisional Sum Part 2		90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 08 - Maintenance & Storage Facility Yard Switch Machines		90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 09 - Yard Layout Revisions		90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 10 - Train Configuration		90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 11 - Preliminary Design & Supplemental Project Mgt		90.02 - Allocated Contingency
		<b>July '13 Contingency Drawdown</b>	<b>(65,254,106)</b>	
<b>August '13</b>				
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 30 - Archeological Inventory Survey (AIS) Provisional Part 2	\$649.1	90.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 32 - Kalo Channel Station Mod Concept		90.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 34 - Traditional Cultural Property Construction Partial Suspension		90.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 36 - H90gill Station Relocation Design		90.02 - Allocated Contingency
DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 06 - Archeological Inventory Survey (AIS) Provisional Part 2		90.02 - Allocated Contingency
FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 02 - Canopy Redesign		90.02 - Contract Allowance
MI-300	Elevator & Escalator Install/maint	Budget Transfer for Contract Awarded under ESE TM contract budget	\$3,738,472	90.02 - Allocated Contingency
		<b>August '13 Contingency Drawdown</b>	<b>(65,824,004)</b>	
<b>September '13</b>				
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 33 - Provisional Sum H90gill Joint Use and Occupancy	\$643.2	90.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 35 - Asbestos Culture Design Conflict		90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 12 - HITE Design Escalation		90.02 - Allocated Contingency
FD-240	Farrington Highway Stations Group FD	Executed Contract Amendment No. 10 - NTP - 2 Delay/Design Delay from Core Systems Contract & West Oahu Farrington Highway DB Contract		90.02 - Allocated Contingency
		<b>September '13 Contingency Drawdown</b>	<b>(65,114,297)</b>	
<b>October '13</b>				
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 13 - Ins. Covg Requirements/ Roof Access Modification	\$637.1	90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Budget Transfer for Change Order No. 13 for Ins. Covg Requirements		90.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 37 - Ala Ika Street Light Vlog at DR Pointon & Farrington HWY		90.02 - Allocated Contingency
DBOM-420	Core Systems Design Build OM	Executed Change Order No. 05 - Platform Screen Gates Systems		90.01 - Unallocated Contingency
FD-520	Kingham and Kaalaia Stations Group FD	Budget Transfer for Contract awarded under DKSSG FD contract budget	\$1,157,760	90.02 - Allocated Contingency
		<b>October '13 Contingency Drawdown</b>	<b>(62,154,797)</b>	
<b>November '13</b>				
DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 38 - Insurance Coverage Requirement 04/20/13	\$615.0	90.02 - Allocated Contingency
DB-120	West Oahu Farrington Highway Guideway DB	Budget Transfer for Change Order No. 09 for Ins. Covg. Requirements		90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 04 - Preliminary Design & Supplemental Project Management 2		90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Budget Change Order No. 016 for Pre-Construction Structural Steel Modification		90.02 - Allocated Contingency
DB-200	Maintenance & Storage Facility DB	Budget Change Order No. 015 for Pre-Construction Structural Steel Modification		90.02 - Allocated Contingency
FD-530	City Center Guideway, Utilities FD	Executed Contract Amendment No. 01 - Archeological Inventory Survey (AIS) Suspension		90.02 - Allocated Contingency
FD-240	Farrington Highway Station Group FD	Budget Transfer for Contract Award for HSSG FD II	\$2,700,705	90.01 - Unallocated Contingency
		<b>November '13 Contingency Drawdown</b>	<b>(64,847,891)</b>	
<b>December '13</b>				
FD-430	Airport Section Guideway, Utilities FD	Executed Contract Amendment No. 05 - Ulena St redesign scope impact	\$610.0	90.02 - Allocated Contingency
FD-140	West Oahu Station Group FD	Executed Contract Amendment No. 03 - Design relocation of HECO 46kv and fiber optic lines		90.02 - Allocated Contingency
		<b>December '13 Contingency Drawdown</b>	<b>(627,869)</b>	
<b>January '14</b>				
FD-430	Airport Section Guideway, Utilities FD	Executed Contract Amendment No. 06 - Archeological Inventory Survey (AIS) Suspension	\$609.8	90.02 - Allocated Contingency
FD-530	City Center Guideway, Utilities FD	Executed Contract Amendment No. 07 - Soil Resistance Test and Max. Sag Calculation		90.02 - Allocated Contingency
MI-280	Construction Engineering & Inspection West	Budget Transfer for Contract Award less than CEI West contract budget		90.02 - Allocated Contingency
MI-335	Construction Engineering & Inspection East	Budget Transfer for Contract Award less than CEI East contract budget	\$1,102,817	90.02 - Allocated Contingency
		<b>January '14 Contingency Drawdown</b>	<b>(61,426,718)</b>	
<b>February '14</b>				
FD-430	Airport Section Guideway, Utilities FD	Executed Contract Amendment No. 07 - Resist & Sag Geotech Investigation	\$608.3	90.02 - Allocated Contingency
HRT-201	HART ODC	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract		90.02 - Allocated Contingency
MI-910	GEC II	Budget Transfer for Contract Award - Archeological & Cultural Monitoring & Core Systems Support contracts		90.02 - Allocated Contingency
MI-960	Archeological & Cultural Monitoring	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract		90.02 - Allocated Contingency
MI-962	Core Systems Support	Budget Transfer for Contract Award - Core Systems Support contract	\$4,398,889	90.02 - Allocated Contingency
		<b>February '14 Contingency Drawdown</b>	<b>(6,162,900)</b>	
		<b>February '14 - Ending Contingency Balance</b>	<b>\$608.2</b>	

