

# HONOLULU RAIL TRANSIT PROJECT



## April 2015 MONTHLY PROGRESS REPORT

# HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

[www.HonoluluTransit.org](http://www.HonoluluTransit.org)

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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 Diamond Head.

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

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**LIST OF ACRONYMS**

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

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

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**\*HIGHLIGHT OF THE MONTH: CHINATOWN STATION**  
 Serving the Chinatown, Pali, Downtown and Outlying Residential Areas



- Station Features:**
- ADA Pedestrian Access
  - Bicycle Parking
  - Elevators and Stairs
  - TheBus – Nearby services along King, Hotel and Beretania St.
  - TheHandi-Van Pick-up/Drop-off
  - Platform Type: Side
  - Planned # of Entrances: 1

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

# 1 EXECUTIVE SUMMARY

## KEY ACTIVITIES THIS MONTH

### Project Overview

The project continues to successfully move forward with the following milestones being reached in April: the completion of more than 100 spans and 150 columns, as well as completing more than 70 percent of the Maintenance and Storage Facility yard.

Procurement for the Honolulu Rail Transit Project’s remaining contracts continues to move forward. In April, the Airport Guideway and Stations (AGS) Design-Build contract and the West O’ahu Stations Group Design-Bid-Build construction contract were both advertised.

In April, HART received \$65 million in General Excise and Use Tax (GET) surcharge revenue this past quarter for construction of the Honolulu rail project. GET surcharge revenue for the quarter running from January to March of this year was about \$9 million above projections for the quarter based on the project’s financial plan. Total GET revenue for the Honolulu rail project now stands at \$1.47 billion. Overall GET collections remain about \$30 million lower than projected.

### 100 Spans and Counting

Work is progressing on the elevated guideway on the ewa end of the Honolulu Rail Transit Project.

Construction crews have now built more than 100 spans between east Kapolei and Waipahu. A span is the part of the guideway which is built between two support columns.

In Waipahu, workers are starting to build columns east of Fort Weaver Road.

There are now more than 150 columns that stretch from Kapolei into Waipahu, more than half the number planned for the first section of the rail guideway.



### Stand Up 4 Transportation

All across the country in April, there were rallies and events to observe Stand Up 4 Transportation Day, a day set aside by the American Public Transportation Association to call for passage of a long-term federal transportation funding bill.

For its part, HART participated in Leeward Community College’s Career and Job Fair and used the opportunity to increase students’ understanding of the important role public transportation plays in their lives.

### Cost:

Project Costs Summary Through March 27, 2015		
	Current Budget (\$M)	Incurred To Date (\$M)
Project Budget	\$4,438.0	\$1,444.8
Project Contingency	\$510.6	\$0.4
Finance Charges*	\$173.1	\$0.0
<b>TOTAL</b>	<b>\$5,121.7</b>	<b>\$1,445.2</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 March 27, 2015				
	Actual		Early Plan	Late Plan
Overall Project Progress	33.4%		50.3%	41.5%
Overall Construction Progress	25.3%		42.6%	33.6%
Overall Design Progress	84.7%		96.0%	91.2%
Overall Utilities Progress	14.8%		42.1%	26.1%

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

The CSC contractor is continuing to progress through Interim Design into Final Design. Qualification and design verification tests are on-going. Construction interface and mobilization is on-going in preparation for the initial work schedule to begin at the MSF. CSC continues to coordinate mobilization plans with the MSF team. CSC will be mobilizing crews on-site at the MSF in May. Passenger vehicle manufacturing, key system manufacturing, design verification and qualification testing activities are on-going. The first carshell assembly continues to progress at the Reggio Calabria, Italy facility. (See Section 4.1.A for details)

Elevators and Escalators Manufacture-Install-Maintain Contract

The Elevator/Escalator contract is on schedule to meet the requirements of the Farrington Highway Station Group contract and the West O'ahu Station Group contract. The manufacturing and installation of the escalators and elevators is dependent on the award and construction of the individual stations. The release for manufacturing dates is in concert with the actual bid and award date for the various stations. The FHSG contract award is delayed due to a protest from one of the bidders. This has prevented the release for manufacturing of the escalators and elevators for these stations. (See Section 4.1.B for details)

West O'ahu Farrington Highway (WOFH) Contract

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

Maintenance and Storage Facility (MSF) Contract

Excavation and foundation work on the Train Wash Facility and the Traction Power Substation has commenced. Work on utilities and track work is progressing including turnout installation. Work in the OSB, MOW and WTB have progressed with roofing, siding and interior partitions and rough-ins as well as commencing work on mechanical, electrical, and plumbing installations. Overall, the project is progressing per plan. (See Section 4.2.D for details)

Kamehameha Highway Guideway (KHG) Contract

Construction of the drilled shafts continued at both the east and west ends of the project. HECO's schedule continues to slip, and to date only a single utility conflict has been remedied to 100% on the KHG contract. In addition, HART has deployed a dedicated noise monitor to respond to complaints and document contractor compliance. KIWC ordered an additional truss; expected delivery is in May and in operation by July. (See Section 4.3.A for details)

Airport Section Utilities Construction Contract

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

Airport Seven Piers Construction Contract

The Airport Seven Piers construction work, including final paving, was completed on April 17, with remaining demobilization from the site ongoing. Project Substantial Completion inspection was performed on April 22, 2015. Hawaiian Dredging Construction Company/Condon-Johnson & Associates (HDCC/CJA) are working towards final completion and are on schedule. (See Section 4.4.C for details)

**Board Meeting Q&A:**

Listed below are questions that were raised by community members at the April 2 HART Board meeting:

- **Question:** Regarding GET revenues, do penalties and interest also go to HART?

**Answer:** Per the State Department of Taxation, HART receives a lump sum from the State Department of Taxation quarterly, which includes penalties and interest collected on GET surcharge revenue.

- **Question:** What is HART's budget for Right-of-Way?

**Answer:** HART's Right-of-Way budget is \$222 million for property acquisitions and relocation.

- **Question:** When did the Federal Transit Administration (FTA) say HART had to return federal funds if the project is not completed per Full Funding Grant Agreement (FFGA)?

**Answer:** As recently as April 3, 2015, HART received confirmation from FTA Administrator Therese McMillan that the FTA would ask for a repayment of funds if the project was not completed according to the terms of the FFGA. The FFGA specifically provides \$1.55 billion to build the rail project, which is a 20-mile, 21-station project with steel-on-steel technology, with an 80-vehicle fleet of train cars. That letter can be found in Appendix I.

In addition, **Section 4** of the FFGA, specifically states HART has an obligation to complete the project as outlined in the FFGA, regardless of the project's finances. **Section 19** of the FFGA also states that if the project is not completed according to the existing terms of the agreement then the FTA may demand all funds be returned.

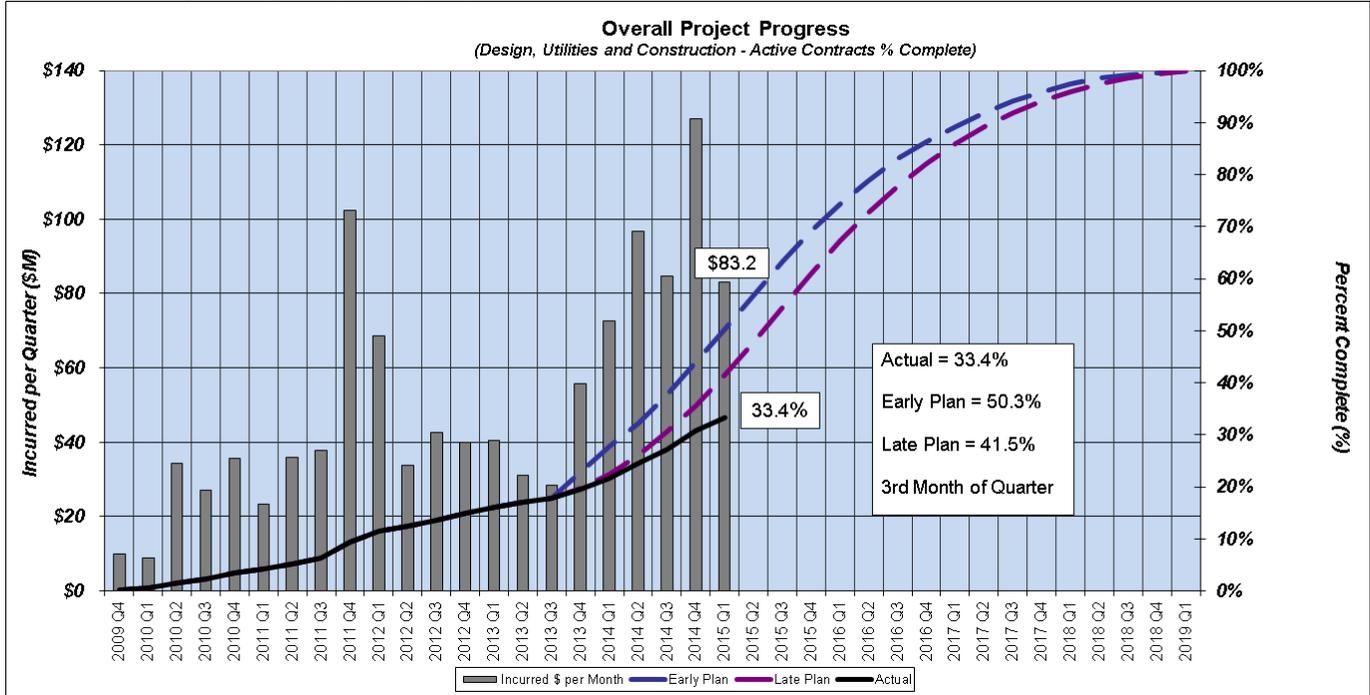
The FFGA can be found on the project's website at <http://www.honolulutransit.org/media/160229/20121219-full-funding-grant-agreement.pdf>.

## 2 OVERALL PROJECT PROGRESS AND FINANCIALS

### 2.1 Project Progress (data as of March 27, 2015)

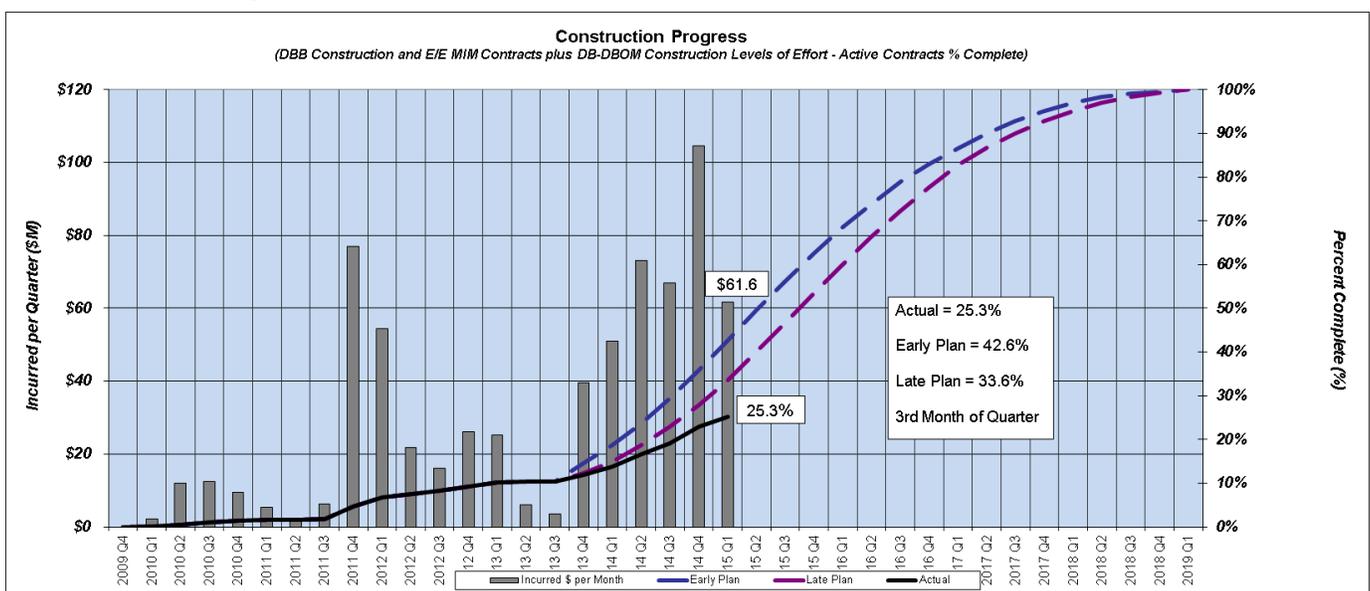
- Note:
- Actual = Actual cost of work performed, based on invoiced-to-date amount.
  - Early Plan = Earliest dates activities can begin and finish, based on logic and durations used in the schedule.
  - Late Plan = Latest dates activities can begin and finish and not have an impact on completion date,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

Figure 1. Overall Project Progress (% Complete)



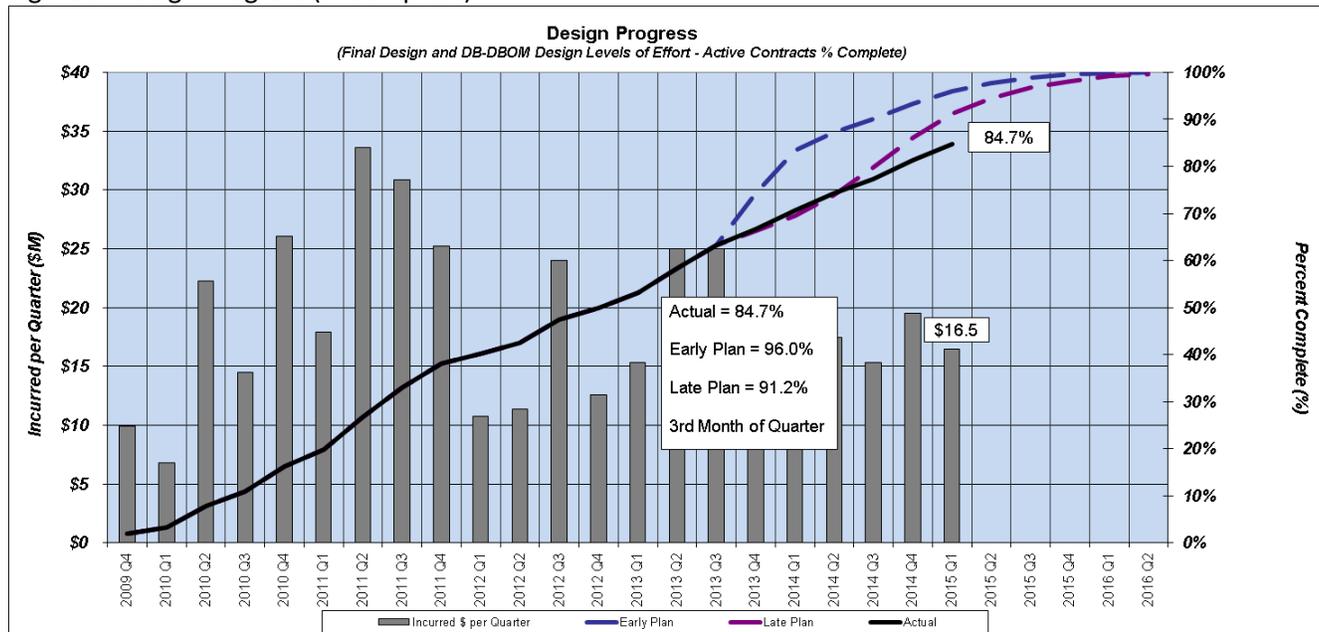
At present “overall” project progress is based on the weighted value progress of the individual construction and design contracts (Design-Build [DB], Design-Bid-Build [DBB], Design-Build-Operate-Maintain [DBOM], Elevator/Escalator Manufacture-Install-Test-Maintain [MIM], Final Design [FD] and DB-DBOM 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)