# HART Project Contingency Drawdown with Details

Data as of 09/25/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (\$)	Contingency Code
<b>March '14</b>					
	N/A		No Contingency Drawdown	\$0	
			March '14 Contingency Drawdown	\$0	
<b>March '14 - Ending Contingency Balance</b>					
				\$608.2	
<b>April '14</b>					
	FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 04 - East Kapolei Staff Room Pre-Final Submittal	(\$60,243)	90.02 - Contract Allowance
	FD-430	Airport Section Guideway Utility FD	Executed Contract Amendment No. 08 - Notice-to-Proceed & Provisional Sum for Design Support during bid	(\$1,889,014)	90.02 - Contract Allowance
	BB-200	Maintenance & Storage Facility DB	Executed Change Order No. 016 - Rail Lubricators	(\$102,000)	90.02 - Allocated Contingency
	BB-200	Maintenance & Storage Facility DB	Executed Change Order No. 017 - Yard Layout Reconfiguration/Automated Train Operation Design	(\$2,128,000)	90.02 - Allocated Contingency
	BB-200	Maintenance & Storage Facility DB	Executed Change Order No. 018 - Rail Material Storage Plan	(\$370,000)	90.02 - Allocated Contingency
	BB-200	Maintenance & Storage Facility DB	Executed Change Order No. 019 - Train Wash Facility Shortening	\$0	90.02 - Allocated Contingency
	BB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 040 - Precast Yard Alternative Site	(\$12,400,638)	90.02 - Allocated Contingency
	BB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 041 - Revised Track Alignment and Profile	(\$46,808)	90.02 - Allocated Contingency
	BB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 042 - Spanwidth Isles Communications Utility Relocation @ North South Rd	(\$798,048)	90.02 - Allocated Contingency
	BB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 005 - Rebar Clear Spacing Design Criteria	\$0	90.02 - Allocated Contingency
			April '14 Contingency Drawdown	(\$17,469,782)	
<b>April '14 - Ending Contingency Balance</b>					
				\$590.7	
<b>May '14</b>					
	FD-140	West Oahu Stations Group FD	Budget Transfer for Executed Contract Amendment No. 05 - Final Design for relocated Hoopili Station	\$20,123	90.02 - Allocated Contingency
	BB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 008 - APEC work restrictions/abandoned utilities removal	(\$505,674)	90.02 - Allocated Contingency
	BB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 009 - Emergency walkway/insurance covg. Requirements 2013	(\$539,000)	90.02 - Allocated Contingency
	BB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 007 - Relocate TPSS to system site #3	\$87,054	90.02 - Allocated Contingency
	MM-915	HJOT MGT Consultant	Budget Transfer for Executed Contract Amendment No. 002 - Increase T&M contract value	\$287,381	90.02 - Allocated Contingency
	BB-200	Maintenance & Storage Facility DB	Budget Transfer for Executed Contract Amendment No. 001 - LEED measurement and verification plan	(\$91,910)	90.02 - Allocated Contingency
	BB-200	Maintenance & Storage Facility DB	Executed Change Order No. 020 - CSC consolidated changes construction	(\$22,500,000)	90.01 - Unallocated Contingency
	BB-200	Maintenance & Storage Facility DB	Executed Change Order No. 025 - OSB reconfiguration	\$70,000	90.02 - Allocated Contingency
			May '14 Contingency Drawdown	(\$22,910,068)	
<b>May '14 - Ending Contingency Balance</b>					
				\$568.4	
<b>June '14</b>					
	BB-200	Maintenance & Storage Facility DB	Board Approved RFCC 00010 - Amendment 1 Non-Rail Escalation	(\$5,000,000)	90.02 - Allocated Contingency
			June '14 Contingency Drawdown	(\$5,000,000)	
<b>June '14 - Ending Contingency Balance</b>					
				\$563.4	
<b>July '14</b>					
	LBOM-920	Core Systems Contract Design Build O&M	Executed Change Order No. 008 - Platform Screen Gates Mobilization	(\$89,194)	90.02 - Allocated Contingency
	ROW	Real Estate/Right-of-Way	Budget Transfer for Contract Award above the Real Estate Map & Survey budget	(\$1,344,612)	90.02 - Allocated Contingency
	BB-200	Maintenance & Storage Facility DB	Budget Transfer to Project Contingency from remaining "known" Changes balance	\$1,007,860	90.02 - Allocated Contingency
	BB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer to Project Contingency from remaining "known" Changes balance	\$1,556,107	90.02 - Allocated Contingency
			July '14 Contingency Drawdown	\$321,161	
<b>July '14 - Ending Contingency Balance</b>					
				\$563.7	
<b>August '14</b>					
	BB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 010 - Delay in issuance of Notice-to-Proceed 2 & 3	(\$1,828,000)	90.02 - Allocated Contingency
	FD-140	West Oahu Stations Group FD	Executed Amendment No. 005 - Passenger screen gates	(\$80,233)	90.02 - Allocated Contingency
	BBE-505	Airport Section Utility Construction DBE	Budget Transfer for Contract Award above Airport Section Utility Construction original budget	(\$2,755,321)	90.02 - Allocated Contingency
	MM-946	On Call Hazmat Removal Consultant	Budget Transfer due to scope transfer from ROW to Hazmat consultant	\$470,823	90.02 - Allocated Contingency
	MM-945	On Call Contractor	Budget Transfer for Contract Award above On Call Contractor original budget	(\$130,435)	90.02 - Allocated Contingency
			August '14 Contingency Drawdown	(\$4,323,166)	
<b>August '14 - Ending Contingency Balance</b>					
				\$559.4	
<b>September '14</b>					
	MM-950	OCIP Consultant Contract	Budget Transfer to unallocated contingency as estimate at completion is less than current budget	\$750,000	90.02 - Allocated Contingency
	BB-200	Maintenance & Storage Facility DB	Executed Change Order No. 027 - Traditional Cultural Properties (TCP) Suspension	(\$473,583)	90.02 - Allocated Contingency
	BB-200	Maintenance & Storage Facility DB	Executed Change Order No. 028 - Insurance Coverage Requirements 2014	(\$1,114,000)	90.02 - Allocated Contingency
	BB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 011 - Revised Vehicle Criteria/Construction Safety Security Plan	(\$231,500)	90.02 - Allocated Contingency
	BB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 012 - Insurance Coverage Requirements 9/17/13 - 6/20/14	(\$1,400,000)	90.02 - Allocated Contingency
	BB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 045 - Standard Specification Revision 2.0	(\$2,650,000)	90.02 - Allocated Contingency
	BB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 046 - Insurance Coverage Requirements 2014	(\$3,400,000)	90.02 - Allocated Contingency
	FD-530	City Center Guideway Utilities FD	Executed Contract Amendment 004 - Aesthetic Station Column	(\$271,650)	90.02 - Allocated Contingency
	FD-340	Kahehameha Highway Stations Group FD	Executed Contract Amendment 001 - City Center Section Rescue Cart Scope Impact	(\$72,000)	90.02 - Allocated Contingency
	FD-340	Kahehameha Highway Stations Group FD	Executed Contract Amendment 001 - Special Provisions Update/Shear Wave Analysis	(\$27,892)	90.02 - Contract Allowance
	FD-340	Kahehameha Highway Stations Group FD	Executed Contract Amendment 005 - Historic Architect/Replace Highway Sign	(\$71,911)	90.02 - Contract Allowance
	FD-430	Airport Section Guideway Utility FD	Executed Contract Amendment 006 - Added Bus Shelters at Aloha Stadium Station	(\$28,883)	90.02 - Contract Allowance
	FD-430	Airport Section Guideway Utility FD	Executed Contract Amendment 010 - Aesthetic Station Column and Pearl Harbor Station Redesign	(\$238,750)	90.02 - Allocated Contingency
	FD-430	Airport Section Guideway Utility FD	Executed Contract Amendment 011 - Airport Section Rescue Cart Scope Impact	(\$48,000)	90.02 - Allocated Contingency
	FD-140	West Oahu Stations Group FD	Executed Contract Amendment 007 - Traffic Signal Control UHWO/Hoopili Access Road	(\$97,722)	90.02 - Contract Allowance
			September '14 Contingency Drawdown	(\$8,588,161)	
<b>September '14 - Ending Contingency Balance</b>					
				\$550.1	
<b>October '14</b>					
	LBOM-920	Core Systems Contract Design Build O&M	Executed Change Order No. 009 - WVOFH Guideway Alignment for CSC	(\$145,000)	90.02 - Allocated Contingency
	BB-200	Maintenance & Storage Facility DB	Executed Change Order No. 028 - Escalation due to Schedule Impacts	(\$8,500,000)	90.01 - Unallocated Contingency



# HART Project Contingency Drawdown with Details

Data as of 09/28/15

Project #	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (+/-)	Contingency Code
<b>April '15 Contingency Drawdown</b>				
<b>April '15 - Ending Contingency Balance</b>			<b>\$510.4</b>	
<b>May '15</b>				
1)	West Oahu Stations Group FD	Executed Contract Amendment No. 016 - PS&E by Agency Design/Power to Hoopili Station/ Courtenmeasures	(\$ 172,000)	90.03 - Contract Allowance
2)	Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 009 - West Loch Separator	(\$ 7,000)	90.03 - Contract Allowance
3)	FD-440	Executed Contract Amendment No. 004 - HIA Obstruction Investigation	(\$20,000)	90.03 - Contract Allowance
4)	DB-320	Executed Change Order No. 018 - Delay to Method Shaft 6	(\$ 121,000)	90.02 - Allocated Contingency
5)	DBOM-920	Executed Change Order No. 018 - Delete Passenger Counters On/Off Time - Wifi Provisions on Veh	\$ 114,161	90.02 - Allocated Contingency
6)	DB-200	Executed Change Order No. 080 - OSB 1 St Fl Bldg Int Ext System Design Rev	(\$ 500,000)	90.02 - Allocated Contingency
<b>May '16 Contingency Drawdown</b>				
<b>May '15 - Ending Contingency Balance</b>			<b>\$509.8</b>	
<b>June '15</b>				
1)	MM-928	Budget Transfer from Inactive CPP- HOOT Airport consultant took on City Center scope	\$ 1,084,782	90.01 - Unallocated Contingency
2)	MM-360	Budget Transfer to Provide funding for F2015	(\$ 551,052)	90.01 - Unallocated Contingency
3)	MM-928	Executed Contract Amendment No. 013 - Airport Design Build Package	(\$ 923,640)	90.02 - Unallocated Contingency
4)	MM-801	Budget Transfer for exercised option for one year extension of services	(\$ 7,618,377)	90.01 - Unallocated Contingency
5)	DBOM-920	Budget Transfer for On-Call Contractor performing CSC related scope at the FOC	(\$ 500,000)	90.02 - Allocated Contingency
<b>June '16 Contingency Drawdown</b>				
<b>June '15 - Ending Contingency Balance</b>			<b>\$501.7</b>	
<b>July '15</b>				
1)	CC-100	Inactive CPP (DTS costs), reduces budget to incurred costs	\$ 410,586	90.01 - Unallocated Contingency
2)	DB-120	Executed Contract Change Order No. 066 - Reloc of LCC Pribales/Park Lot	(\$ 490,978)	90.01 - Unallocated Contingency
3)	DB-120	Executed Contract Change Order No. 066 - Reloc of LCC Pribales/Park Lot	(\$ 565,983)	90.01 - Unallocated Contingency
4)	DB-120	Executed Contract Change Order No. 067 - Revised Offset LT Lane at Kahualii	(\$ 724,505)	90.01 - Unallocated Contingency
5)	DB-200	Executed Contract Change Order No. 031 - MOW Interior Bldg. Systems Devices	(\$ 180,000)	90.02 - Allocated Contingency
6)	DB-200	Executed Contract Change Order No. 032 - Deletion of Vegetative Roof Request	\$ 153,415	90.02 - Allocated Contingency
<b>July '16 Contingency Drawdown</b>				
<b>July '15 - Ending Contingency Balance</b>			<b>\$500.7</b>	
<b>Aug '15</b>				
1)	DB-120	Executed Contract Change Order No. 068 - Delay NPH, 2 & 4 - OMC Escalation	(\$ 228,445)	90.01 - unallocated Contingency
2)	DB-200	Executed Contract Change Order No. 033 - EOS Foundation	(\$ 44,178)	90.02 - Allocated Contingency
3)	DB-320	Executed Change Order No. 017 - Relocate Sewer Near 935+00 to 947+00	(\$ 181,281)	90.02 - Allocated Contingency
4)	FD-140	Executed Contract Amendment No. 010 - Power to UHWO Station and Electrical Bonding	(\$ 49,000)	90.03 - Contract Allowance
5)	FD-440	Executed Contract Amendment No. 017 - Pedestrian Bridge Modifications	(\$ 18,750)	90.03 - Contract Allowance
6)	FD-440	Executed Change Amend No. 007 - Value Engineering Reduce Sln. Cost and PH, PK and AS New Platform Canopy Coordination	(\$ 24,572)	90.02 - Allocated Contingency
7)	FD-440	Executed Contract Amendment No. 005 - Design Build Enclosing Disburements	(\$ 70,000)	90.02 - Allocated Contingency
8)	DBOM-920	Executed Change Order No. 017 - Voltage Flicker Study	(\$ 333,985)	90.02 - Allocated Contingency
10)	FD-550	Executed Change Amend No. 00005 - Scope of Change - Schedule Extension	(\$ 7,168,082)	90.02 - Allocated Contingency
<b>Aug '16 Contingency Drawdown</b>				
<b>Aug '15 - Ending Contingency Balance</b>			<b>\$492.9</b>	
<b>*July '15 - Board Approved Changes Only - Pending execution</b>				
1)	DBOM-920	Core Systems Contract Design Build O/M	\$5,700,000	90.02 - Allocated Contingency
<b>*August '15 - Board Approved Changes Only - Pending execution</b>				
Subtotal Board Approved Contingency Drawdown			\$5,200,000	
<b>August '15 - Ending Contingency Balance (Pending Execution)</b>			<b>\$498.1</b>	