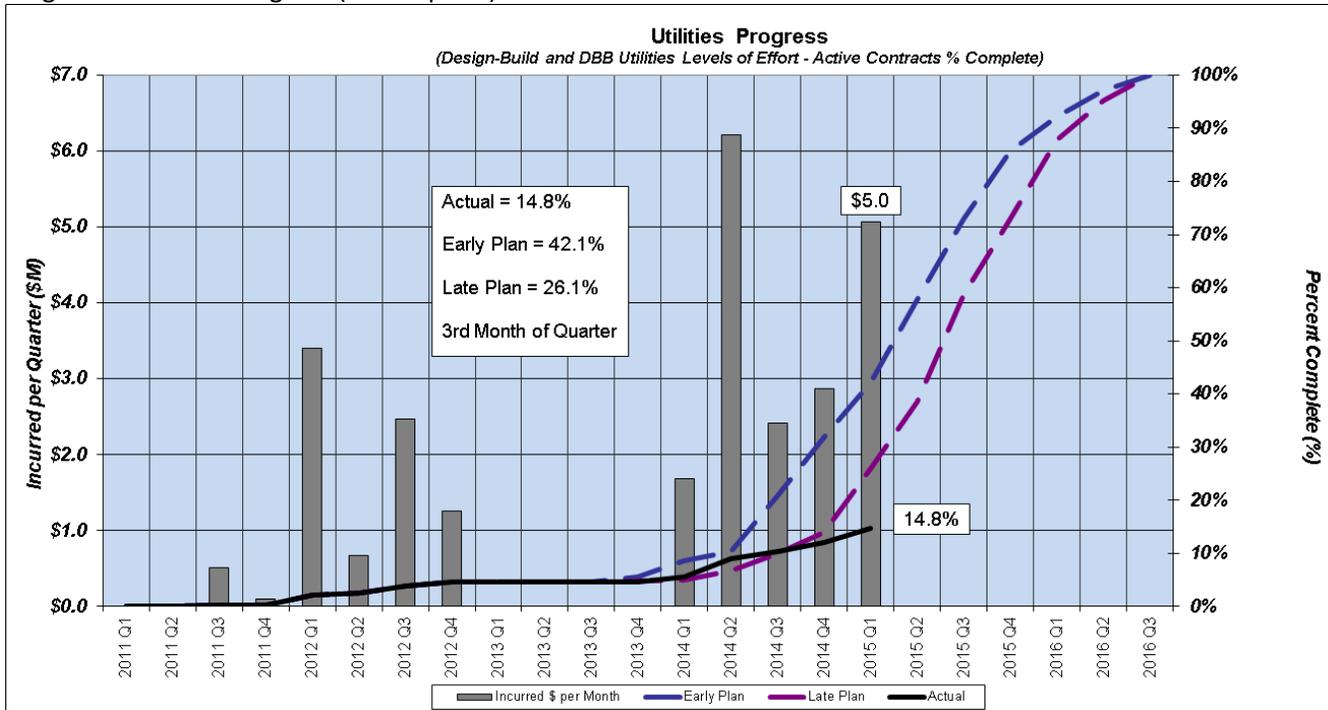
Overall construction progress is based on the weighted average progress of the individual DBB and E/E MIM construction contracts and the DB-DBOM construction levels of effort, not including consultant construction engineering and inspection (CE&I) services.

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 March 27, 2015)**

- FFGA Project Budget = **\$5,121.7M**
  - Current Project Budget - \$4,438M
  - Current Project Contingency - \$510.6M
  - Project Finance Charges - \$173.1M
  
- Total Incurred Cost = **\$1,445.2M** (32.6% of current project budget)
  - March 2015 Incurred Cost = \$34.4M

*Total Incurred Cost = \$1,445.2M  
(previous report = \$1,410.8M)*

**2.3 Project Contingency (data as of March 27, 2015)**

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

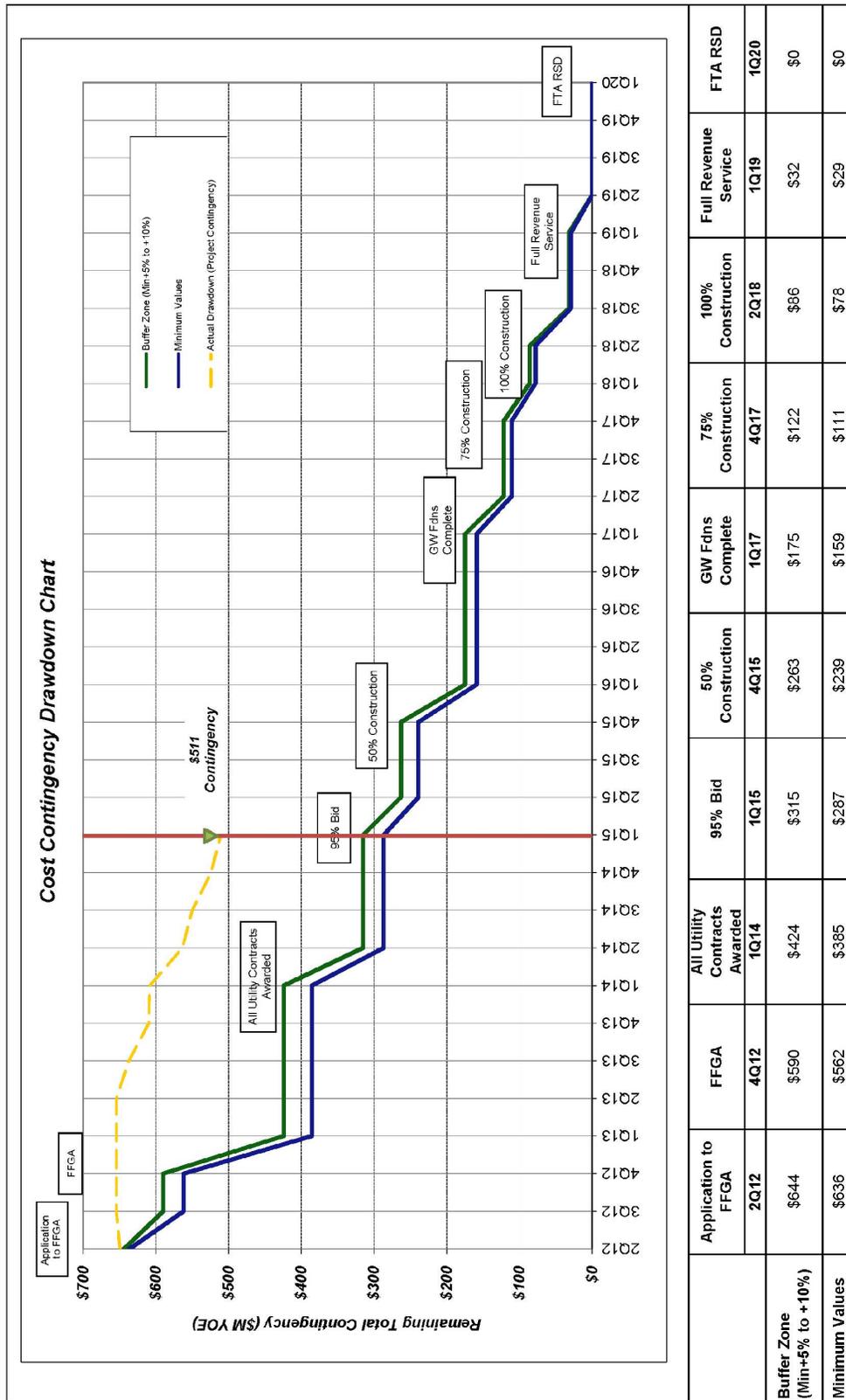
- Current Project Contingency Balance = **\$510.6M**
  - Contingency drawdown to date - \$133M (20.6% of baseline project contingency budget)
  - \$5M contingency drawdown during March 2015. Please see Appendix B for more details.

*Current Contingency Balance = \$510.6M  
(previous report = \$515.6M)*

Figure 5. Project Contingency Budget

Project Contingency Budget		
Contingency	SCC Code	Budget (\$M)
Unallocated Contingency	90.01	\$101.9
Allocated Contingency	90.02	\$540.1
Allowances	90.03	\$1.6
<b>Baseline FFGA Project Contingency Budget</b>	<b>90.01 - 90.03</b>	<b>\$643.6</b>
Contingency drawdown through January 2015 Report	90.01 - 90.03	(\$119.8)
Contingency drawdown February 2015 Report	90.01 - 90.03	(\$4)
Contingency drawdown March 2015 Report	90.01 - 90.03	(\$4.2)
Contingency drawdown April 2015 Report	90.01 - 90.03	(\$5)
Contingency drawdown to date	90.01 - 90.03	(\$133)
<b>Current FFGA Project Contingency</b>	<b>90.01 - 90.03</b>	<b>\$510.6</b>

Figure 6. Draft Cost Contingency Drawdown Chart



Data as of 3/27/15 - March '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 March 27, 2015)

Figure 7. Planned vs. Received Project Funding

Planned vs. Received Project Funding				
Funding Source	Pre-FFGA Project <sup>1</sup>	FFGA Project Period		Total Project
	2007 - 2009 Actuals Received	Planned <sup>2</sup> (\$YOE M)	2009 - Present Actuals Received	2007 - Present Actuals Received
	[A]		[B]	[C] = A + B
Beginning Project Cash Balance <sup>3</sup>	0	298	298	298
Interest Income on Cash Balance	7	3	2	9
FTA Section 5309 New Starts Revenue <sup>4,5</sup>	0	1,550	362	362
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	1026	1,404
<b>Total</b>	<b>385</b>	<b>5,356</b>	<b>1,692</b>	<b>2,077</b>

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

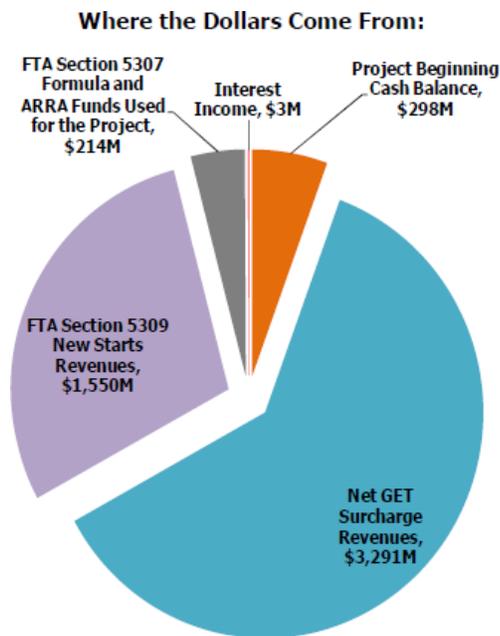
<sup>2</sup> FFGA Financial Plan, Table A-1 Capital Plan Cash Flows .

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

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

<sup>5</sup>\$7.5 million was recorded in April and will be reported in next month's report.

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



Source: FFGA Financial Plan, p. 2-1

- General Excise Tax (GET) Surcharge (data as of March 27, 2015)
  - \$1,026M = amount received since the Project’s entry into FTA’s Preliminary Engineering phase of project development.
    - \$1,066M = Projected Net GET Surcharge Revenue for FYs 2010-3Q 2015, as stated in FFGA Financial Plan (Table A-1 *Capital Plan Cash Flows*)
    - GET receipts are currently running 4% short of projections to date, or \$40M behind.
    - \$40M shortfall is approximately 1.2% of the total GET surcharge projections per the FFGA Financial Plan of \$3.291B.
  - \$0 = GET surcharge received in March 2015.
- Full Funding Grant Agreement (FFGA)
  - \$29.3M = New Starts drawdown processed in March 2015.
- The \$5307 funds for the Project, per the Financial Plan, are \$210M.

*Total Cash Received Since PE = \$1,692M*  
 (previous report = \$1,670M)

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

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

Figure 9. New Starts Drawdown by Federal Fiscal Year (data date as of March 27, 2015, per the FTA TEAM website)

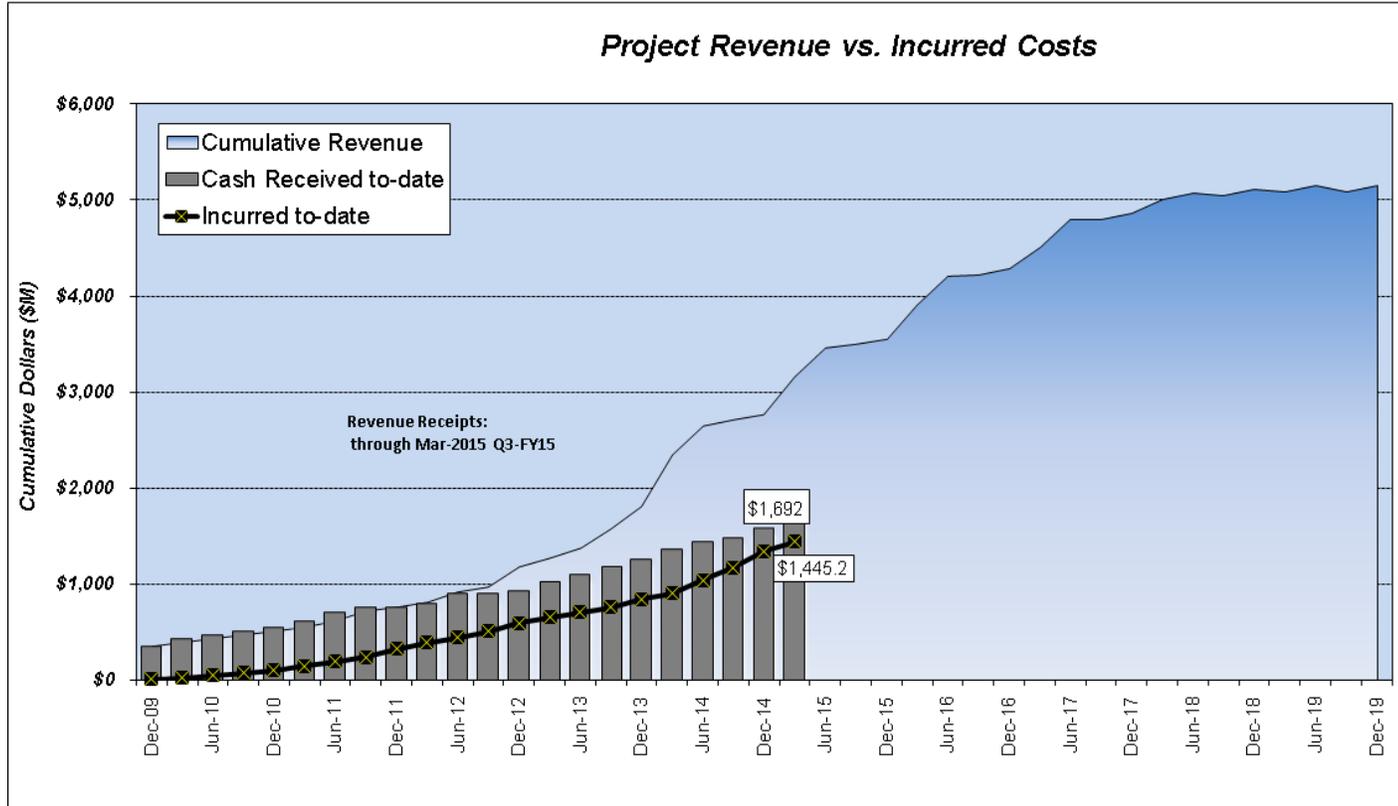
New Starts Grant Information by Federal Fiscal Year				
Federal Fiscal Year Allocation	Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance	FFGA Base Case Cash flow
2008	\$15,190,000	\$15,190,000	\$0	
2009	\$19,800,000	\$19,800,000	\$0	
2010	\$30,000,000	\$30,000,000	\$0	
2011	\$55,000,000	\$55,000,000	\$0	\$20,607,242
2012	\$200,000,000	\$200,000,000	\$0	\$99,382,758
2013	\$236,277,358	\$49,181,075	\$187,096,283	\$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>\$369,171,075</b>	<b>\$1,180,828,925</b>	<b>\$1,550,000,000</b>

**2.5 Project Revenue and Costs**

(data as of March 27, 2015)

*Ending Cash Balance 3/31/15 = \$345.8M*  
*(previous report = \$347.6M)*

Figure 10. Project Revenue versus Incurred Costs



Planned Funding levels as per the June 2012 FFGA Finance Plan  
Data date for Revenue & Incurred Cost = March 27, 2015

Figure 11. Cash Balance Summary

MARCH 31, 2015 CASH BALANCE SUMMARY		
	MARCH	YTD Cumulative
<b>Beginning Cash Balance</b>	347,597,232	441,011,319
Expenditures:		
Operating Expenditures	(1,046,654)	(11,280,713)
Capital Expenditures	(22,518,119)	(345,789,813)
<b>Expenditures Total:</b>	<b>(23,564,773)</b>	<b>(357,070,526)</b>
Receipts:		
GET Surcharge	0	155,773,862
FTA Drawdown*	21,752,588	105,665,824
Interest	18,495	179,976
Other (rental, refunds, copy fees, etc.)	28,687	271,772
<b>Receipts Total:</b>	<b>21,799,770</b>	<b>261,891,435</b>
<b>Ending Cash Balance 03/31/15</b>	<b>345,832,228</b>	<b>345,832,228</b>

\*\$7.5M was recorded by HART in April 2015 and will be reflected in next month's report.