**Appendix C. Project Cost Reports** (data as of Aug. 28, 2015)

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

**Project Costs by Contract**



Costs Reported as of Month Ending: August 2015

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

Page: 1 of 3

CPP No	Title	T&M	A		B		C=A+B		D		E		F	
			Original	Changes	COMMITTED	Current *	AFE	AFE**	INCURRED	Incurred To Date	PERCENT	PERCENT		
ART	A RT Contracts		0	0	0	0	0	0	0	0	0	0	0	0%
CCH-100	Inactive Hart/Qty CCH		15,348,443	0	15,348,443	0	15,348,443	0	14,825,228	0	0	0	0	37%
CCH-101	HART/ City Dept of BFS		105,082	0	105,082	0	105,082	0	0	0	0	0	0	0%
CCH-102	HART/ City DDC Land Division		256,201	0	256,201	0	256,201	0	173,182	0	0	0	0	68%
CCH-107	HART/ City Corporation Counsel (COB)		1,662,880	0	1,662,880	0	1,662,880	0	146,078	0	0	0	0	9%
CCH-108	HART / Board of Water Supply (BWS)		928,325	0	928,325	0	928,325	0	928,325	0	0	0	0	100%
DB-120	West Oahu/Farrington Hwy Guideway DB	SOM	482,924,000	148,282,384	631,206,384	631,206,384	631,206,384	0	451,489,511	0	0	0	0	72%
DB-200	Maintenance & Storage Facility DB	SOM	195,258,000	79,620,772	274,878,772	274,878,772	274,878,772	0	215,270,370	0	0	0	0	78%
DB-320	Kamehameha Hwy Guideway DB	SOM	372,150,000	16,667,654	388,817,654	388,817,654	388,817,654	0	159,847,073	0	0	0	0	41%
DB-450	Airport Section Guideway and Sta. DB	SOV	100,000	0	100,000	100,000	100,000	0	52,461	0	0	0	0	52%
DBB-171	West Oahu Station Group DBB	SOV	56,088,470	0	56,088,470	56,088,470	56,088,470	0	0	0	0	0	0	0%
DBB-185	SPCD - West Side SG Construction	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-271	Farrington Highway Station Group DBB	SOV	78,999,000	0	78,999,000	78,999,000	78,999,000	0	0	0	0	0	0	0%
DBB-275	SPCD-Pearl Highlands Pkg. Str. Constr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-385	H2R2 Ramp	SOV	5,203,646	0	5,203,646	5,203,646	5,203,646	0	0	0	0	0	0	0%
DBB-450	SPCD-Airport Section Utility Reloc.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-460	SPCD-Airport Guideway/Util. Constr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-470	SPCD-Airport Station Group Constr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-505	Airport Section Utilities Constr.	SOV	28,413,974	0	28,413,974	28,413,974	28,413,974	0	5,279,921	0	0	0	0	19%
DBB-510	City Ctr. Section Utilities Constr. DBB	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-520	SPCD-Airport-City Center Gateway Cntr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-525	Airport Section Guideway 7 Pier Cntr	SOV	3,373,000	508,241	4,481,241	4,481,241	4,481,241	0	3,796,241	0	0	0	0	85%
DBB-550	SPCD-City Segment Util Relocations	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-560	SPCD-City Center Guideway Constr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-570	SPCD-Dillingham Stat Group Constr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-572	SPCD-City Center Station Constr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-580	SPCD-Dillingham/Haka'ako S.G Cntr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-600	Park-and-Ride Lots Construction	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-M-920	Core Systems Design Build O/M	SOM	573,782,793	21,280,894	595,063,687	595,063,687	595,063,687	0	143,620,180	0	0	0	0	24%
FD-140	West Oahu Station Group FD	SOM	7,789,000	2,225,305	10,014,305	10,014,305	10,014,305	0	9,094,052	0	0	0	0	91%
FD-240	Farrington Highway Stations Group FD	SOM	9,300,696	4,897,349	14,198,045	14,198,045	14,198,045	0	12,546,293	0	0	0	0	88%
FD-245	SPCD-Pearl Highlands Pkg. Str. FD	SOM	0	0	0	0	0	0	0	0	0	0	0	0%
FD-340	Kamehameha Hwy Station Group FD	SOM	8,702,392	933,638	9,636,030	9,636,030	9,636,030	0	8,849,841	0	0	0	0	92%

\* Current Committed = Original Contract + CCO/Amendment

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

m\_ow\_mnoc\_monthly\_contract\_ots\_line - No. 19

Print 9/11/15 14:23



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

Page: 2 of 3

CPP No	Title	A		B		C=A+B		D		E		F	
		Original	Changes	COMMITTED	Changes	Current *	AFE **	AFE **	Incurred To Date	Incurred To Date	PERCENT	PERCENT	
FD-430	SPCD - Airport Sect. Guideway/Util FD	SOM	38,840,360	4,233,512	43,134,472	43,134,472	41,008,758	41,008,758	95%				
FD-440	Airport Station Group FD	SOM	10,177,365	1,494,840	11,672,205	10,734,146	9,801,378	9,801,378	84%				
FD-530	SPCD - City Center Guideway/Util FD	SOM	43,948,220	2,235,303	46,183,523	43,567,202	40,284,180	40,284,180	87%				
FD-542	SPCD - City Center Stations (3), FD		0	0	0	0	0	0	0%				
FD-550	SPCD - Dillingham and Kaka'ako S.G FD	SOM	18,321,918	986,124	19,308,042	15,732,737	10,667,500	10,667,500	55%				
FD-600	Park-and-Ride Lts Final Design	SOM	0	0	0	0	0	0	0%				
HRT-200	HART Labor		40,351,342	0	40,351,342	0	41,810,603	41,810,603	102%				
HRT-201	HART ODC Contracts		15,759,154	0	15,759,154	0	16,577,274	16,577,274	105%				
MI-900	Fare Collection DFI	MI	0	0	0	0	0	0	0%				
MI-930	Elevators & Escalators Install/Maint	SOM	50,982,714	0	50,982,714	5,442,108	4,503,158	4,503,158	9%				
MM-180	SPCD-West Oahu/Farrington Stat CEI		0	0	0	0	0	0	0%				
MM-280	SPCD-WOFR/KHSG CE&I (REPA CK&GED)	CPFF	0	0	0	0	0	0	0%				
MM-290	Construction Engrg & Inspection West	CPFF	54,232,480	0	54,232,480	16,650,000	14,390,510	14,390,510	27%				
MM-385	SPCD-Pearl Highlands Garage Rmpts CEI	CPFF	0	0	0	0	0	0	0%				
MM480	SPCD-Airport Guideway/Utilities CEI		0	0	0	0	0	0	0%				
MM-500	SPCD-By M959 CEI East	CPFF	0	0	0	0	0	0	0%				
MM-525	SPCD-By M959 CEI East	CPFF	0	0	0	0	0	0	0%				
MM-580	SPCD-City Center Guideway/Util CEI		0	0	0	0	0	0	0%				
MM-590	SPCD-By M959 CEI East	CPFF	0	0	0	0	0	0	0%				
MM-595	SPCD - Const. Engrg & Insp. East	CPFF	63,083,417	-47,826,417	15,257,000	(32,569,417)	11,059,211	11,059,211	72%				
MM-600	SPCD-UHWO Pkg-Hoopili Stn Fresh CEI	CPFF	0	0	0	0	0	0	0%				
MM-900	Program Mgt Support Const (PM SC-1)	CPFF	36,727,162	0	36,727,162	20,700,000	0	0	0%				
MM-901	Program Mgt Support Const (PM SC-2)	CPFF	33,376,897	7,616,377	40,993,274	34,297,167	34,090,427	34,090,427	83%				
MM-905	MM-905 Gen Engrg Const EIS/E	CPFF	0	78,564,942	78,564,942	78,564,942	74,157,822	74,157,822	94%				
MM-910	MM-910 Gen Engrg Const FD-Construct	CPFF	150,000,000	0	150,000,000	150,000,000	149,446,962	149,446,962	100%				
MM-913	MM-913 Gen Engrg Recomplete	CPFF	46,143,277	0	46,143,277	13,078,208	19,945,438	19,945,438	43%				
MM-915	HDOT Traffic Mgmt. Consult.	T&M	1,600,000	1,400,000	3,000,000	4,000,000	2,621,948	2,621,948	87%				
MM-920	HDOT Coordination Const WOFR	T&M	3,000,000	7,500,000	10,500,000	10,000,000	6,316,890	6,316,890	60%				
MM-921	HDOT Coordination Const KHG	T&M	10,000,000	-1,400,000	8,600,000	5,000,000	3,666,816	3,666,816	43%				
MM-922	HDOT Coordination Const Airport	T&M	12,000,000	-5,600,000	6,400,000	3,000,000	2,236,596	2,236,596	35%				
MM-923	HDOT Coordination Const City Center	T&M	0	0	0	0	0	0	0%				
MM-925	HDOT Labor - WOFR/KHSG Agreements	T&M	550,000	1,265,633	1,815,633	3,081,266	1,530,186	1,530,186	84%				
MM-926	HDOT Labor - Airport Agreements	T&M	0	0	0	0	0	0	0%				