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

### 3 SCHEDULE

(data as of March 27, 2015)

#### OVERVIEW

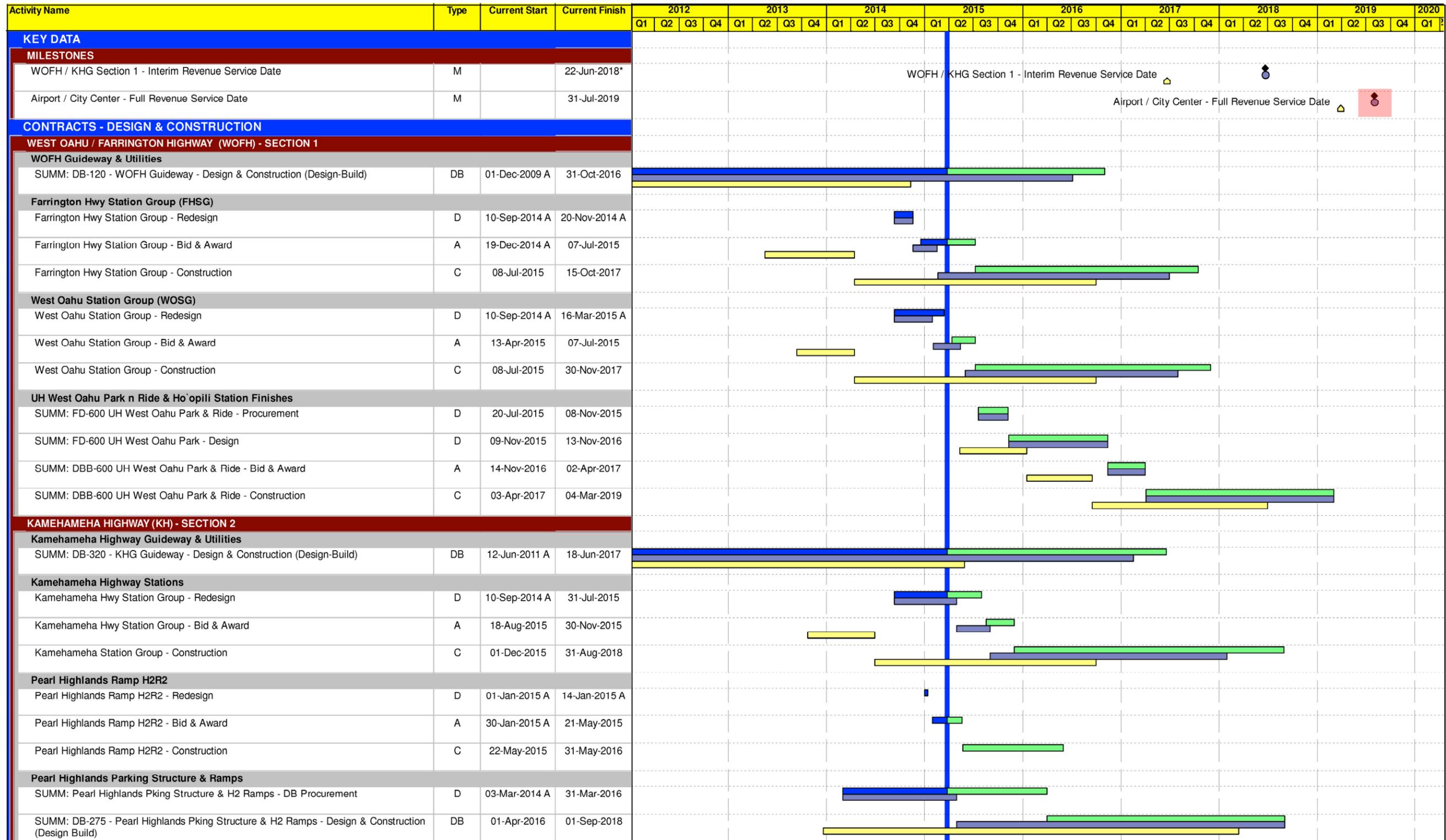
- HART is currently revising its procurement strategy for the east guideway, stations and utility relocations. Once completed, HART will update the design, bid/award and construction dates shown in the monthly MPS summary. Until then, the November 2014 MPS forecasts for the Interim Revenue Service Date and the Full Revenue Service will be shown for reference.
- The MPS Summary schedule has had some minor changes. Under the Airport Section, the Airport Guideway 7 Pier Construction schedule has been added. The Airport Guideway and Airport Stations schedules have been combined into a consolidated Airport Guideway and Stations schedule that reflects more closely how the actual contract is anticipated to be awarded. The City Center Section has been revised into a Utility Relocations schedule and a City Center Guideway and Stations schedule. These changes are to represent the anticipated contracting strategy for this section.
- 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.

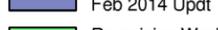
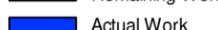
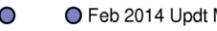
#### KEY ISSUES

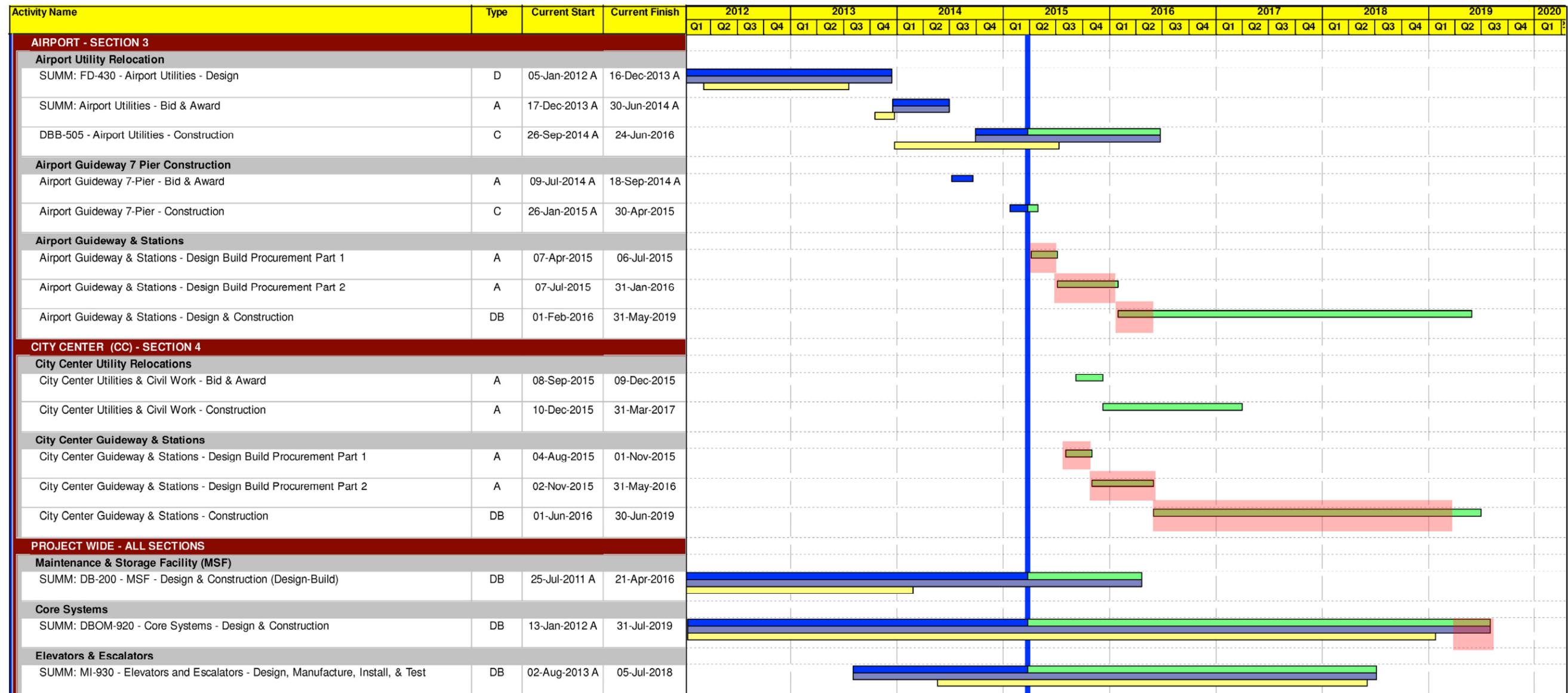
- Guideway construction contractor progress is behind approved planned schedules.
- Right-of-way acquisition, third-party interface and utility relocations continue to be areas of concern for program completion.

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

The MPSS is statused against the FFGA Baseline MPS. The baseline and actual/planned durations of each contract are displayed for comparison.



 <p>HONOLULU AUTHORITY for RAPID TRANSPORTATION</p>	 FFGA Baseline  Feb 2014 Updt  Remaining Work  Actual Work  FFGA Baseline Milestone	 Feb 2014 Updt Milestone  Milestone	Printed: 04-May-2015 15:47 <b>Honolulu Rail Transit Project</b> <b>March 2015 Update</b> As of: 27-Mar-2015	Page 1 of 2 <b>MPS Summary</b> <b>Design &amp; Construction Contracts</b>
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 Program Critical Path



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

Printed: 04-May-2015 15:47  
**Honolulu Rail Transit Project**  
**March 2015 Update**  
 As of: 27-Mar-2015

Page 2 of 2  
**MPS Summary**  
**Design & Construction Contracts**

## 4 CONTRACT STATUS

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

#### OVERVIEW

- Vehicle Aluminum Carshell Manufacturing is moving forward in Reggio Calabria, Italy.
- Progressing with sub-system testing and design verification activities.
- Change Order # 16 was executed. (RFCR # 19 – Delete Passenger Counter & RFCR # 21 – Add Wi-Fi to Passenger Vehicles).

#### KEY ISSUES

- The AM radio tower near the Middle Street Station is likely to cause Electromagnetic Interference (EMI) due to the proximity of the radio tower to the guideway and station. HART is evaluating alternatives to mitigate EMI.
- HART has provided 2 notices of delayed access; July 2014 notice and more recently January 2015, the notice of delayed access due to the repackaging of the east side stations and guideway contracts. HART and AHJV continue to evaluate the cost and schedule impacts associated with both delays.

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

#### OVERVIEW

- Fare Collection system RFP draft is under review by HART Procurement and COR.
- Fare Collection Technical Support RFQ was released on March 24, 2015.
- The Fare System MOU covering the cost sharing arrangement for the capital costs of the system has been finalized. PIG review is now scheduled for May 7, with signature anticipated by mid-May. A separate MOU covering operations will be required prior to exercising any operations option with the selected vendor.

#### KEY ISSUES

- Completion of MOUs between HART and DTS for shared funding on fare system items to be jointly owned and operated.
- Finalizing RFP package with COR review in order to issue RFP in early May 2015.

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

#### OVERVIEW

- Leeward Community College (LCC) Portables and Parking Lot Change Order – Change Order 063, Procurement of LCC Portables/Parking Lot has been executed to allow KIWC to procure four (4) portable buildings for LCC. The procurement of the buildings are long lead time items which have been on the project's critical path. Once the buildings are installed, work can begin at the LCC Station area.
- Balanced Cantilever System (BCS) Form Advancement and Mechanically Stabilized Earth (MSE) Wall by Pier 251 – BCS construction is progressing as scheduled. Pier tables and segments for 253, 254 and 255 are in various levels of completion. Both sets of travelers have been fully assembled on Piers 253 and 254 and segment casting and stressing is proceeding in both eastward and westward directions.
- Span Erection/Stressing Construction Progress – Due to a reevaluation of KIWC's final span setting procedures and a temporary suspension of nighttime work, span progress has been affected but operations are now continuing to move forward.

#### KEY ISSUES

- Hawai'i Department of Health (DOH) Section 401 Permit (for additional detail, see 4.2.A Key Issues)
- Span 17, Span 105, and Column 151 Damage and Repair (for additional detail, see 4.2.A Key Quality Issues)

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

#### OVERVIEW

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

#### KEY ISSUES

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

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

- Construction of the drilled shafts continues at both the east and west ends of the project.
- HECO's schedule continues to slip, and to date only a single utility conflict has been remedied to 100% on the KHG contract. Further work within the Aloha Stadium main parking lot is pending relocation of utility conflicts in the area.
- In response to noise complaints from the public, HART has deployed a dedicated noise monitor to respond to complaints and document contractor compliance.

KEY ISSUES

- HECO work continues to be delayed, has impacted the current shaft installation schedule and has caused additional mobilization and productivity impacts to KIWC.
- Permanent easements: of the 15 locations that require permanent easements for relocated utilities, 7 have been resolved, allowing construction to progress during the finalization of the easement documents. The remaining 8 easements will require meetings and negotiations with the five (5) owners. A MOU allowing HECO to proceed under a right of entry (ROE) while easements are being obtained is still pending resolution at an elevated HART level.
- HDOT betterments are still pending agreement at an elevated level of what constitutes a betterment, and how funding will be transferred from HDOT to HART.

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

- Utility relocations along Kamehameha Highway continue for DBB-505 with the installation of the sewer, water, and telecom lines along Kamehameha Highway. License Plate Reader (LPR) camera installations are nearing completion.

KEY ISSUES

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

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

- Shafts excavation and concrete placement has been completed for all seven piers.
- Final CSL Test Results were submitted and accepted.
- Concrete curbs and paving was completed at Piers 552R, 551R and 550.
- Asphalt paving at Piers 547 and 546 was installed.
- Demobilized crane boom and A-Frame.
- Project Substantial Completion inspection was performed on April 22.

KEY ISSUES

- HDCC/CJA JV is to submit the following additional costs RFC:
  - Force Account Sheets for Pier 550 Utility conflicts.
  - Force Account Sheets for Pier 548 Utility conflicts.
  - Change proposal for Temporary Fill at Piers 551R and 550.
  - Cost Proposal for Extra surface work (concrete curbs and paving) at Piers 552R, 551R, 550, 547 and 546 due to lowering of CMP casings.
  - Response to rejection of double handling drill spoils.
- HDCC has some additional costs that are to be submitted as an RFCC for review and consideration for project closeout.

**Contracts in Procurement**OVERVIEW

- Active Procurements:
  - Bids for the Farrington Highway Stations Group (FHSG) construction contract were opened on March 3, 2015. This procurement is currently under protest.
  - The H2R2 Ramp was advertised for bids on Jan. 30, 2015. A public bid opening occurred on April 28, 2015.
  - The Airport Guideway and Stations (AGS) Design-Build contract was advertised on April 7, 2015. Qualifications proposals are due on June 9, 2015.
  - The West O'ahu Stations Group (WOSG) construction contract was advertised for bids on April 13, 2015. A public bid opening is scheduled for June 16, 2015.
- Upcoming Procurements:
  - The Kamehameha Highway Stations Group (KHSG) package is scheduled for advertisement in August 2015.
  - The City Center Guideway and Stations (CCGS) Design-Build package is scheduled for advertisement in August 2015.
  - HART is determining the scope for a potential City Center Utilities Design-Bid-Build (DBB) package.

KEY ISSUES

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

4.1 System-wide

A. Core Systems Contract (CSC)

Contract No.: DBOM-920

DBOM Contractor: Ansaldo Honolulu Joint Venture (AHJV)

Contract Start Date: January 2012

Contract Substantial Completion: March 2019

Projected Substantial Completion: July 2019

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



**Project Overview:** The CSC contractor is continuing to progress through Interim Design into Final Design. Qualification and design verification tests are on-going. Construction interface and mobilization is on-going in preparation for the initial work schedule to begin at the MSF. CSC continues to coordinate mobilization plans with the MSF team. CSC will be mobilizing crews on-site at the MSF in May. Passenger vehicle manufacturing, key system manufacturing, design verification and qualification testing activities are on-going. The first carshell assembly continues to progress at the Reggio Calabria, Italy facility.

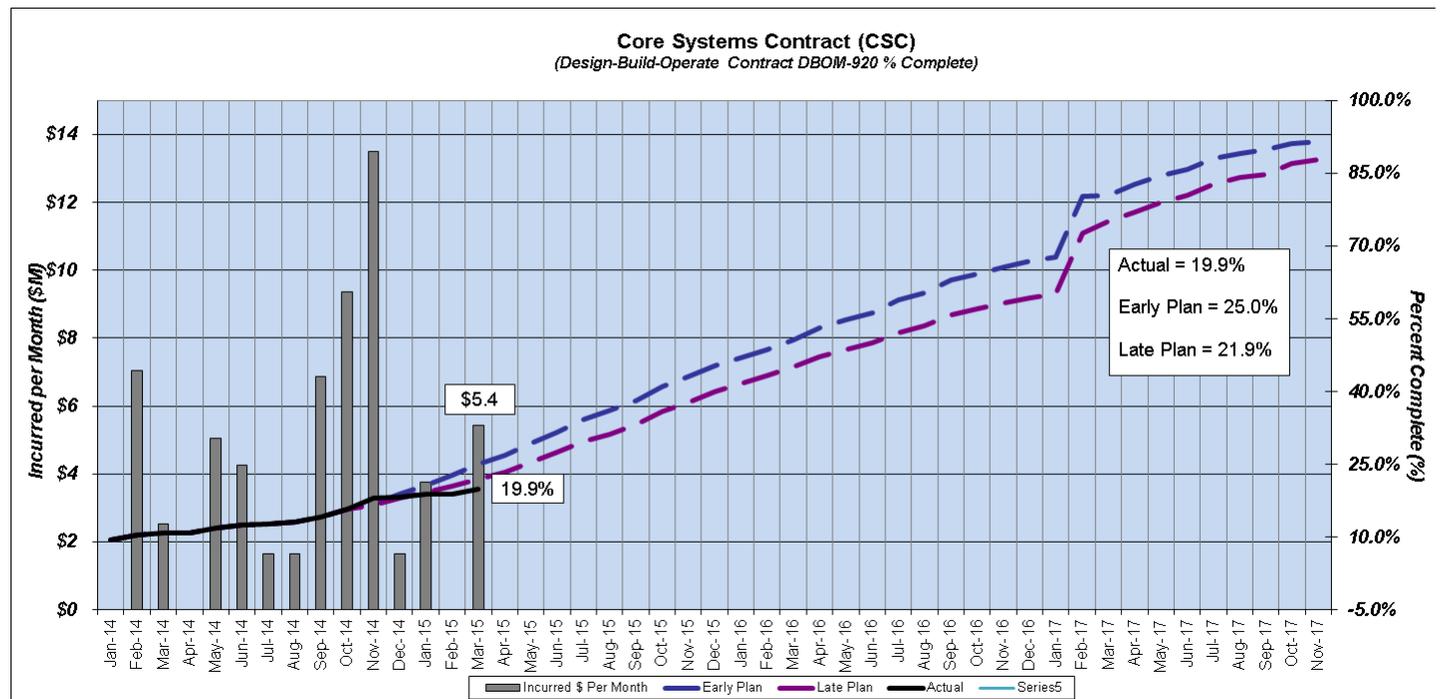
COST INFORMATION:

Original Contract:	\$573,782,793	Incurred-to-Date:	\$118,156,179
Current Contract Value <sup>1</sup> :	\$595,025,837	Incurred in March:	\$5,420,540

<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%

March Change Orders		
Change No.	Description	Amount (\$)
CCO 00016	Delete Passenger Counters Onbrd Time -Wifi Provsions on Veh	-\$114,161
<b>Cumulative to Date</b>		<b>\$21,243,044</b>





Activities this Month (continued):

**Manufacturing:**

- Performed manufacturing oversight at the AnsaldoBreda factory in Reggio Calabria, Italy.
- Completed a Buy America Audit to AnsaldoBreda (AB). The audit concluded that AB is compliant at this time.

**Testing:**

- Concluded ATC/SCADA Vehicle On-Board Equipment Environmental re-tests. AFO-IIC Transmitter needs to be retested.
- Started Factory Acceptance Tests for TES Equipment - Blue Light Stations.
- Completed Factory Acceptance Test for Electrical Operated Switches.
- Completed TPSS Enclosure water tightness test.

**MSF:**

- Coordinating work in the yard by KKJV, and coordinating follow up work by AHJV and On-Call Contractor.
- Discussed MSF shared access for Core Systems construction activities.

Look Ahead (continued):

- Pre-Shipping Inspection Test for Wireless Communication System – Plano, TX (May 29, 2015). Pre-Shipping Inspection Test Maintenance Management Information System (MMIS) – Plano, TX. (June 1, 2015).
- Pre-Shipping Inspection Test for Vehicle ATC System Cab racks – Batesburg, SC (May 11, 2015).
- Pre-Shipping Inspection Test for MSF SCADA Hardware – Batesburg, SC (June 15, 2015).
- Pre-Shipping Inspection Test for MSF TCCR Equipment – Batesburg, SC (June 15, 2015).
- UPS Prototype tests for Electromagnetic Compatibility (EMC), compliance with Underwriters Laboratories (UL) Standards, and Seismic Tests – China (May 8, 2015).
- UPS Design Verification Tests – China (May 8, 2015).
- Pre-Shipping Inspection Test for Rail Car Mover, Granite Falls, MN (May 2015).
- Pre-Shipping Inspection Test for High Reach Lift Truck and Rail Grinder – Granite Falls, MN (June 2015).
- Pre-Shipping Inspection Test for Fire Detection Systems – Honolulu (May 2015).

**MSF:**

- Work on installation of yard conduits.
- Start Yard Control Bungalow construction.

**KEY ISSUES:**

- Finalize options for shielding of communications equipment from Electromagnetic Interference (EMI) due to the proximity of the AM radio tower near the Middle Street Station. HART is evaluating alternatives to mitigate EMI.
- HART is closely monitoring Passenger Vehicle production in Italy and working with AnsaldoBreda (AB) to prepare for final assembly start-up in Pittsburg (CA).
- HART has provided 2 notices of delayed access; the July 2014 notice and the recent notice of delayed access due to the repackaging of stations and guideway contracts. HART and AHJV are continuing to work on options that minimize the cost and schedule impact associated with the delay.
- 4-Car Train – Negotiations are still in progress; HART is drafting the Negotiation Strategy Memo.
- AHJV has asserted that it has had a 9-month delay in starting work due to CSC protest. This issue is in mediation; AHJV submitted additional information, but it has been rejected by HART.

**QUALITY MANAGEMENT:**

- Testing and Oversight Activities:

Design Verifications & System Testing		
Subsystem	Test Completed	Date Completed
ATC/SCADA	Finalized retests of Vehicle Train Control Environmental and EMI Tests	March 2015
TES	Factory Acceptance Tests for TES Equipment - Blue Light Stations	April 10, 2015
TES	Factory Acceptance Test for Electrical Operated Switches	April 20, 2015
TES	Design Verification TPSS Enclosure water tightness test	April 21, 2015

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

CSC NCR Log			
	OPEN	CLOSED	TOTAL
AHJV	0	15	15
ASTS	0	2	2
AB	19	27	46
<b>TOTAL</b>	<b>19</b>	<b>44</b>	<b>63</b>

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

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



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

**Project Overview:** Elevator and Escalator equipment design was completed in January 2015. The release to begin manufacturing of the FHSg equipment occurred in March 2015, but has been put on hold pending the resolution of the current bid protest and contract award. The design for the West O’ahu Station Group was completed in March 2015. The Kamehameha Station Group will be completed in the third quarter of 2015.

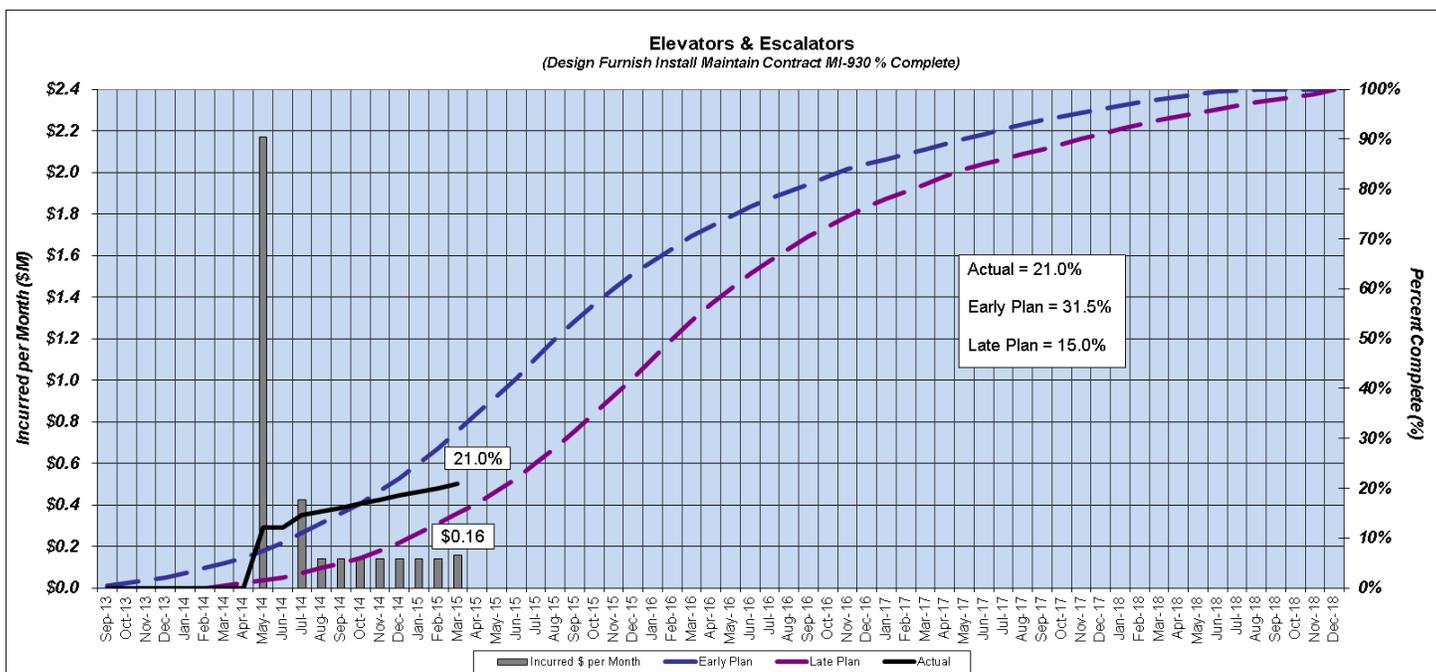
**COST INFORMATION:**

<u>Original Contract:</u> \$50,982,714	<u>Incurred-to-Date:</u> \$3,738,473
<u>Current Contract Value<sup>1</sup>:</u> \$50,982,714	<u>Incurred in March:</u> \$158,476

<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%

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





### C. Fare Collection System

**Contract No.:** TBD

**Contractor:** TBD

**Contract Start Date:** TBD

**Contract Substantial Completion:** TBD

**Projected Substantial Completion:** TBD

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

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

**Project Overview:** The technical specification for the project is complete and the remaining RFP package is 95% complete. Current schedule would see the start of procurement in early May 2015, provided COR review is timely. The MOU outlining cost sharing responsibilities with DTS has been finalized and is awaiting signature by all parties. Execution is assumed to be complete by May 2015. An additional MOU covering operations cost sharing will be required. Award of a Fare System Technical Support contract is anticipated in May 2015.

#### **COST INFORMATION:** TBD

#### **SCHEDULE:**

- Anticipated RFP release in May 2015 with RFP award anticipated for first quarter FY2016. System design anticipated for winter 2016.
- Manufacture in summer 2016.
- System testing for the back office functions and the bus anticipated in spring 2017.
- Anticipated system pilot launch on TheBus in June 2017 with full roll out on TheBus (including all central systems) for fall 2017.
- Interim roll out on rail in late 2018.
- Full roll out on rail in late 2019.

#### **CRITICAL PATH ISSUES:**

- MOU with City and County of Honolulu (DTS, BFS and DIT) signed committing to cost share operations is required prior to exercising any option with the selected vendor for the provision of the capital components of the integrated fare collection system.

#### **WORK PROGRESS:**

##### Activities this Month:

- Work to finalize and execute MOU with DTS, DIT and BFS for cost sharing components of the capital portion of the Fare Collection System.
- Completion of the draft RFP for review by COR.
- Work with PIG to set fare policy work plan and support City set up of a fare policy PIG.

##### Look Ahead:

- Issue Fare System RFP.
- Begin drafting MOU for cost sharing operations with DTS and BFS.
- Support City with establishment of a fare policy PIG.
- Review RFQ responses and award contract for Fare Systems Technical Support Services.

**KEY ISSUES:**

- Competing draft RFP and expediting review by COR in order to issue in early May 2015.
- Negotiating Scope of Work for Fare Systems Technical Support Services with the highest ranked RFQ respondent.
- Drafting MOU for cost sharing fare system operations and maintenance.

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

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

Contract No.: DB-120

DB Contractor: Kiewit Infrastructure West Company (KIWC)

Contract Start Date: December 2009

Contract Substantial Completion: July 2016

Projected Substantial Completion: October 2016

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



**Project Overview:** For the April 2015 Report, progress for utilities, shaft, column, segment casting, and span stressing have been updated. A major drilled shaft repair at Pier 144 was completed in addition to the Span 67 repair. Obtaining the 401/404 Permits for drill shafts operations to begin in the Pearl Highlands Station area still remains critical. Night work had been temporarily affected due to the expiration of the project’s Community Noise Variance Permit; a revised WOFH Community Noise Variance from HDOH was signed and placed into effect in April. The Project’s Key Quality Issues continue to focus on drilled shafts and segment repairs, in addition to the repairs of Span 17, Span 105 and Column 151.