m\_ow\_pmooc\_monthly\_contract\_ave\_line - No. 19

\* Current Committed = Original Contract + CCO /Amendment

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

Print 9/11/15 14:23



Costs Reported as of Month Ending: August 2015

Project Monthly Cost Report by Contract - One Line Summary

Page: 3 of 3

CPP No	Title	A		B		C=A+B		D	E	F
		Original	Changes	COMMITTED	Current *	AFE**	INCURRED			
										%
MM-930	HDOT State SOA Manager & Consultant	T8M	1,272,400	583,142	1,855,542	1,855,542	843,167	783,335	42%	
MM-935	Real Estate Consultant	T8M/T1	3,000,000	3,327,665	6,327,665	6,327,665	4,817,665	5,042,440	80%	
MM-937	Real Estate Consultant - Maps/Surv.	C/PFF	2,998,000	0	2,998,000	2,998,000	1,500,000	508,128	17%	
MM-940	Kaiko'o Consultant	T8M/T1	1,000,000	0	1,000,000	1,000,000	500,000	506,133	51%	
MM-945	On-Call Contractor	T8M/T1	1,000,000	999,951	1,999,951	1,999,951	1,799,951	1,646,552	82%	
MM-946	On-Call Hazmat Removal Contractor	T8M/T1	3,075,000	0	3,075,000	3,075,000	1,000,000	1,379,897	64%	
MM-947	On-Call Contractor 2	T8M/T1	7,500,000	0	7,500,000	7,500,000	1,000,000	853,001	11%	
MM-950	OCIP Consultant	FFF	1,250,000	0	1,250,000	1,250,000	1,250,000	903,125	72%	
MM-951	Owner-Controlled Insurance Program	FFF	41,000,000	0	41,000,000	41,000,000	0	21,534,368	53%	
MM-960	Archaeological & Cultural Monitoring	T8M	1,010,609	0	1,010,609	1,010,609	1,010,609	872,479	86%	
MM-962	Core Systems Support	C/PFF	43,988,989	0	43,988,989	43,988,989	3,600,000	10,101,405	23%	
MM-964	Safety and Security Consultant	FFF	4,639,573	112,751	4,812,324	4,812,324	2,612,751	2,149,436	45%	
MM-975	LEED Commissioning Services for MSF	T8M	278,630	9,810	288,540	288,540	2,885,540	79,835	28%	
OTHER	All Project Wide Documents		0	0	0	0	0	0	0%	
PA-101	Programmatic Agreement Humanities	PA	0	0	0	0	0	0	0%	
PA-102	Programmatic Agreement HP C	T8M/T1	400,000	0	400,000	400,000	2,000,000	172,325	43%	
PA-103	Programmatic Agreement HP C Park Impr	PA	0	0	0	0	0	0	0%	
ROW	Real Estate / Right-of-Way		89,885,511	0	89,885,511	89,885,511	121,392	80,531,186	90%	
UTIL	Utility Company Contracts	T8M	91,326,631	17,142,123	108,668,755	108,668,755	88,016,065	33,596,061	31%	
<b>Total Project:</b>			<b>2,764,566,960</b>	<b>347,122,152</b>	<b>3,111,689,113</b>	<b>3,111,689,113</b>	<b>2,490,407,369</b>	<b>1,671,139,324</b>		

\* Current Committed = Original Contract + COO/Amendment

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

m\_low\_priced\_monthly\_contract\_one\_line - No. 19

Print 9/11/15 14:23

Project Costs by SCC – Summary

Costs Reported as of Month Ending: August 2015  
**Project Monthly Cost Report by SCC Summary**

Page: 1 of 1

SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G	I
		Baseline	Transfers	BUDGET	Current	COMMITTED	AFE**						
<b>1. Subtotal 10 - 80 SCC Costs</b>													
10.	Guideway & Track Elements	1,114,215,147	46,009,500	1,160,223,647	550,892,093	37,178,532	70,898	1,160,223,647	0	0	0	228,193,387	0
20.	Stations, Stops, Terminals, Intermodal	421,804,740	(25,139,472)	396,666,268	186,070,184	0	0	396,666,268	0	0	0	4,503,158	0
30.	Support Facilities: Yards, Shops, Admin	92,535,015	22,007,354	114,542,369	114,542,369	18,198,705	0	114,542,369	0	0	0	75,445,757	0
40.	Sitework & Special Conditions	983,178,121	45,586,326	1,028,764,447	734,120,642	171,274,609	(332,046)	1,028,764,447	0	0	0	487,344,831	0
50.	Systems	221,284,301	26,296,231	247,580,532	232,420,319	27,038,099	0	247,580,532	0	0	0	30,769,005	0
60.	ROW, Land, Existing Improvements	197,397,947	529,621	197,927,568	93,215,331	329,820	5,900,000	197,927,568	0	0	0	85,873,101	0
70.	Vehicles	186,829,020	4,645,501	191,474,521	191,474,521	1,446,224	0	191,474,521	0	0	0	28,647,706	0
80.	Professional Services	1,087,830,119	30,721,122	1,118,551,241	1,001,714,889	92,044,266	(14,141,990)	1,118,551,241	0	0	0	728,459,043	0
A.C.	Provisional Pay Requests	0	0	0	0	0	0	0	0	0	0	1,433,844	0
<b>Subtotal:</b>		4,305,074,410	150,655,184	4,455,729,594	3,104,550,348	347,510,255	(8,503,138)	4,455,729,594	0	0	0	1,670,649,831	0
<b>2. NTP</b>													
NTP	Authorized For Expenditure	0	0	0	0	2,138,899,825	0	0	0	0	0	0	0
<b>Subtotal:</b>		0	0	0	0	2,138,899,825	0	0	0	0	0	0	0
<b>3. Contingency</b>													
CNTR	Allocated Contingency	541,689,343	(95,687,278)	446,002,065	7,138,765	3,997,289	312,893,843	446,002,065	0	0	0	489,493	0
PRJ	Unallocated Contingency	101,871,170	(54,967,905)	46,903,265	0	0	0	46,903,265	0	0	0	0	0
<b>Subtotal:</b>		643,560,513	(150,655,184)	492,905,330	7,138,765	3,997,289	312,893,843	492,905,330	0	0	0	489,493	0
<b>4. Finance Charges - Eligible</b>													
OTH	Finance Charges	173,058,243	0	173,058,243	0	0	0	173,058,243	0	0	0	0	0
<b>Subtotal:</b>		173,058,243	0	173,058,243	0	0	0	173,058,243	0	0	0	0	0
<b>FTA TOTAL PROJECT COSTS</b>	5,121,693,166	(0)	5,121,693,166	3,111,689,113	2,490,407,369	304,390,705	5,121,693,166	0	1,671,139,324	0	0	0	0
<b>4. Finance Charges - Ineligible Costs</b>													
FINC	Finance Charges	42,000,000	0	42,000,000	0	0	0	42,000,000	0	0	0	0	0
<b>Subtotal:</b>		42,000,000	0	42,000,000	0	0	0	42,000,000	0	0	0	0	0
<b>INELIGIBLE COSTS</b>	42,000,000	0	42,000,000	0	0	0	0	42,000,000	0	0	0	0	0
<b>Total Project:</b>	5,163,693,166	(0)	5,163,693,166	3,111,689,113	2,490,407,369	304,390,705	5,163,693,166	0	1,671,139,324	0	0	0	0