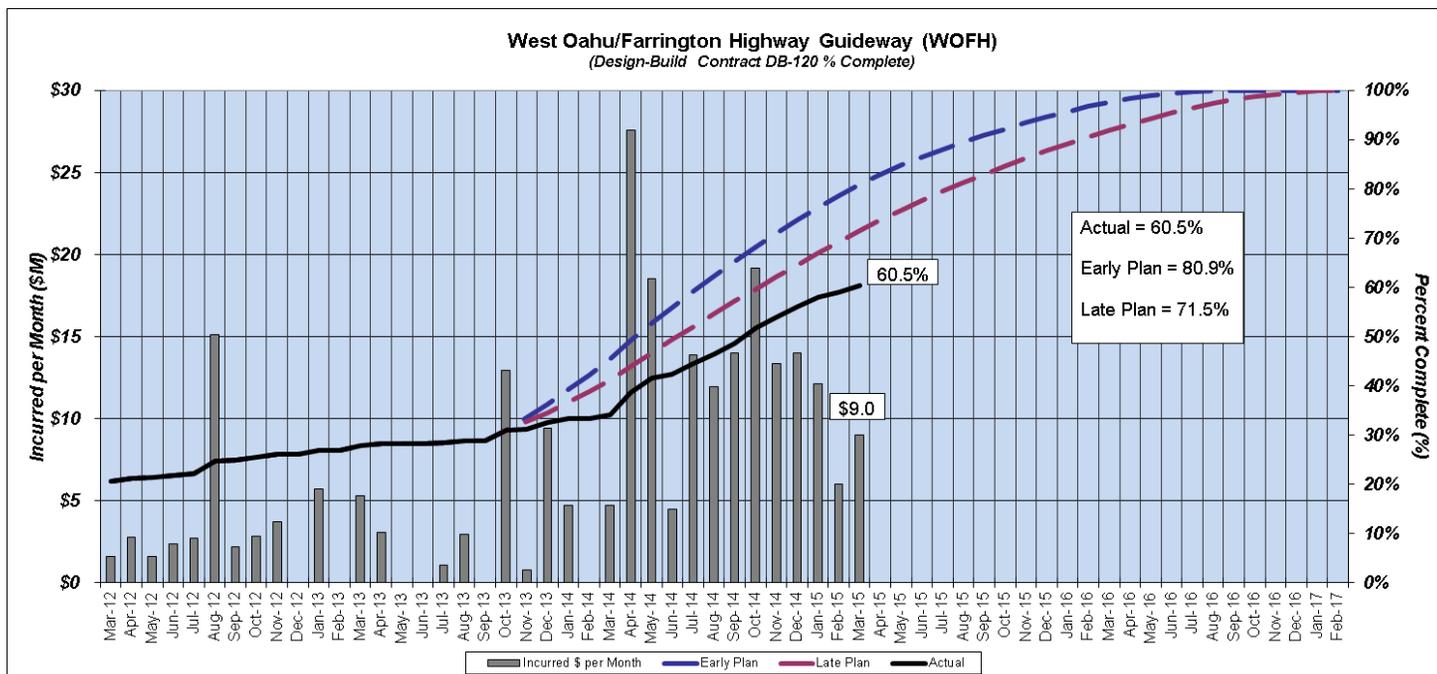
**COST INFORMATION:**

Original Contract:	\$482,924,000	Incurred-to-Date:	\$377,175,209
Current Contract Value <sup>1</sup> :	\$623,606,472	Incurred in March:	\$9,004,782

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

DBE Participation	
Actual DBE Participation:	\$3,681,646
DBE % Attained:	0.76%

March Change Orders		
Change No.	Description	Amount (\$)
CCO 00049	Hazmat Assessment for LCC Portables	\$9,174
<b>Cumulative to Date</b>		<b>\$140,682,472</b>



KIWC resubmitted Pay Applications #60 - #63 for November 2014 to February 2015, with retention applied, and HART has been processing these Pay Applications during the month of April. In April, KIWC also submitted Pay Application #64 for March 2015, but the Payment was rejected since retention was not applied. HART awaits resubmission of Pay Application #64.

**SCHEDULE:**

- Progress is lagging from the approved planned schedule. HART and KIWC have been working to mitigate impacts to critical path activities. HART reviewed a revised schedule and requested a resubmittal via the Change Order process.
- A second set of travelers has been incorporated at the Balanced Cantilever System area in order to mitigate potential schedule impacts.

March 2015 Update		Data Date: 27-Mar-15, Printed On: 08-Apr-15 14:35													
Activity Name	Start	Finish	2014			2015				2016					
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>Total</b>	08-Mar-12 A	31-Oct-16													
<b>West Guideways &amp; Structures</b>	08-Mar-12 A	31-Oct-16													
W. Oahu/Farrington Highway (WOFH) - Section 1	08-Mar-12 A	31-Oct-16													
W. Oahu/Farrington Highway Guideway	08-Mar-12 A	31-Oct-16													
<b>Kiewit WOFH Summary</b>	08-Mar-12 A	31-Oct-16													
<b>Foundations</b>	08-Mar-12 A	18-Dec-15													
Drilled Shafts	23-Apr-12 A	09-Nov-15													
Columns	21-May-12 A	18-Dec-15													
At Grade	08-Mar-12 A	31-Aug-15													
<b>Guideway</b>	29-Jan-14 A	26-Sep-16													
Precast Segment Erection	29-Jan-14 A	26-Sep-16													
Balanced Cantilever Segments	10-Sep-14 A	01-Dec-15													
<b>Trackwork</b>	12-May-15	31-Oct-16													
Direct Fixation Trackwork	12-May-15	30-Sep-16													
Third Rail	10-Dec-15	31-Oct-16													

**CRITICAL PATH ISSUES:**

- HART continues to work to resolve construction right of entry for the UH LCC campus.
- A change order for the procurement and delivery of portables at LCC was executed. The lead time for these modular buildings will have an impact to the overall schedule. KIWC has notified HART that a 6 month time extension beyond substantial completion is needed to complete work at LCC. HART is currently reviewing this situation and is working with the contractor to mitigate a potential delay.
- Production rates for span erection continue to reside near critical path.
- Obtaining the 401/404 Permit is necessary for KIWC to begin drilled shaft work at the Pearl Highlands Station area.
- Work in the Balanced Cantilever System area has slipped from the October 2014 schedule and is nearing critical path with minimal total float days available.

**WORK PROGRESS:**

WOFH Status as of 4/17/15

Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	Total to Date	Planned to Date*	Total Qty	% Complete
Water Line	8,528	9,348	91.2%	Shafts	206	192	266	77.4%
Sewer Line	550	570	96.5%	Columns	153	143	266	57.5%
Fuel Line	340	340	100%	Segment Casting	2,640	3,163**	3,163**	83.5%
Gas line	1,498	1,591	94.2%	Spans Stressed	108	102	266**	40.6%
Drainage Line	3,325	5,166	64.4%	* The planned values are based on KIWC's Pending October Schedule Revision dated Dec. 5, 2014.				
Elec/Telecom	14,856	21,374	69.5%	** Total quantity for spans stressed have been revised to reflect the original number of spans.				
Street Lights	5,975	8,357	71.5%					
Traffic Sig/ITS Duct bank	6,031	10,802	55.8%					
System Sites	-	7,046	0%					
ITS Systems Devices	821	4,121	19.9%					

Activities this Month:

**Earned Value: 62.4%** [(Total Achieved to March 2015 (\$377 million) + Projected April 2015 Period (\$12 million))/Total Contract Including Executed Change Orders (\$623 million)]. Planned Value: 73.6%

**Shaft/Column**

- Performed drilled shaft construction, drilling, and placed concrete for a total of 3 drill shafts. Placed concrete for 6 columns. Completed the drill shaft repair for Shaft 144.

**Guideway Segment Erection**

- Eastbound heading segments were erected for Span 116 through Span 121. Westbound heading segments were erected for Span 16 and Span 15.

Look Ahead:

**Design Progress**

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

**Shaft/Column**

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

**Guideway Segment Erection**

- Segment span erection will continue from Span 15 westbound towards East Kapolei Station, and from Span 121 eastbound along Farrington Highway.

Activities this Month (continued):

**Utility Relocation**

- Addressed utility conflicts along the alignment, relocating traffic signals, streetlights, and existing water/sewer lines. HECO relocating power lines. Third-party companies relocating overhead fiber-optic lines.

**Balanced Cantilever Structure**

- Cast in place segment 253-2D and 254-1U. Completed traveler assembly at Pier Table 254. Placed concrete at pier table for Pier 255 for soffit, stem wall, and diaphragm. Pour first lifts for columns at Piers 256 US and DS.

**Track Construction**

- Completed welding operations on the eastside of Ho’opili Station. Rail was stockpiled on the guideway when complete. Operations have been relocated on the westside of Ho’opili Station to resume welding operations.

**Precast Yard**

- Precast Yard performed daily segment and sound wall casting at a reduced pace, averaging 9 segments per day or 45 segments per week, because span by span operations is trailing segment casting production.

**KIWC/Third-Party Coordination**

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

Look Ahead (continued):

**Utility Relocation**

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

**Balanced Cantilever Structure**

- KIWC will continue to cast-in-place upstream and downstream segments for the balanced cantilever at Piers 253 and 254. Complete concrete placement for the pier table at Pier 255. Column concrete placement will continue at Pier 256.

**Track Construction**

- Welding operations will continue along the guideway west of Ho’opili Station. Rail will be stockpiled on guideway when complete. Setting track and placing concrete for plinths is continuing east of the double crossover by Ho’opili Station.

**Precast Yard**

- Production of segment casting and sound walls are expected to continue at a rate of 9 segments per day.

**KIWC/Third-Party Coordination**

- Continue to resolve conflict construction and traffic issues with third-party agencies (HDOT, DTS, HECO and Hawaiian Telcom).

**KEY ISSUES:**

- **Design Completion Schedule** – The Project’s design schedule continues to be tracked closely by HART. Comment Disposition and Over-the-Shoulder Meetings also continue to occur. As of mid-April, 106 of 127 design submittals have been submitted. HART will continue to facilitate the third-party review process and will track against KIWC’s design schedule.
- **Leeward Community College (LCC) Portables and Parking Lot Change Order** – In order for KIWC to begin work at the LCC Station area, four (4) portable buildings need to be relocated to another location within the campus. Change Order 063, Procurement of LCC Portables, was executed. KIWC has a pre-construction Right of Entry (ROE) and borings have begun. A grading permit will be needed prior to the granting of a full construction ROE.
- **Construction Production/Baseline Schedule** – Meeting the project’s schedule will continue to be a challenge for the project. A re-sequenced baseline schedule was submitted to HART in October 2014 showing more realistic construction durations. The schedule is being used to track progress against schedule of milestones. HART and KIWC continue to meet to discuss further refinements to durations and activities within the schedule.
- **HDOT Traffic Signal Betterments** – HDOT has requested various betterments beyond KIWC’s base scope of work. These requests have prevented KIWC from finalizing their design and obtaining approval from HDOT. In March, KIWC presented a list of contract work versus betterments. HART had reviewed these items and in April agreed to the final scope of work. KIWC is providing pricing for the agreed upon scope which will be presented to HART in the coming weeks.
- **Hawai’i Department of Health (DOH) Section 401 Permit** – In order for KIWC to begin drilled shaft work at the Pearl Highlands Station, HART will need to obtain a Section 401 Permit, a Section 404 Permit from the U.S. Army Corps of Engineers (Corps), and a Hawaiian Coastal Zone Management (CZM) Permit. These permits will allow KIWC to impact certain Waiawa Stream Tributary and Waiawa Stream areas. The 401 Permit began a 30 day review period at the end of March and is expected to be issued in May 2015. Although HART has since received a conditional 404 Permit, the full 404 Permit will be issued after the 401 Permit is obtained. The CZM permit began a review period in April and was approved by the end of the month. Phase 1 (diversion of stormwater pipes into Waiawa Stream) work and drilling of shafts at Pearl Highlands Station will proceed after the permits are in place.
- **Community Noise Variance Permit** – This HART provided noise variance had expired in mid-April. Due to the expiration, night work was temporarily suspended affecting progress on the balanced cantilever, utilities, and span by span. A revised WOFH Community Noise Variance from HDOH was signed and placed into effect on April 21, 2015.

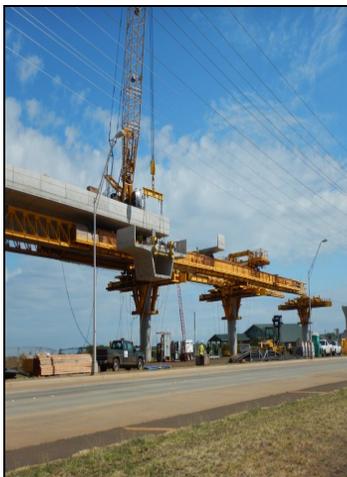
**KEY QUALITY ISSUES:**

- **Span 67 Damage and Repair** – During the erection process of Span 67, the underside of Segments 67-11 and 67-12 were damaged due to unbalanced support from the temporary bearings. In March 2015, KIWC de-stressed the span and erected two replacement segments onto the falsework. In April, the span was re-stressed and brought back into its original location. The repair is now complete and is no longer a key quality issue. This replacement was done to ensure the segments meet HART’s quality standards.
- **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 in March to address this issue. KIWC continues to evaluate the extent of the damage. A root cause analysis and repair procedure alternatives will be submitted to HART for review.
- **Span 105 Damage and Repair** – While setting Span 105 into its final horizontal and vertical position, the span shifted while on the jacks. Span 105 made contact with nearby Spans 104 and 106. NCR 00336 was opened in April, while damage to Spans 104, 105 and 106 are being evaluated. Due to this incident, final span alignment operations were temporarily suspended to re-evaluate the procedures.
- **Column 151 Damage and Repair** – In April, Column 151 was poured, but after formwork was removed, the lower concrete surface of the column exhibited large areas of honeycombing and rock pockets with localized areas of exposed vertical and horizontal reinforcing, possibly due to insufficient concrete consolidation. NCR 00331 was opened in April to address this issue and KIWC is currently in the process of determining the appropriate repair procedure.
- **Drill Shaft Quality** – HART received nine additional drill shaft Crosshole Sonic Logging (CSL) Reports in April 2015. Eight of the drilled shafts were found to have velocity reductions outside of the acceptable design criteria limits, potentially because concrete was segregated during concrete placement; one of the shafts had no issues. Of the 235 drilled shafts that have been tested to date, HART has requested that KIWC provide additional testing and/or modifications to 56 shafts to ensure that the shafts meet the specifications. KIWC continues to have weekly Drill Shaft Quality Meetings with HART to discuss testing results, quality, the concrete mix, and methods for repair.
- **Drill Shaft Repairs** – Of the 56 drill shafts that are being reviewed in detail, eight new NCRs have been opened and submitted to HART this month. HART will not close an NCR until KIWC completes another CSL test and demonstrates soundness of the concrete shaft as well as when all HART comments are responded to. KIWC completed repair work at Shaft 144 and can now continue with column construction approaching eastbound on Farrington Highway toward West Loch Station in preparation for the segment erection. The next major drill shaft repair is expected to be at Pier 235.

- **Pre-Cast Segment Progress/Quality** – The Casting Yard has scaled back in production to allow time for span erection efforts to catch up. Production is now averaging 45 segments per week and is currently 83.5% complete with segment production for the overall project. 2,640 segments have been cast to date. Although 104 of the total 339 NCRs (30.7%) have been related to segmental issues like damaged shear keys, concrete voids, and spalls, proper correction procedures have already been developed and are being implemented.
- **Closing Out NCRs** – NCRs are being promptly corrected, validated, and closed out during this period. Both KIWC and HART have been working together to complete all the needed processes for timely validation. A total of 20 NCRs have been closed since last month. Of the 20, 10 were related to pre-cast segment issues, one was for the superstructure, six were related to drill shaft issues, one post-tensioning issue, and two concrete strength issues.
- **Flash Butt Track Welding & Track Construction Operations** – KIWC moved their welding operations to the Ho’opili Station area where another 347 welds have been completed in the area directly east of the station. These welds cover track between STA 500+00 to STA 580+00. By mid-April, welding operations have moved to the area west of Ho’opili Station where another 476 welds will be worked on. KIWC is expected to complete 20-25 welds per day and quantities are being reported to HART on a weekly basis. KIWC will continue to also prepare the concrete plinth trackwork heading eastward past the double crossover at Ho’opili Station.
- **BCS Form Advancement** – KIWC has made great strides in the Balanced Cantilever construction. The two sets of travelers were assembled at the beginning of April on Pier Tables 253 and 254. KIWC is already forming, casting, and stressing segments both upstream and downstream segments from Pier 253 as well as upstream of Pier 254. As of mid-April, 6 of 84 BCS segments have been stressed (7.1%). Lane closures to redirect traffic on the H-1 are being adequately coordinated with third parties.
- **Base Grouting** – Base grouting work at the base of select drill shafts began this month. The grout ties the drilled shaft to the rock socket which allows for a more stable structural support system. Base grouting reports continue to be submitted to HART in a timely manner.
- **MSE Wall by Pier 251 & Cast-in-Place Wall F** – Both walls continue to be the main civil/structural focus for April. KIWC has been progressing work for both walls as scheduled and with proper coordination with the MSF project. Coordination meetings are ongoing and the West Yard Lead area is expected to remain on time for a January 2016 train delivery.

WOFH NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
339	252	87

PROJECT PICTURES:



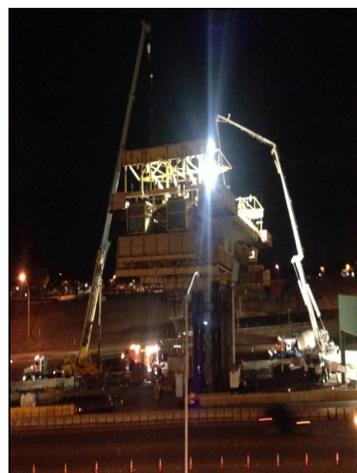
Erecting guideway segments for Span 16, Work Area 1.



Erecting rebar at Column 256US, Work Area 6.



Concrete placement at Column 150, Work Area 2.



Concrete placement at Balanced Cantilever 253-2U, Work Area 6.

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



**Contract No.:** FD-140

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

**Contract Start Date:** June 2012

**Construction Docs Bid-Ready:** April 2015

**Projected Substantial Completion (Construction):** November 2017

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

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

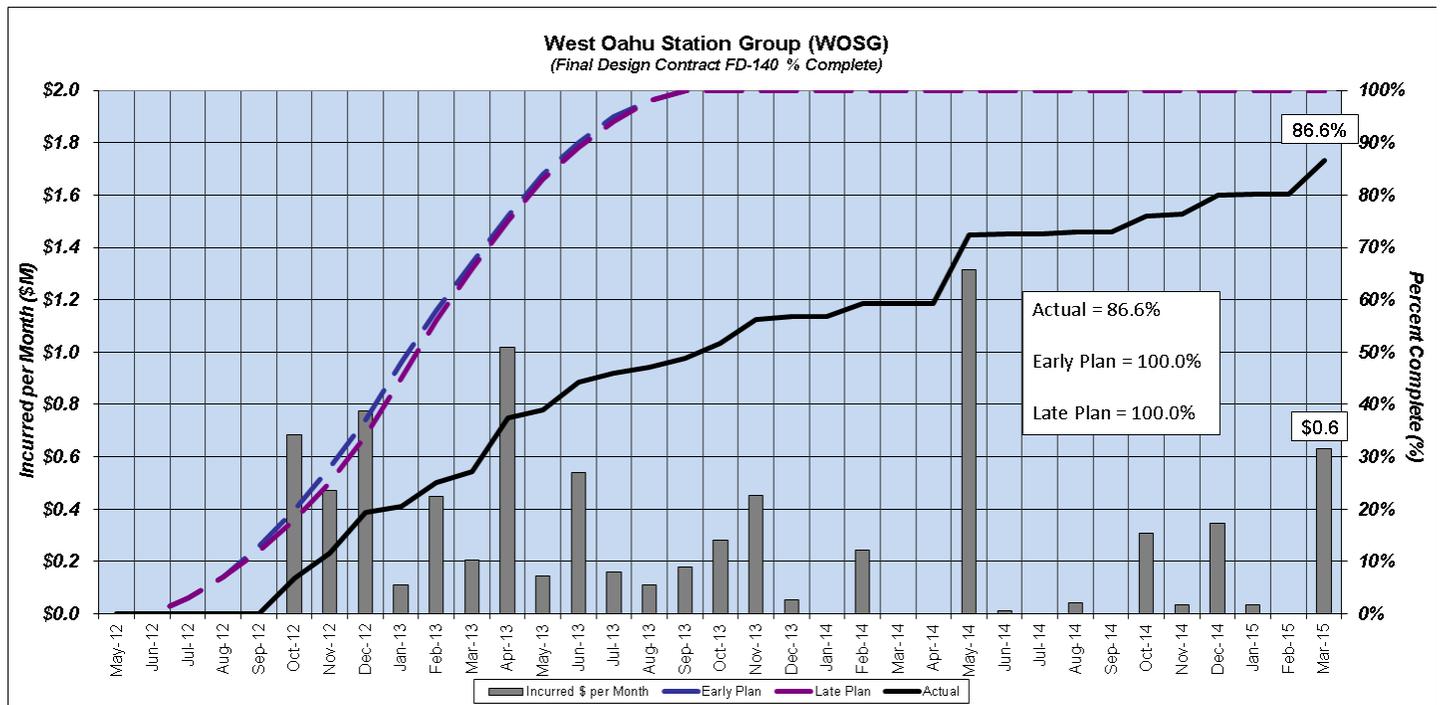
**COST INFORMATION:**

Original Contract:	\$7,789,000	Incurred-to-Date:	\$8,587,327
Current Contract Value <sup>1</sup> :	\$9,920,305	Incurred in March:	\$629,167

<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%

March Change Orders/Amendment		
Change No./Amend	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$2,376,305</b>



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

**SCHEDULE:**

March 2015 Update			Data Date: 27-Mar-15, Printed On: 08-Apr-15																	
Activity Name	Start	Finish	2015				2016				2017				2018					
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1				
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	14-Jan-10 A	24-Jan-18																		
<b>W. Oahu Station Group</b>	14-Jan-10 A	24-Jan-18																		
Design - W. Oahu Station Group	14-Jan-10 A	12-Dec-17																		
Construction - W. Oahu Station Group	05-Aug-15	24-Jan-18																		
East Kapolei Station	05-Aug-15	12-Dec-17																		
UH West Oahu Station	27-Oct-15	24-Jan-18																		
Ho'opili Station	05-Aug-15	13-Sep-17																		

**CRITICAL PATH ISSUES:**

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

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 91%.
- Received final plan set for bidding purposes.
- Issued the package in a DBB procurement.
- Interfacing design with CSC, WOFH and EE contracts.
- Coordinating with private developer and utility companies 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.
- Obtain outstanding third-party approvals.
- Finalize agreements with adjacent land owners.

**KEY ISSUES:**

- Coordinating with HDOT to resolve significant policy level design review comments.
- Documenting interface agreements between design consultants. Tentatively scheduling risk evaluation meeting(s) to assess any unresolved interfaces prior to bid opening.

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

**Contract No.:** FD-240

**Contractors:**

**URS Corporation**

Start Date: Sept. 27, 2013

End Date: June 2017

**HDR Engineering, Inc.**

Start Date: Jan. 12, 2011

End Date: April 5, 2013

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



**Projected Substantial Completion (Construction):** August 2017

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

**Project Overview:** The FHSG DBB construction package was issued for bid in December 2014. Bids were opened on March 3, 2015. The FHSG procurement is currently under protest.

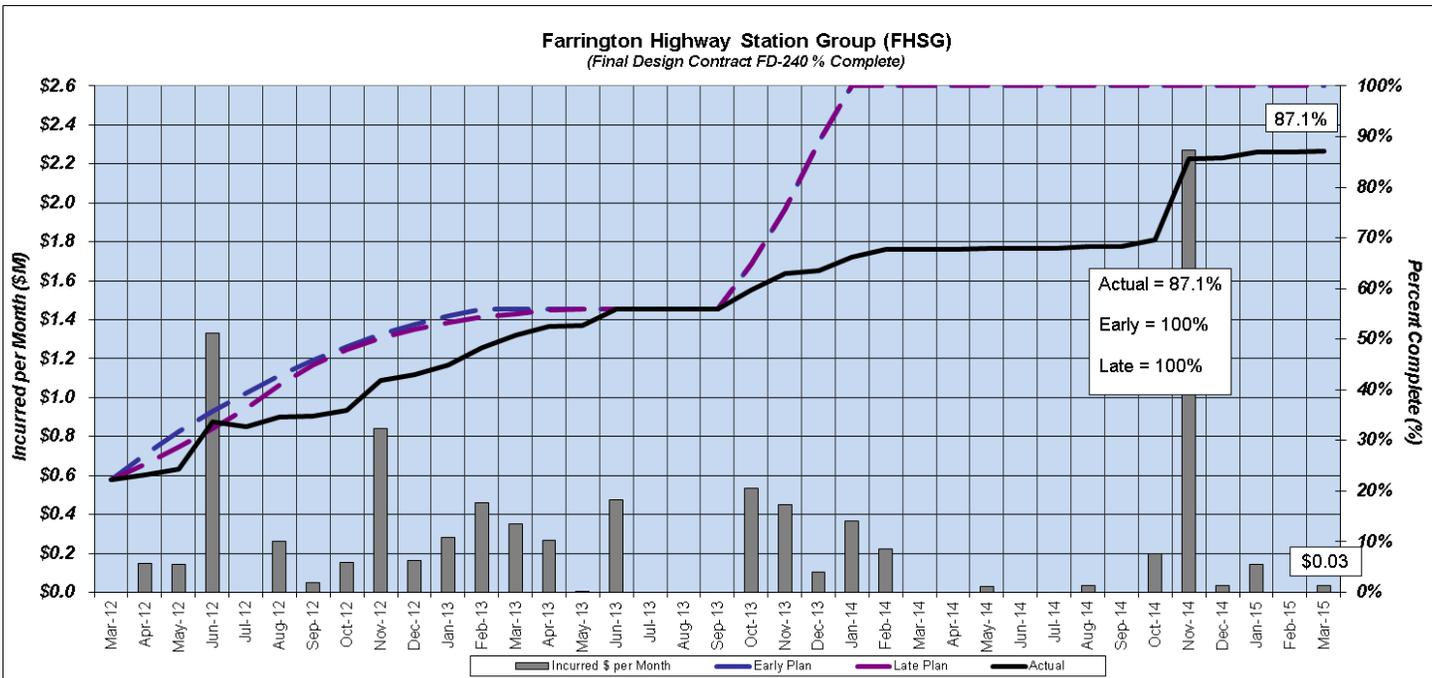
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$9,300,696</u>	<u>Incurred-to-Date:</u>	<u>\$12,366,404</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$14,198,045</u>	<u>Incurred in March:</u>	<u>\$34,060</u>

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

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

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



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

**SCHEDULE:**

March 2015 Update			Data Date: 27-Mar-15, Printed On: 20-Apr-15														
Activity Name	Start	Finish	2015				2016				2017						
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	02-Oct-09 A	10-Oct-17															
<b>Farrington Highway Station Group</b>	02-Oct-09 A	10-Oct-17															
Design - Farrington Highway Station Group	02-Oct-09 A	01-Aug-17															
Construction - Farrington Highway Station Group	06-Apr-15	10-Oct-17															
West Loch Station	07-Jul-15	01-Aug-17															
Waipahu Transit Station	06-Apr-15	10-Oct-17															
Leeward Community College Station	08-Oct-15	26-Sep-17															

**CRITICAL PATH ISSUES:**

- HART is proactively facilitating the finalization and documentation of interface agreements between the FHSG, CSC, WOFH and EE contracts to ensure consistency in these designs prior to construction.
- HART is coordinating and forecasting construction access milestones between interfacing contracts.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 80%. This value appears low relative to other station groups due to the proportionally larger value of its construction services budget. However, the design scope of this contract is substantially complete.
- Finalizing design interface resolutions with all interfacing design consultants.
- Pursuing approvals from third parties.

Look Ahead:

- Obtain all third-party approvals.
- Obtain remaining HART-provided construction permits and rights of entry.
- Document design agreements with interfacing partners.
- Award construction contract.

**KEY ISSUES:**

- Tracking resolution of designs that interface with FHSG prior to construction.
- Tracking construction access handoff dates with WOFH contractor.
- Obtaining access to properties required for construction at West Loch Mauka and Leeward Community College.

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

**Contract No.:** DB-200

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

**Contract Start Date:** July 2011

**Contract Substantial Completion:** April 2016

**Projected Substantial Completion:** April 2016



**Project Description:** The MSF contract consists of the operations and servicing building, maintenance of way, train wash facility and wheel truing building. In addition to the four (4) facility buildings, MSF includes rail procurement, special trackwork, ties, third rail and other track material for the four guideway segments on the project.

**Project Overview:** MSF substantial completion remains 6 calendar days behind schedule due to weather delays that impacted critical construction activities. HART is evaluating a time extension by KKJV.

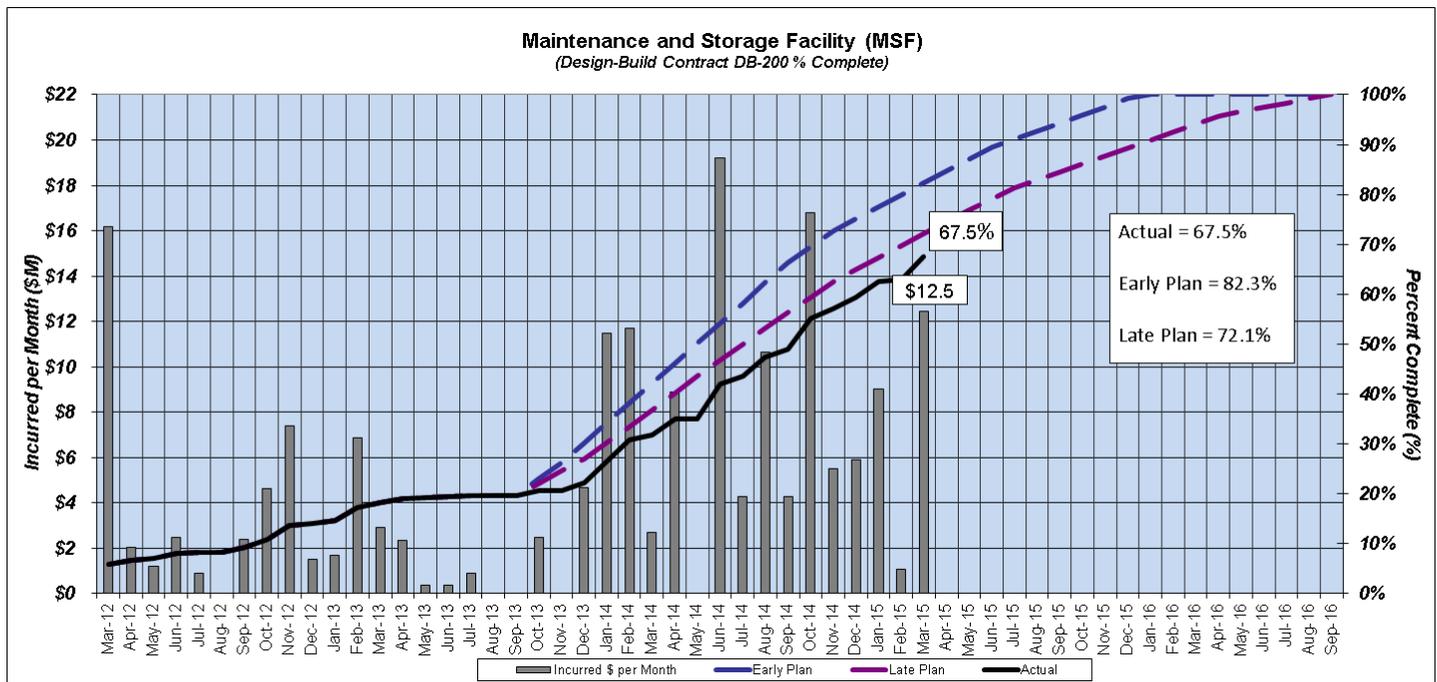
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$195,258,000</u>	<u>Incurred-to-Date:</u>	<u>\$185,123,743</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$274,808,008</u>	<u>Incurred in March:</u>	<u>\$12,453,449</u>

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

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

March Change Orders		
Change No.	Description	Amount (\$)
CCO 00030	OSB 1st Fl Bldg Int Ext System Design Rev	\$450,000
<b>Cumulative to Date</b>		<b>\$79,550,008</b>



**SCHEDULE:**

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

March 2015 Update			Data Date: 27-Mar-15, Printed On: 08-Apr-15 11:17								
Activity Name	Start	Finish	2015				2016				
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<b>Total</b>	29-Aug-11 A	21-Apr-16									
<b>Maintenance &amp; Storage Facility (MSF)</b>	29-Aug-11 A	21-Apr-16									
<b>Design</b>	29-Aug-11 A	27-Jan-15 A									
Design & Engineering	29-Aug-11 A	27-Jan-15 A									
<b>Construction</b>	26-Jul-12 A	21-Apr-16									
Site Civil/Utilities	26-Jul-12 A	23-Mar-16									
Operations & Servicing Building	27-Nov-13 A	08-Feb-16									
Maintenance of Way Building	12-May-14 A	07-Dec-15									
Wheel Truing Building	18-Jul-14 A	29-Sep-15									
Yard Trackwork	17-Feb-15 A	29-Feb-16									
Train Wash Facility	23-Mar-15 A	24-Feb-16									
Third Rail	09-Jul-15	22-Jan-16									
Project Facility Commissioning, Closeout & Turnover	09-Oct-15	21-Apr-16									

**CRITICAL PATH ISSUES:**

- MSF contract substantial completion date is indicating 6 calendar days late. This delay is due to inclement weather beyond the norm that impacted construction operations in the fourth quarter of 2014. HART is considering a zero cost time extension request made by KKJV for 6 calendar days.
- Scheduling work related to test track and functional track to support program opening dates.
- Coordination with abutting WOFH main line contract for completion of track work in west yard, and utilities and site access in the east yard.