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

Report M\_C00\_pmoec\_monthly\_Soc\_31mmay - No. 22

Print Date: '11/15 12:54

Project Costs by SCC – Level 2

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

Page: 1 of 3

SCC	Title	A		B		C=A+B		D		E		F		G		H=C-G		I	
		Baseline	Transfers	BUDGET	Current	COMMITTED	Current*	AFE**	AFE**	Changes ID'd***	Est. At Completion****	Variance	Incurred To Date						
<b>1. Subtotal 10 - 80 SCC Costs</b>																			
10.00	Guideway & Track Elements	1,114,215,147	46,009,500	1,160,223,647	550,392,033	37,178,532	70,898	1,160,223,647	0	228,193,367	0	17,378	0	17,378	0	179,647,473	0	179,647,473	
10.02	Guideway, At-grade, semi-exclusive	0	17,378	17,378	17,378	0	0	17,378	0	17,378	0	0	0	17,378	0	0	0	17,378	
10.04	Guideway, Aerial Structure	1,022,380,671	43,014,961	1,065,395,632	465,671,878	27,439,427	70,898	1,065,395,632	0	179,647,473	0	0	0	179,647,473	0	0	0	179,647,473	
10.08	Guideway, Retained Cut or Fill	7,492,944	(1,056,688)	6,436,256	6,436,256	0	0	6,436,256	0	0	0	0	0	6,436,256	0	0	0	0	
10.09	Track: Direct Fixation	79,347,205	3,097,822	82,445,027	74,637,831	9,630,851	0	82,445,027	0	48,528,536	0	0	0	82,445,027	0	0	0	48,528,536	
10.11	Track: Ballasted	3,293,724	(595,849)	2,697,875	2,697,875	0	0	2,697,875	0	0	0	0	0	2,697,875	0	0	0	0	
10.12	Track: Special (Switches, turnouts)	1,700,603	1,530,876	3,231,479	1,530,876	30,876	0	3,231,479	0	0	0	0	0	3,231,479	0	0	0	0	
20.00	Stations, Stops, Terminals, Intermodal	421,804,740	(25,138,472)	396,666,268	186,070,184	0	0	396,666,268	0	4,503,158	0	0	0	396,666,268	0	4,503,158	0	4,503,158	
20.01	At-grade station, stop, shelter, ...	6,111,332	0	6,111,332	0	0	0	6,111,332	0	0	0	0	0	6,111,332	0	0	0	0	
20.02	Aerial Station, stop, shelter, mail	294,563,457	(21,400,000)	273,163,457	135,087,470	0	0	273,163,457	0	0	0	0	0	273,163,457	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	66,408,765	0	0	0	0	
20.07	Elevators, Escalators	54,721,186	(3,738,472)	50,982,714	50,982,714	0	0	50,982,714	0	0	0	0	0	50,982,714	0	0	0	0	
30.00	Support Facilities, Yards, Shops, Admin	92,335,015	22,007,354	114,342,369	114,342,369	18,198,705	0	114,342,369	0	75,445,757	0	0	0	114,342,369	0	75,445,757	0	75,445,757	
30.02	Light Maintenance Facility	7,591,888	(5,095)	7,586,793	7,586,793	0	0	7,586,793	0	1,661,094	0	0	0	7,586,793	0	1,661,094	0	1,661,094	
30.03	Heavy Maintenance Facility	38,099,138	4,978,668	43,077,806	43,077,806	5,220,776	0	43,077,806	0	24,771,232	0	0	0	43,077,806	0	24,771,232	0	24,771,232	
30.04	Storage or Maintenance of Way Buil	7,797,460	773,770	8,571,230	8,571,230	835,320	0	8,571,230	0	5,297,667	0	0	0	8,571,230	0	5,297,667	0	5,297,667	
30.05	Yard and Yard Track	39,046,529	16,260,011	55,306,540	55,306,540	12,142,609	0	55,306,540	0	43,715,744	0	0	0	55,306,540	0	43,715,744	0	43,715,744	
40.00	Sitework & Special Conditions	983,178,121	45,586,326	1,028,764,447	734,120,642	171,274,609	(332,046)	1,028,764,447	0	487,344,891	0	0	0	1,028,764,447	0	487,344,891	0	487,344,891	
40.01	Demolition, Clearing, Earthwork	29,980,158	(7,241,039)	22,739,099	8,589,446	632,302	0	22,739,099	0	2,458,715	0	0	0	22,739,099	0	2,458,715	0	2,458,715	
40.02	Site Utilities, Utility Relocation	299,449,756	9,247,657	308,797,413	211,092,736	23,715,892	47,265	308,797,413	47,265	91,404,007	0	0	0	308,797,413	0	91,404,007	0	91,404,007	
40.03	Haz. mat'l, contain'd soil removal	9,199,237	(5,300,634)	3,898,603	3,212,085	137,085	(379,301)	3,898,603	0	2,116,982	0	0	0	3,898,603	0	2,116,982	0	2,116,982	
40.04	Environmental Mitigation	26,379,122	4,983,249	31,362,371	16,549,945	9,137	0	31,362,371	0	9,965,093	0	0	0	31,362,371	0	9,965,093	0	9,965,093	
40.05	Site structures, retaining walls,	7,998,960	6,540,840	14,539,800	14,381,274	274,780	0	14,539,800	0	3,417,879	0	0	0	14,539,800	0	3,417,879	0	3,417,879	
40.06	Pedestrian/bike access/landscaping	41,073,897	741,177	41,815,074	4,991,868	(4,566)	0	41,815,074	0	50,000	0	0	0	41,815,074	0	50,000	0	50,000	
40.07	Auto, bus, van accessways	181,379,367	(15,949,515)	165,029,852	36,321,054	1,532,538	0	165,029,852	0	4,535,519	0	0	0	165,029,852	0	4,535,519	0	4,535,519	
40.08	Temporary Facilities/Indirect Cost	386,517,624	52,464,611	438,982,235	438,982,235	144,897,440	0	438,982,235	0	373,396,696	0	0	0	438,982,235	0	373,396,696	0	373,396,696	
50.00	Systems	221,284,301	26,296,231	247,580,532	232,420,319	27,088,099	0	247,580,532	0	30,769,005	0	0	0	247,580,532	0	30,769,005	0	30,769,005	
50.01	Train control and signals	81,382,556	24,381,140	106,363,696	106,363,696	23,961,050	0	106,363,696	0	2,250,972	0	0	0	106,363,696	0	2,250,972	0	2,250,972	
50.02	Traffic signals and crossing prot.	10,456,226	(206,890)	10,251,336	0	0	0	10,251,336	0	0	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)	0	30,880,806	0	2,649,029	0	0	0	30,880,806	0	2,649,029	0	2,649,029	
50.04	Traction power distribution: cat	32,878,150	5,059,838	37,937,988	33,029,111	7,941,115	0	37,937,988	0	16,769,209	0	0	0	37,937,988	0	16,769,209	0	16,769,209	

Report: H\_C100\_pmooc\_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: 9/11/15 12:50

Costs Reported as of Month Ending: August 2015

Project Monthly Cost Report by SCC Details

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	AFE**	Changes ID'd***	Est. At Completion****	Variance	Incurred To Date	
<b>1. Subtotal 10 - 80 SCC Costs</b>													
50. Systems		221,284,301	26,296,231	247,580,532	232,420,319	27,038,039	0	247,580,532	0	30,769,005	0	30,769,005	
50.05 Communications		53,691,339	6,133,477	59,824,816	59,824,816	5,573,419	0	59,824,816	0	10,231,696	0	10,231,696	
50.06 Fare collection system and equi		9,159,277	(10,291,178)	(1,131,901)	(1,131,901)	(10,350,000)	0	(1,131,901)	0	(1,131,901)	0	(1,131,901)	
50.07 Central Control		3,613,827	(160,036)	3,453,791	3,453,791	0	0	3,453,791	0	0	0	0	
60. ROW, Land, Existing Improvements		197,397,947	529,621	197,927,568	93,215,331	329,820	5,900,000	197,927,568	0	85,873,101	0	85,873,101	
60.01 Purchase or lease of real estate		179,360,664	250,821	179,611,485	86,269,854	32,020	5,000,000	179,611,485	0	76,281,284	0	76,281,284	
60.02 Relocation of existing households		18,037,283	277,800	18,315,083	6,945,477	277,800	900,000	18,315,083	0	9,591,817	0	9,591,817	
70. Vehicles		166,829,020	4,645,501	171,474,521	191,474,521	1,446,224	0	191,474,521	0	28,647,706	0	28,647,706	
70.01 Light Rail		166,721,386	5,847,131	172,568,517	172,568,517	1,446,224	0	172,568,517	0	20,855,245	0	20,855,245	
70.06 Non-revenue vehicles		14,346,323	(1,320,375)	13,026,548	13,026,548	0	0	13,026,548	0	7,792,461	0	7,792,461	
70.07 Spare parts		5,760,711	119,685	5,879,396	5,879,396	0	0	5,879,396	0	0	0	0	
80. Professional Services		1,087,890,119	30,721,122	1,118,611,241	1,001,714,899	92,044,266	(14,141,990)	1,118,611,241	0	728,499,049	0	728,499,049	
80.01 Preliminary Engineering		94,055,262	24,644,185	118,699,447	109,567,127	20,905,682	0	118,699,447	0	102,945,648	0	102,945,648	
80.02 Final Design		228,321,632	(2,061,977)	226,259,655	209,362,308	34,447,882	(4,935,353)	226,259,655	0	164,361,426	0	164,361,426	
80.03 Project Management Design & Cons		363,848,768	(28,383,713)	335,465,055	375,547,518	79,563,102	(17,323,901)	335,465,055	0	296,075,522	0	296,075,522	
80.04 Constr. Admin. & Management		199,656,728	(93,961,200)	105,695,528	110,604,651	(43,779,981)	160,000	105,695,528	0	73,407,917	0	73,407,917	
80.05 Professional Liability & other Ins		46,549,724	28,781,338	75,331,062	43,174,657	7,000,500	0	75,331,062	0	23,396,793	0	23,396,793	
80.06 Legal; Permits; Review Fees et..		67,641,005	(3,206,464)	64,434,541	36,800,153	3,782,053	0	64,434,541	0	19,845,317	0	19,845,317	
80.07 Surveys, Testing, Investigation, I		21,759,336	47,133,037	68,898,373	67,789,497	1,463,121	33,073	68,898,373	0	26,910,227	0	26,910,227	
80.08 Start up		65,996,664	(230,685)	65,765,980	48,868,377	9,619,009	7,924,191	65,765,980	0	21,496,193	0	21,496,193	
A.C. Provisional Pay Requests		0	0	0	0	0	0	0	0	1,433,844	0	1,433,844	
ACR Provisional Request For Payment		0	0	0	0	0	0	0	0	1,433,844	0	1,433,844	
<b>Subtotal:</b>		4,305,074,410	150,655,184	4,455,729,594	3,104,550,348	347,510,255	(8,503,138)	4,455,729,594	0	1,670,649,831	0	1,670,649,831	
<b>2. NTP</b>													
NTP Authorized For Expenditure		0	0	0	0	0	0	0	0	2,138,899,825	0	2,138,899,825	
NTP Notice To Proceed		0	0	0	0	0	0	0	0	2,138,899,825	0	2,138,899,825	
<b>Subtotal:</b>		0	0	0	0	0	0	0	0	2,138,899,825	0	2,138,899,825	