MSF Construction Status as of 4/30/15	
Element	% Complete
OSB	60%
MOW Building	55%
WTB	70%
Rail Procurement	96%

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 71%** [(Total Achieved to March 2015 (\$184.8 million) + Projected April 2015 Period (\$9.75 million))/Total Contract Including Executed Change Orders (\$274.3 million)]. Planned Value: 73%

**Yard/Utilities**

- Installing/testing site electrical, water, sewer and drainage systems.
- Installing conduit for systems, communications, train control, traction power, site electrical and exterior lighting.
- Installing rail turnouts in the yard.
- Installing track subdrain and subballast, and ballast material at west side of S1-10 track and west side of maintenance track.
- Placed concrete for TPSS utility slab.

**Operations and Servicing Building (OSB)**

- Installing metal framing.
- Installing roof.
- Placing concrete for OSB elevated slabs.
- Installing rail car lifts.
- Commenced mechanical/electrical/plumbing.

**Maintenance of Way (MOW)**

- Installing interior and exterior walls.
- Installing roof/floor pan decking.
- Commenced mechanical/electrical/plumbing.

Look Ahead:

- Installation of M Track turnouts.
- Train Wash Facility Structure.
- Complete TPSS work.

Activities this Month (continued):

**Wheel Truing Building (WTB)**

- Completed slab on grade placement.
- Commenced mechanical/electrical/plumbing.
- Installing embedded tracks at WTB.

**TPSS**

- Placed concrete for utility trench and TPSS slab.

**Rail Procurement and Installation**

- Receiving materials and installing turnouts.
- Distributing rail materials to WOFH.
- Installation of rail turnout SY-21, SY-22, SY-23, SY-25, SY-26, SY-27 and SY02.
- Installed pre-curved rail.

**Administration**

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

**KEY ISSUES:**

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

**KEY QUALITY ISSUES:**

MSF NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
24	24	0

**PROJECT PICTURES:**



Hydraulic car lift box excavation at OSB.



HVAC installation at MOW.



Rail installation at midsection of storage track.



Train Washing Facility footing excavation.



Track subdrain at west side of M tracks.



Layout rail concrete ties through WTB.

### 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:** April 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 continued at both the east and west ends of the project. HECO’s schedule continues to slip, and to date only a single utility conflict has been remedied to 100% on the KHG contract. HART has deployed a dedicated noise monitor to respond to complaints and document contractor compliance.

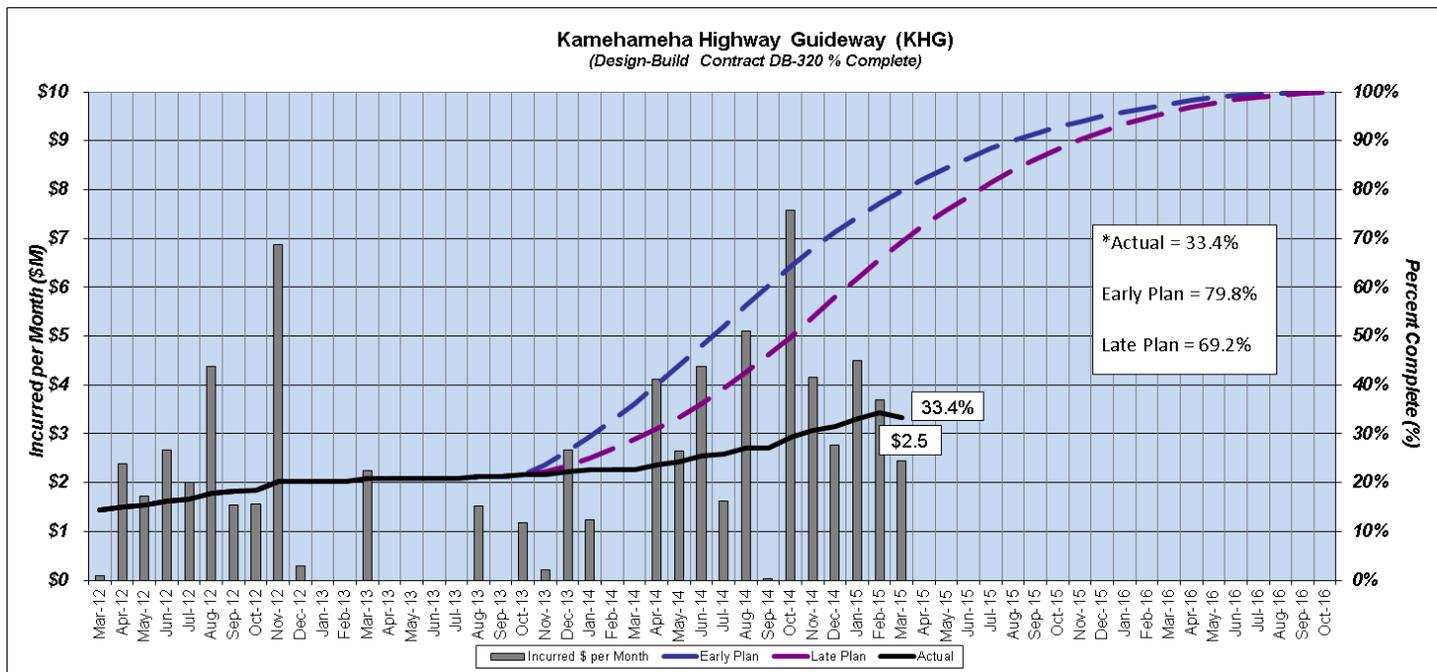
#### COST INFORMATION:

<u>Original Contract:</u>	<u>\$372,150,000</u>	<u>Incurred-to-Date:</u>	<u>\$132,892,290</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$388,515,363</u>	<u>Incurred in March:</u>	<u>(\$3,624,829)</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%

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



\*Actual Percentage adjusted due to final value of pay request #39 thru #43.

- Schedule of Milestone revision 8 has been submitted and approved.
- Progress payments 39 (October), 40/41 (November/December), 42 (January), and 43 (February) have been submitted and approved.

**SCHEDULE:**

- The accepted re-baselined schedule dated Oct. 28, 2013 is no longer valid, and HART has requested a recovery schedule showing how KIWC would achieve the currently agreed upon substantial completion date of Sept. 16, 2016. KIWC initially proposed a list of mitigation measures that would allow recovery, but has since notified HART that the substantial completion date is no longer achievable. They have provided a draft schedule.
- HART has reviewed the schedule and requested re-submittal via change order process.

March 2015 Update			Data Date: 27-Mar-15, Printed On: 08-Apr-15 14:57											
Activity Name	Start	Finish	2015				2016				2017			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
<b>Total</b>	26-Dec-14 A	28-Jun-17	Forecast Dates - Dates Not Approved											
<b>West Guideways &amp; Structures</b>	26-Dec-14 A	28-Jun-17												
<b>Kamehameha Highway (KH) - Section 2</b>	26-Dec-14 A	28-Jun-17												
<b>Kamehameha Highway Guideway</b>	26-Dec-14 A	28-Jun-17												
<b>Kiewit KHG Summary</b>	26-Dec-14 A	28-Jun-17												
<b>Foundations</b>	26-Dec-14 A	30-Nov-16												
Drilled Shafts	26-Dec-14 A	29-Sep-16												
Columns	05-Feb-15 A	30-Nov-16												
<b>Guideway</b>	06-Apr-15	23-Jan-17												
Precast Segment Erection	06-Apr-15	23-Jan-17												
Cast BC Segments	06-Jul-15	23-Aug-16												
<b>Trackwork</b>	30-Sep-15	15-Mar-17												
Direct Fixation Trackwork	30-Sep-15	01-Mar-17												
Third Rail	15-Oct-15	15-Mar-17												
<b>KHG Project Finish Work, Demob, Punchlist</b>	08-Apr-16	28-Jun-17												

**CRITICAL PATH ISSUES:**

- HECO’s schedule continues to slip, and to date only a single utility conflict has been remedied to 100% on the KHG contract. Further work within the Aloha Stadium main parking lot is pending relocation of utility conflicts in the area.
- Permanent easements: of the 15 locations that require permanent easements for relocated utilities, 7 have been resolved, allowing construction to progress during the finalization of the easement documents. The remaining 8 easements will require meetings and negotiations with the five (5) owners. A MOU allowing HECO to proceed under a right of entry (ROE) while easements are being obtained is still pending.
- Due to delays in the Design-Builder’s coordination and construction of utility relocation work, drilling of shafts 305 – 308 was delayed. To mitigate the delay, KIWC began drilling at the Aloha Stadium area.

**WORK PROGRESS:**

KHG Construction Status as of 4/17/15								
Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	Total to Date	Planned to Date*	Total Qty**	% Complete
Water Line	3,547	4,362	81%	Shafts	29	12	186	16%
Gas Line	11,069	12,641	88%	Columns	0	0	169	0%
Sewer Line	522	1,077	48%	Segment Casting	0	0	2,075	0%
Drainage	536	2,081	26%	Segment Erection	0	0	2,075	0%
Elec/Telecom	8,387	19,455	43%	Spans Stressed	0	0	156	0%
Signals/ITS/Lights	8,549	18,486	46%	* The planned values are based on KHG’s pending October schedule revision dated Dec. 5, 2014. **Total Quantity based on KIWC interim plans. Final design has not been completed.				

Activities this Month:

**Earned Value: 37.7%** [(Total achieved to February 2015 (\$129.6 million) + March 2015 and April 2015 projections (\$16.9 million))/Total contract including executed Change Orders (\$389 million)]. Planned Value: 72.7%

**Shaft/Column**

- 29 of 186 shafts have been installed.

Look Ahead:

**Design Progress**

- HART and KIWC are working together to complete final design. To date, 32 of 46 drawing packages have been issued for construction.

Activities this Month (continued):

**Utility Relocation Progress**

- Gas and water line relocations are ongoing in Phases 5, 6, 11 and 12.
- The relocation of HECO electrical lines and Hawaiian Telcom, Oceanic Time Warner and Intelligent Transportation Systems (ITS) duct banks is occurring in Phases 4 through 8.
- Sewer line relocation is occurring in Phase 11.

**Traffic Signals**

- Traffic signal installation is ongoing throughout the limits of the project.
- Installation of license plate readers has begun.

**Roadway Widening**

- Roadway widening activities are ongoing in Phases 10 and 11.

Look Ahead (continued):

**Utility Relocation**

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

**Guideway Structure**

- KIWC has completed all available shafts in the Aloha Stadium area. Completion of shafts within the main stadium parking lot will resume after utility (HECO) relocations have occurred.
- Segment casting will start for the KHG EJ segments.
- KIWC has ordered an additional truss which is expected to be delivered in May and operational in July.

**Roadway Widening**

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

**KEY ISSUES:**

- HECO work continues to be delayed, has impacted the current shaft installation schedule and has caused additional mobilization and productivity impacts to KIWC.
- Permanent easements: of the 15 locations that require permanent easements for relocated utilities, 7 have been resolved, allowing construction to progress during the finalization of the easement documents. The remaining 8 easements will require meetings and negotiations with the five (5) owners. A MOU allowing HECO to proceed under a right of entry (ROE) while easements are being obtained is still pending resolution at an elevated HART level.
- HDOT betterments are still pending agreement at an elevated level of what constitutes a betterment, and how funding will be transferred from HDOT to HART.

**KEY QUALITY ISSUES:**

- **Project specifications** – Current project construction items of work are being built in compliance with the originally issued specifications. HART has requested that where KIWC is requesting a variance from the original project specifications, a project specification be developed and submitted for approval through the standard submittal process.

KHG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
52	40	12

**PROJECT PICTURES:**



Drilling Shaft 275, Phase 1.



Blessing ceremony, Phase 13.



Grouting abandoned waterline, Phase 12.



Shaft drilling, Phase 13.



Widening work, Phase 10.



Reinforcing in Shaft 411L, Phase 12.

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

**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 active procurement)  
 Kamehameha Highway Stations: August 2015  
**Projected Substantial Completion (Construction):**  
 H2R2 Highway Ramp: May 2016  
 Kamehameha Highway Stations: August 2018



**Project Description:** The Kamehameha Highway Stations Group FD Contract (KHSB) consists of architectural and engineering services for the design of three (3) transit stations situated along the Kamehameha Highway Guideway. The three (3) stations comprising the KHSB 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 KHSB design is being revised to incorporate value engineering changes in preparation for a construction solicitation in August 2015. In addition, the H2R2 Ramp was broken out and expedited under a separate Design-Bid-Build construction solicitation. The H2R2 Ramp bids were received on April 28, 2015.