\* 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

Report: M\_C100\_pmooc\_monthly\_Scc\_detail - No. 23

Print Date: 9/11/15 12:50



Costs Reported as of Month Ending: August 2015

Project Monthly Cost Report by SCC Details

Page: 3 of 3

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***	ESTIMATE AT COMPLETION	Variance	Incurred To Date
<b>3. Contingency</b>													
CNTR	Allocated Contingency	541,689,343	(95,687,278)	446,002,065	7,138,765	3,937,289	312,893,843	446,002,065	0	0	489,493	0	489,493
90.02	Allocated Contract Contingency	540,101,329	(87,901,008)	442,200,322	3,937,289	3,937,289	307,750,786	442,200,322	0	0	489,493	0	489,493
90.03	Allowances	1,588,014	2,213,729	3,801,743	3,141,476	0	5,143,067	3,801,743	0	0	0	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	(54,967,905)	46,903,265	0	0	0	46,903,265	0	0	0	0	0
90.01	Unallocated Project Contingency	101,871,170	(54,967,905)	46,903,265	0	0	0	46,903,265	0	0	0	0	0
<b>Subtotal:</b>		643,560,513	(150,655,184)	492,905,330	7,138,765	3,937,289	312,893,843	492,905,330	0	0	489,493	0	489,493
<b>4. Finance Charges - Eligible</b>													
OTH	Finance Charges	173,058,243	0	173,058,243	0	0	0	173,058,243	0	0	0	0	0
100.1	Finance Charges-Project-Eligible	173,058,243	0	173,058,243	0	0	0	173,058,243	0	0	0	0	0
<b>Subtotal:</b>		173,058,243	0	173,058,243	0	0	0	173,058,243	0	0	0	0	0
<b>FTA TOTAL PROJECT COSTS</b>		5,421,693,166	(0)	5,421,693,166	3,111,689,113	2,490,407,369	304,390,705	5,124,693,166	0	0	1,674,139,324	0	1,674,139,324
<b>4. Finance Charges -Ineligible Costs</b>													
FINC	Finance Charges	42,000,000	0	42,000,000	0	0	0	42,000,000	0	0	0	0	0
100.2	FTA Non-Eligible Costs	42,000,000	0	42,000,000	0	0	0	42,000,000	0	0	0	0	0
<b>Subtotal:</b>		42,000,000	0	42,000,000	0	0	0	42,000,000	0	0	0	0	0
<b>INELIGIBLE COSTS</b>		42,000,000	0	42,000,000	0	0	0	42,000,000	0	0	0	0	0
<b>Total Project:</b>		5,163,693,166	(0)	5,163,693,166	3,111,689,113	2,490,407,369	304,390,705	5,163,693,166	0	0	1,674,139,324	0	1,674,139,324

\* 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

Report #: C:\01\_pnoc\_monthly\_Soc\_detail - No. 23

Print Date: 9/11/15 12:50

Appendix D. Procurement and Contract Status

Awarded Contracts						
Contract Code	Contract Name	Contractor Name	Advertise Date	Contract Date	Issue NTP	Projected Substantial Completion Date
DB-120	West O'ahu/Farrington Highway Guideway (WOFH)	Kiewit Infrastructure West Company (KIWC)	Apr 03 '09	Nov 11 '09	Dec 01 '09	Jul 04 '16
DB-200	Maintenance and Storage Facility (MSF)	Kiewit / Kobayashi Joint Venture (KKJV)	Jul 24 '09	June 30 '11	Jul 25 '11	Apr 15 '16
DB-320	Kamehameha Guideway (KHG)	Kiewit Infrastructure West Company (KIWC)	Mar 19 '10	June 30 '11	Jul 12 '11	Sep 16 '16
DBOM-920	Core Systems Contract	Ansaldo Honolulu JV	Aug 17 '09	Nov 28 '11	Jan 13 '12	Mar 31 '19
MI-930	Elevators and Escalators	Schindler Elevator Corporation	Dec 18 '12	Jul 31 '13	Aug 02 '13	Jul 05 '18
FD-140	West O'ahu Station Group Final Design and Support	URS Corporation	Jun 14 '10	Jun 14 '12	Jun 15 '12	Jun 30 '16
FD-240	Farrington Highway Station Group Final Design and Support -2	URS Corporation	Jun 10 '13	Sep 27 '13	Sep 30 '13	Nov 14 '16
FD-340	Kamehameha Highway Station Group Final Design (includes H2/R2 Ramp) and	Anil Verma Associates, Inc.	Jun 28 '11	Nov 16 '12	Nov 26 '12	Jun 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	Jun 30 '17
FD-530	City Center Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Dec 16 '11	Jul 30 '12	Jul 31 '12	Apr 30 '18
FD-440	Airport Station Group Final Design and Support	AECOM Technical Services, Inc.	Mar 30 '12	Nov 7 '12	Nov 14 '12	Jul 15 '17
FD-550	Dillingham and Kaka'ako Station Groups "East Side Stations" Final Design and	Perkins+Will	Nov 16 '12	Aug 15 '13	Aug 19 '13	Jul 30 '18
MM-290	Construction Engineering & Inspection West Side Sections	PGH Wong Engineering, Inc.	Jul 26 '13	Jan 9 '14	Jan 09 '14	Mar 01 '19
MM-595	Construction Engineering & Inspection East Side Sections	URS Corporation	Jul 26 '13	Jan 07 '14	Jan 09 '14	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 '16
MM-910	General Engineering Consultant II (GEC-2) (Final Design and Construction)	Parsons Brinckerhoff	Sep 03 '09	Jun 30 '11	Aug 02 '11	Dec 31 '14
MM-913	General Engineering Consultant III (GEC-3)	CH2M HILL	Jul 26 '13	Dec 5 '13	Dec 05 '13	Apr 5 '19
MM-935	Real Estate Consultant	Paragon Partners, Ltd.	Apr 01 '11	Mar 14 '12	Mar 14 '12	Mar 13 '17
MM-937	Real Estate Mapping & Surveying	R.M. Towill Corporation	Nov 15 '13	May 22 '14	May 23 '14	Dec 30 '17
MM-940	Kāko'o Consultant	Pacific Legacy, Inc.	May 20 '11	Mar 29 '12	Mar 30 '12	Feb 14 '17
MM-950	Owner-Controlled Insurance Program (OCIP) Consultant	Marsh USA, Inc.	Jan 31 '12	May 10 '12	Jun 05 '12	May 09 '17
MM-951	Owner-Controlled Insurance Program (OCIP) Brokerage Services	Aon Risk Services, Inc., of Hawaii	Jun 04 '13	Apr 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	May 30 '18
MM-962	CORE Systems Support	Lea+Elliott, Inc.	Sep 13 '13	Feb 10 '14	Feb 11 '14	Mar 01 '19
MM-964	Safety / Security Support	Lawson & Associates, Inc.	Oct 23 '13	Apr 23 '14	May 01 '14	Dec 14 '17
MM-975	LEED Commissioning Services for the Maintenance and Storage Facility (MSF)	Enovity, Inc.		Oct 6 '10	Oct 07 '10	Jan 14 '16
PA-102	Historic Architecture Design Services	Fung Associates, Inc.	Mar 15 '13	Aug 1 '13	Aug 01 '13	May 01 '16
MM-915	HDOT Traffic Management Coordination Consultant	ICX Transportation Group, Inc.	Aug 15 '11	Jun 5 '12	Jun 12 '12	Jun 11 '17
MM-920	HDOT Design Coordination Consultant - West O'ahu/Farrington Highway	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 28 '17
MM-922	HDOT Design Coordination Consultant - Airport and City Center Guideway	SSFM International, Inc.		Jun 8 '12	Jun 12 '12	Jun 11 '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	Mar 03 '19
MM-946	On-Call Hazardous Materials (HazMat) Removal Contractor	CH2M HILL		Aug 23 '12	Sep 07 '12	Feb 15 '17
MM-947	On-Call Construction Contractor II	Royal Contracting Co. Ltd.	Mar 17 '15	May 21 '15	May 21 '15	May 21 '20
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
DBB-385	Ramp H2R2	Royal Contracting Co. Ltd.	Jan 30 '15	May 18 '15	May 18 '15	Jun 17 '16
DBB-505	Airport Section Utilities Construction	Nan, Inc.	Dec 17 '13	Jun 30 '14	Oct 6 '14	Dec 22 '15
DBB-525	Airport Section Guideway Seven (7) Pier Construction Contract	HDCC / CJA JV	Jul 09 '14	Sep 18 '14	Sep 18 '14	Apr 22 '15
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	TBD	NTP+ 29 months

Remaining Contracts						
Contract Code	Contract Name	Advertise Date	Bids Due/Part 1 Proposals Due	RFP Part 2 Proposals Due	Issue NTP	Projected Substantial Completion Date
AP00	Art-in-Transit	May 9 '13	-	-	TBD	TBD
MM-970	Fare Collection System Technical Support Consultant	Mar 24 '15	Apr 27 '15 Jun 10 '15	-	TBD	TBD
MM-596	Construction Engineering and Inspection (CE&I) II Contract	Mar 25 '15	May 20 '15	-	Sep 14 '15	Dec 31 '19
DB-450	Airport Guideway and Stations	Apr 07 '15	Aug 11 '15	Feb 23 '16	Apr 05 '16	NTP + 53 months
	Section 106 Programmatic Agreement Project Manager Kāko'o II	Jun 26 '15	Jul 31 '15	-	TBD	TBD
DB-550	City Center Guideway and Stations	Aug 04 '15	Nov 18 '15	TBD	Jun 01 '16	TBD
MI-900	Fare Systems Contract	Aug 11 '15	Oct 30 '15	-	Jan 15 '16	NTP + 120 months + 2 year option
DBB-371	Kamehameha Hwy Stations Group Construction	Aug 18 '15	Nov 17 '15	-	Dec 15 '15	Aug 31 '18
DBB-510	Dillingham Utilities and Road Widening	Jan 11 '16	Mar 15 '16	-	Apr 13 '16	Jun 12 '18, NTP + 26 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

Appendix E. Vehicle Carshell Progress Tracker

CAR SHELL SERIAL NUMBER	CENTER ROOF ASST & WELDING (2 PANEL SET)	CENTER FLOOR ASST & WELDING (2 PANEL SET)	CENTER ROOF MACHINING	CENTER FLOOR MACHINING (2 PANEL SET)	ROOF ASST & WELDING	FINAL ROOF ASST & WELDING TEST	UNDER FRAME ASST & WELDING	FINAL UNDERFRAME ASST & INSPECTION	UNDER FRAME CLEANING AND PAINTING	CAR SHELL ASST & WELDING Station #7	CAR SHELL ASST & WELDING Station #8	CAR SHELL CALIBRATION & TESTING	WATER TEST	PAINTING	INSULATION	FLOORING	FRONT MASK (E CAR ONLY)	CAR SHELL FINAL INSPECTION	COMPLETED CAR SHELL	FBI	CRADLES INSTALLED	SHIPPED
M/001													N/A				N/A		3-Aug	N/A		8/3/2015
E/001													N/A				N/A		15-Sep	N/A		
M/002													N/A				N/A		11-Sep	N/A		
E/002	E/003																N/A					
M/003	USED FOR E/2					9/9/2015											N/A					
E/003																	N/A					
M/004																	N/A					
E/004																	N/A					
M/005																	N/A					
E/005																	N/A					
M/006																	N/A					
E/006																	N/A					
M/007																	N/A					
E/007																	N/A					
M/008																	N/A					
E/008																	N/A					
M/009																	N/A					
E/009																	N/A					
M/010																	N/A					
E/010																	N/A					
M/011																	N/A					
E/011																	N/A					
M/012																	N/A					
E/012																	N/A					
M/013																	N/A					
E/013																	N/A					
M/014																	N/A					
E/014																	N/A					
M/015																	N/A					
E/015																	N/A					
M/016																	N/A					
E/016																	N/A					
M/017																	N/A					
E/017																	N/A					
M/018																	N/A					
E/018																	N/A					
M/019																	N/A					
E/019																	N/A					
M/020																	N/A					
E/020																	N/A					

COMPLETE  
 IN PROCESS  
 CHANGED  
 NON CONFORMIT

## 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 9/30/15)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
David's Fencing	238990	APA	M	CT-HRT-10H0137 DB-120	\$6,800	
				CT-DTS-1100195 DB-320	\$129,816	
				CT-HRT-1000449 DB-200	\$63,134	\$199,750
Glad's Landscaping	561730	APA	M	CT-HRT-10H0137 DB-120	\$303,790	\$303,790
Don's Makiki	484110	APA	M	CT-HRT-10H0137 DB-120	\$537,031	
				CT-HRT-10H0449 DB-200	\$75,391	
				CT-DTS-1100195 DB-320	\$60,714	\$673,136
Pacific Preferred Contractors Corp.	237310	APA	M	CT-HRT-10H0137 DB-120	\$59,881	\$59,881
PAC Electric	238210	APA	F	CT-HRT-10H0137 DB-120	\$5,388,519	\$5,388,519
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	\$217,880	
				SC-HRT-1400049 MM-962	\$251,920	\$5,853,539
Lawson & Associates	541690	O	F	SC-HRT-11H0131 MM-905	\$740,962	
				SC-DTS-0700001 **** MM-910	\$150,141	
				SC-HRT-1400061 MM-964	\$838,015	\$1,729,118
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	

DBE Participation (9/24/07 to 9/30/15)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
				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	\$3,503,139	\$3,503,139
AMR Estimating Services ***	541330	HA	M	SC-HRT-11H0131 MM-905	\$135,281	
				SC-HRT-1400027 MM-913	\$676,715	\$811,996
The Nakoa Companies	541620	NA	M	CT-HRT-1200106 DBOM-920	\$3,843	\$3,843
Hawaiiya Technologies	238210	APA	F	CT-HRT-10H0449 DB-200	\$27,514	
				CT-HRT-1200106 DBOM-920	\$20,142	\$47,656
Element Environmental	541620	APA	M	SC-HRT-1400050 MM-290	\$674,556	\$674,556
PSC Consultants	541330	APA	M	SC-HRT-1400050 MM-290	\$188,284	
				SC-HRT-1400051 MM-595	\$6,063	\$194,347
Bow Construction Management	541330	APA	M	SC-HRT-1400050 MM-290	\$118,922	\$118,922
FIC, LLC	541611	APA	M	SC-HRT-1400051 MM-595	\$1,099,252	\$1,099,252
The Solis Group	541620	O	F	SC-HRT-1400027 MM-913	\$794,366	\$794,366
Island Hauling	484110	APA	M	CT-HRT-1000449 DB-200	\$164,970	\$164,970
ADS System Safety Consulting *****	541620	BA	M	SC-HRT-1400061 MM-964	\$1,151,415	\$1,151,415
Dovetail Consulting	541330	BA	F	MOU-11-SO-1 MM-930	\$783,335	\$783,335
<b>Total</b>						<b>\$27,876,272</b>

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

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

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

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

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

**Race Categories**

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

## Appendix G. Risk

Risk by Contract Package				
Contract Packages	August 2015 # of Risks	September 2015 Update		
		Total # of Risks	New Risks	Deleted Risks
Project Wide	4	4	0	0
WOFH Guideway	21	21	0	0
Pearl Highlands Garage	3	3	0	0
Maintenance and Storage Facility	5	4	0	1
Kamehameha Highway Guideway	16	16	0	0
Core Systems Contract	8	8	0	0
Elevator/Escalator	4	4	0	0
Airport Utilities	1	1	0	0
Farrington Highway Stations	4	4	0	0
H2R2 Ramp	1	2	1	0
West Oahu Stations	5	5	0	0
Kam. Highway Stations	8	7	0	1
Airport Guideway	17	17	0	0
City Center Guideway	26	26	0	0
Airport Section Stations	12	12	0	0
City Center Section Stations	14	14	0	0
<b>Total</b>	<b>149</b>	<b>148</b>	<b>1</b>	<b>2</b>

## Notes of Significance:

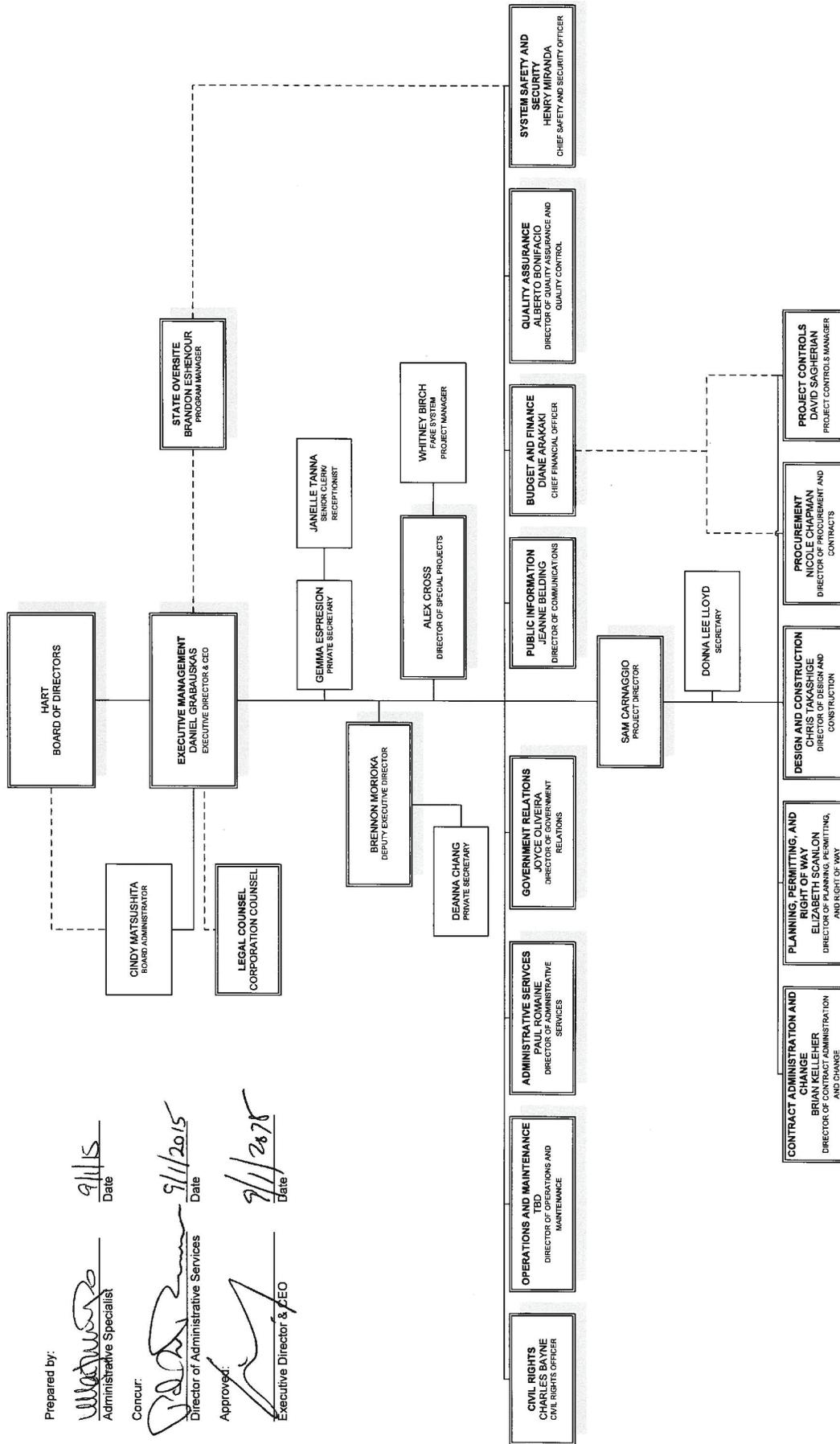
Design contracts for Airport and City Center Sections are still underway for procurement and contract package preparation. When this process is complete, the guideway and stations for each group will be combined. They will be tracked separately in the mean time.

Comparison of Risk Ratings								
Contract Package/Section	August 2015 Update				September 2015 Update			
	# of Risks				# of Risks			
	Total	High	Medium	Low	Total	High	Medium	Low
Project Wide	4	1	2	1	4	1	2	1
WOFH Guideway	21	3	13	5	21	3	13	5
Pearl Highlands Garage	3	0	3	0	3	0	3	0
Maintenance and Storage Facility	5	1	1	3	4	0	1	3
Kamehameha Highway Guideway	16	2	9	5	16	2	9	5
Core Systems Contract	8	0	5	3	8	0	5	3
Elevator/Escalator	4	2	2	0	4	2	2	0
Airport Utilities	2	0	2	0	2	0	2	0
Farrington Highway Stations	4	0	4	0	4	0	4	0
H2R2 Ramp	1	0	1	0	2	0	2	0
West Oahu Stations	5	0	5	0	5	0	5	0
Kam. Highway Stations	8	1	2	5	7	1	2	4
Airport Guideway	17	5	11	1	17	5	11	1
City Center Guideway	26	12	11	3	26	12	11	3
Airport Stations	11	2	7	2	11	2	7	2
City Center Stations	14	2	10	2	14	2	10	2
<b>Total</b>	<b>149</b>	<b>31</b>	<b>88</b>	<b>30</b>	<b>148</b>	<b>30</b>	<b>89</b>	<b>29</b>

Appendix H. Project Organization Chart

September 1, 2015

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION



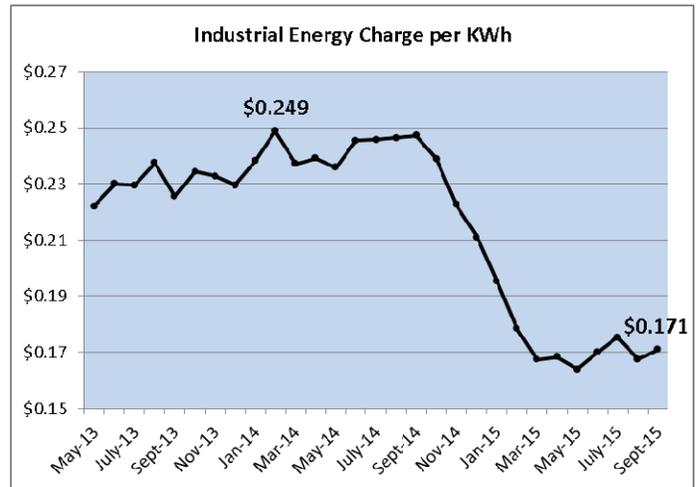
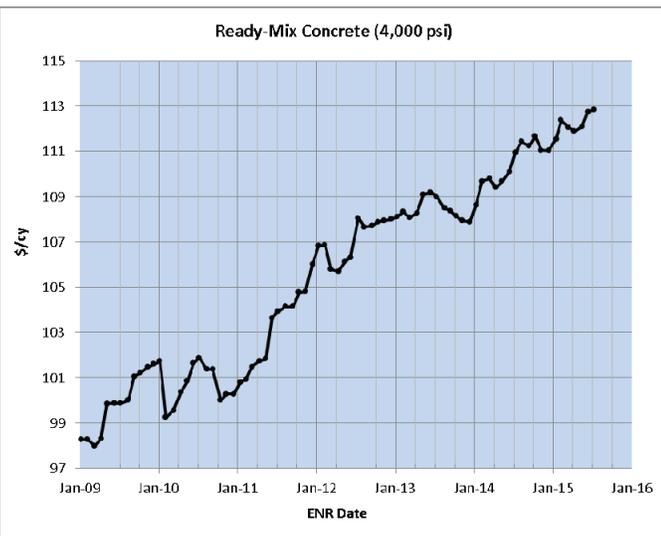
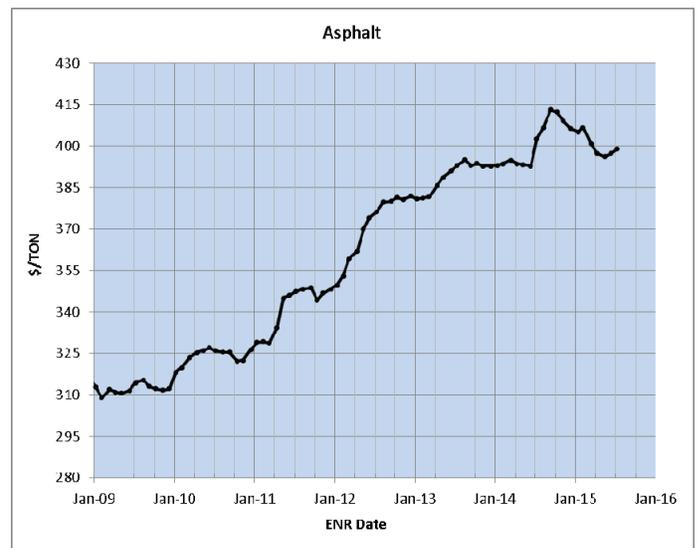
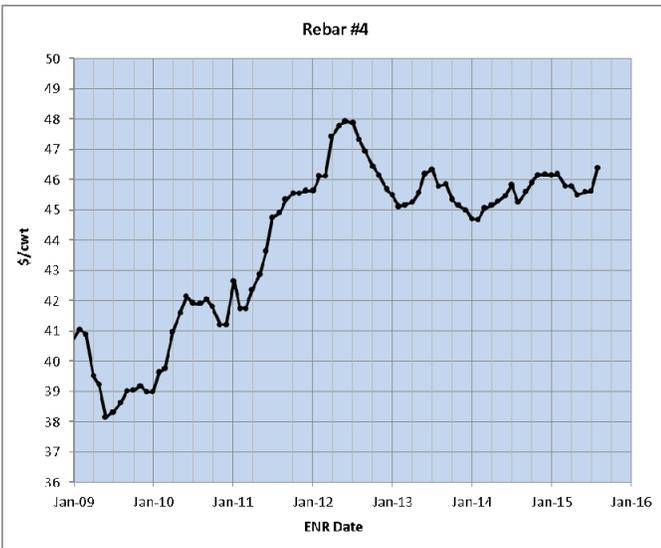
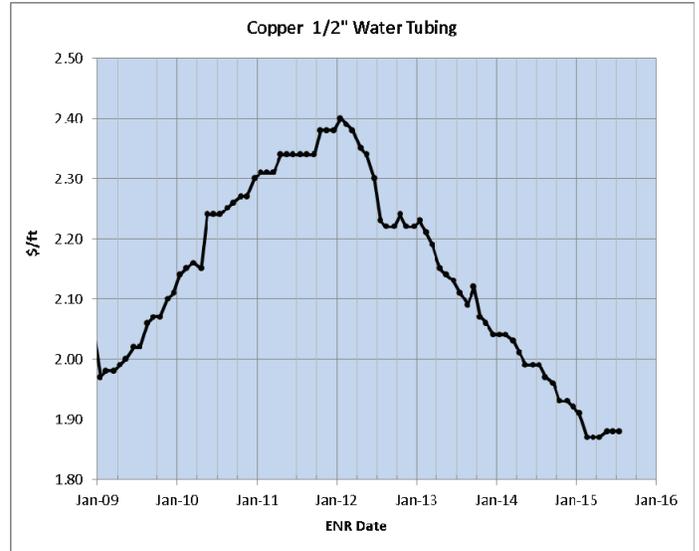
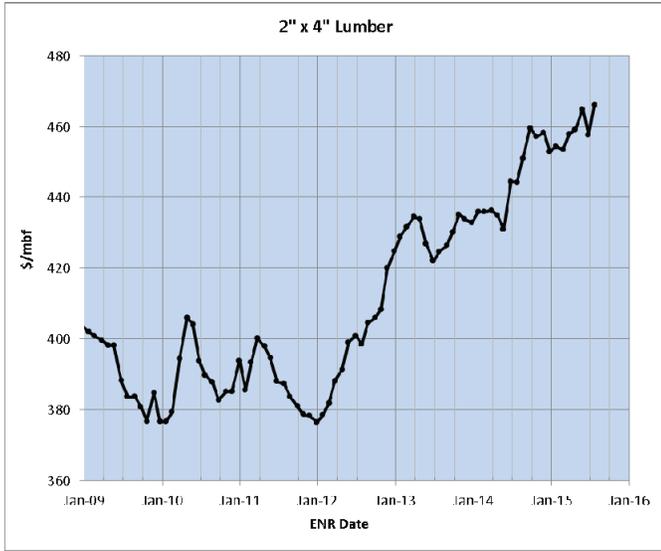
Prepared by:  Administrative Specialist Date: 9/1/15

Concur:  Director of Administrative Services Date: 9/1/2015

Approved:  Executive Director & CEO Date: 9/1/2015

### Appendix I. Indices on Key Commodities

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



Source: HECO: Effective Rate Summary for DS Rate

### Appendix J. Project Photos



Guideway construction in West O'ahu.



Equipment storage site.



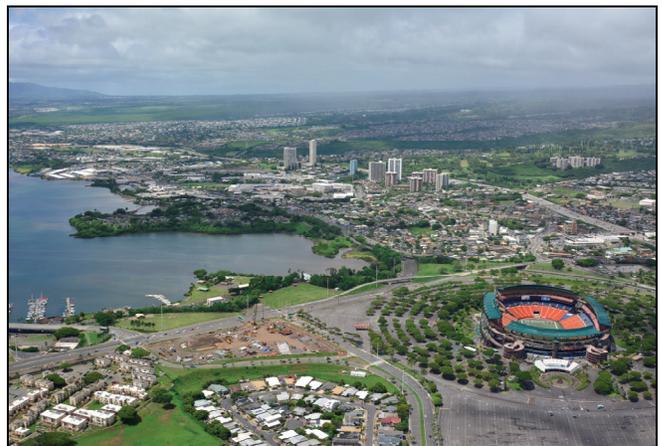
Balanced Cantilever construction near the H-1/H-2 Freeway merge.



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



Construction along Kamehameha Highway.



Future Aloha Stadium Station.



Operations and Servicing Building (OSB).



Wheel Truing Building and OSB.



Maintenance of Way Building.



Casting Yard.