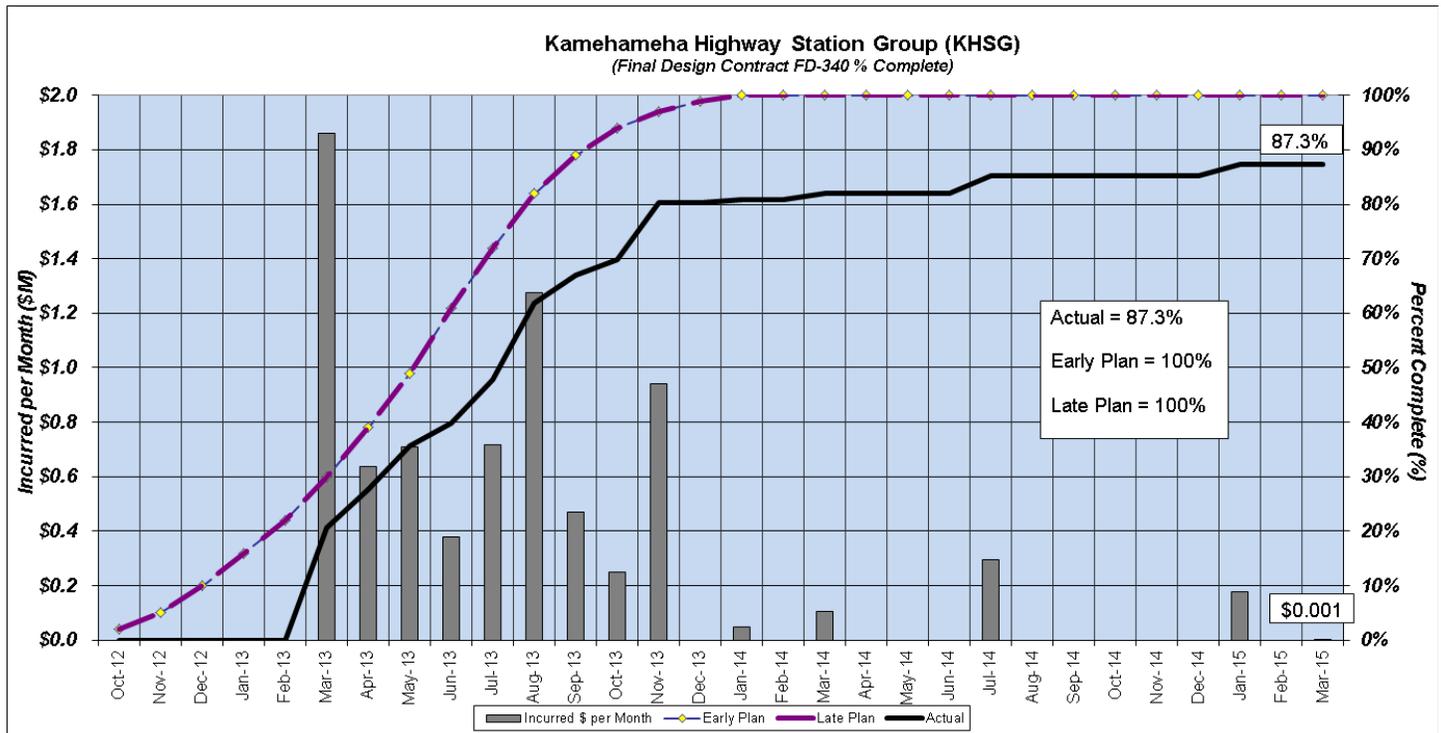
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$8,702,592</u>	<u>Incurred-to-Date:</u>	<u>\$7,867,143</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$9,011,768</u>	<u>Incurred in March:</u>	<u>\$1,002</u>

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

DBE Participation	
Actual DBE Participation:	\$3,281,530
DBE % Attained:	37.71%

March Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
CCO 00006	Aloha Stdm Pkg Lot & LID/PH Ramps & Bearing Pads/All Stn Platform	\$352,176
<b>Cumulative to Date</b>		<b>\$352,176</b>



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

**SCHEDULE:**

March 2015 Update			Data Date: 27-Mar-15, Printed On: 08-Apr-15															
Activity Name	Start	Finish	2015					2016				2017				2018		
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
<b>Kamehameha Highway (KH) - Section 2</b>	28-Jun-11 A	01-Jun-18																
<b>Kamehameha Highway Station Group</b>	28-Jun-11 A	01-Jun-18																
Design - Kamehameha Highway Station Group	28-Jun-11 A	05-Mar-18																
Construction - Kamehameha Highway Station Group	01-Dec-15	01-Jun-18																
Pearl Highlands - Station	01-Dec-15	22-Dec-17																
Pearl Ridge Station	31-Aug-16	01-Jun-18																
Aloha Stadium Station	22-Jan-16	22-Dec-17																

**CRITICAL PATH ISSUES:**

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

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 93%.
- Interfaced design with the CSC, WOFH, KHG and EE contracts.
- Received final design for HART final review.
- Resolving third-party comments.
- Bids opened on H2R2 package on April 28, 2015.

Look Ahead:

- Document remaining design interface agreements.
- Obtain third-party approvals on remaining items.
- Support development of independent cost estimate.
- Prepare construction bid package for August 2015 advertisement.

**KEY ISSUES:**

- HDOT and the Federal Highway Administration (FHWA) accepted the Interstate Access Modification Report (IAMR) in late April 2015.
- Pursuing 401/404 Permit from Hawai’i Department of Health (DOH) Clean Water Branch. Approval anticipated in May 2015.

### 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
  - RFP Part 1 for DB (Qualifications): April 2015
  - RFP Part 2 for DB (Proposals): July 2015

In Construction:

- Airport Section Utilities (DBB-505 - Nan Inc.):
  - Started July 2014
- Airport 7-Piers (DBB-525 – Hawaiian Dredging):
  - Started September 2014

Projected Substantial Completion (Construction): June 2019

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

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

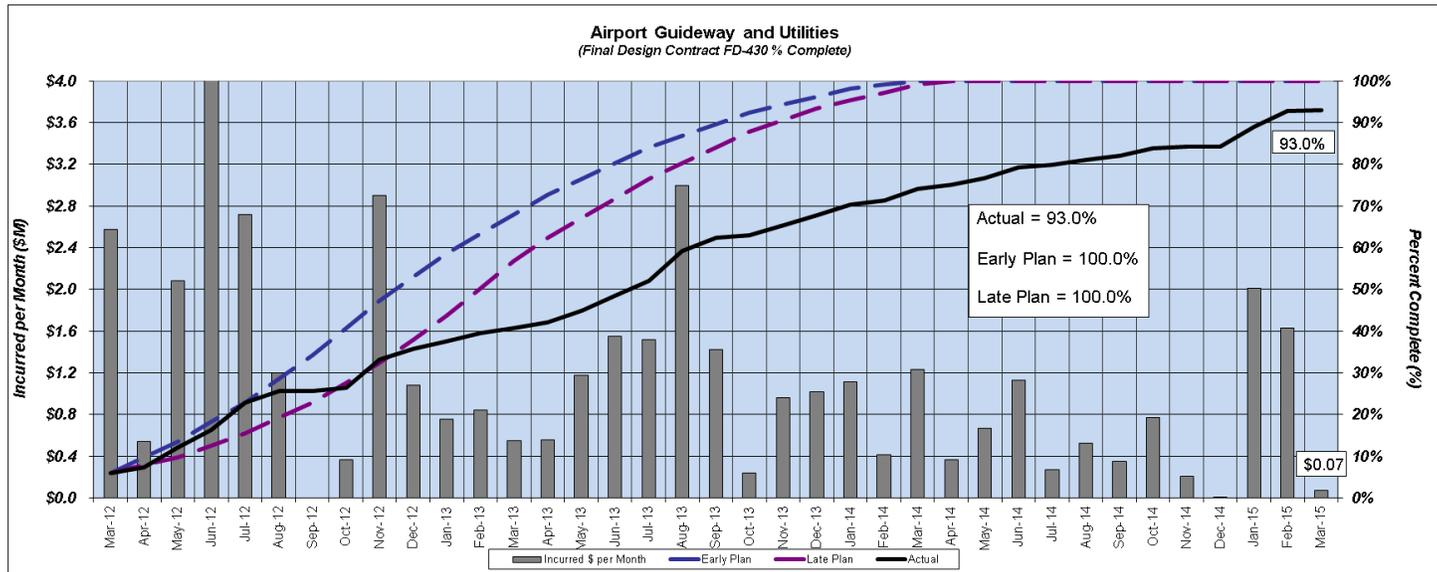
**COST INFORMATION:**

<u>Original Contract:</u> \$38,840,960	<u>Incurred-to-Date:</u> \$39,626,445
<u>Current Contract Value<sup>1</sup>:</u> \$42,610,832	<u>Incurred in March:</u> \$68,870

<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%

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



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



**B. Airport Section Utilities Construction**

**Contract No.:** DBB-505

**Contractor:** Nan, Inc.

**Contract Start Date:** July 2014

**Contract Substantial Completion:** February 2016

**Projected Substantial Completion:** April 2016

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



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

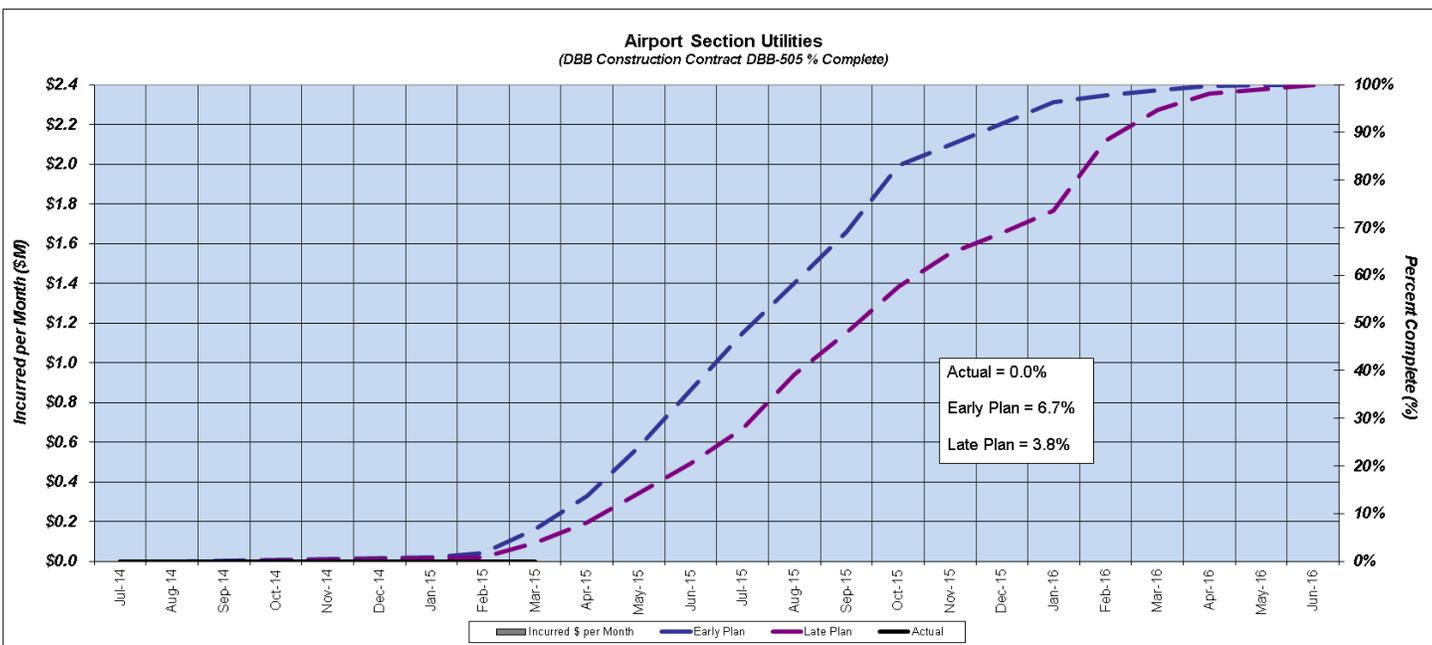
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$28,413,974</u>	<u>Incurred-to-Date:</u>	<u>\$0</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$28,413,974</u>	<u>Incurred in March:</u>	<u>\$0</u>

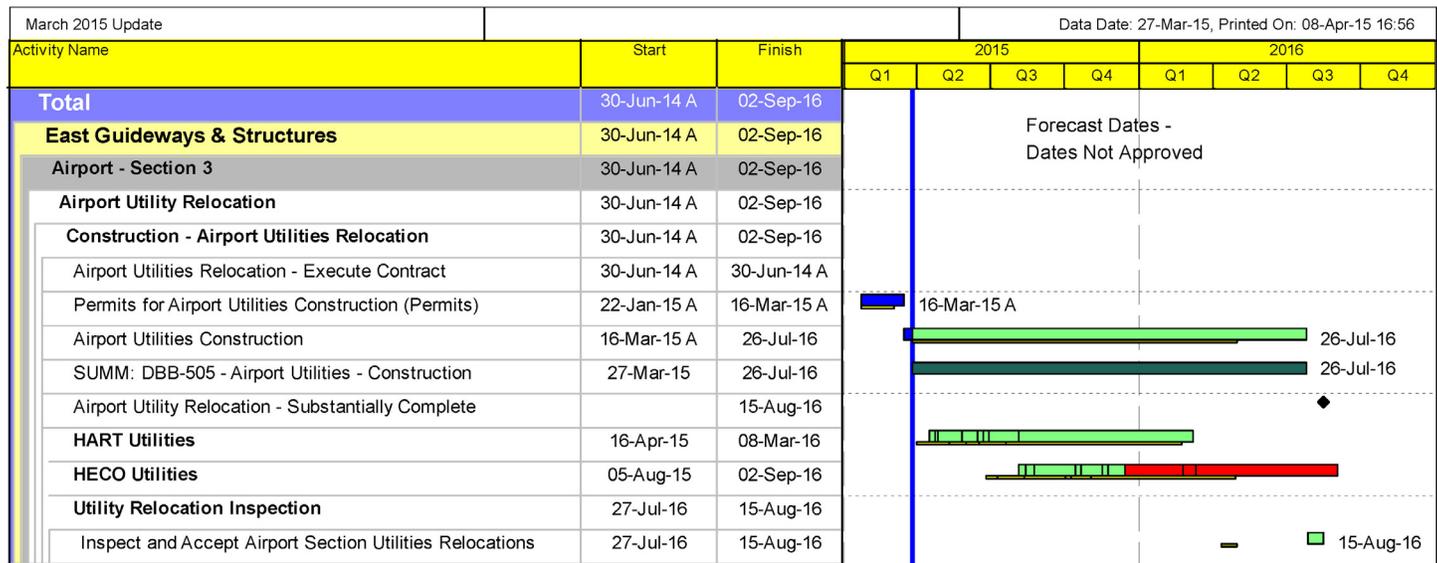
<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

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

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



**SCHEDULE:**



**CRITICAL PATH ISSUES:**

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

**WORK PROGRESS:**

Activities this Month:

Earned Value: 4.57%; Planned Value: 16.78%

- Nan, Inc. has submitted a baseline construction schedule, which has been approved. They are working on a revised baseline schedule based on deductive RFCRs that has been issued.
- Quality Management Plan (QMP) has been resubmitted by Nan and approved by HART.
- Nan, Inc. continues to submit RFI and shop drawings for approvals.
- Nan, Inc. continues installation of license plate reader (LPR) cameras.
- Nan, Inc. has commenced installation of an 18-inch sewer line, 24-inch water line, and a telecom line along Kamehameha Highway.

Look Ahead:

- Continue working on Kamehameha Highway utility work that is not impacted by Navy ROE.
- Evaluate other areas that Nan’s work can be redirected if Navy access is not provided.

**KEY ISSUES:**

- Navy right of entry to perform work
  - Ongoing coordination with HART ROW regarding obtaining access to Navy property for construction related work.
  - Potential construction delays.
- Nan, Inc. is presently behind schedule; lack of Navy access could further impact the schedule.
- Noise variance to perform night work is pending DOH approval. Permit is being held up at Department of Health.
- Navy/HDOT property ownership discrepancies; meeting is being set up for discussion.

**KEY QUALITY ISSUES:**

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

Airport Utilities NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
2	1	1

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

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



**Project Description:** The Airport 7-piers contract consists of seven drilled shaft foundations installed within the HNL INTERIM CAR RENTAL FACILITY work area. The contractor has completed installing seven pier foundations, No. 546, 547, 548, 549, 550, 551R and 552R. This work involves close coordination with the HDOT Airport and Kiewit, who is the contractor for the HNL INTERIM CAR RENTAL FACILITY.

**Project Overview:** HDCC/CJA JV has substantially completed the work, with the exception of final demobilization from the site. Existing BMPs and traffic control measures are to be turned over to the CONRAC project and HDOT-A. The Contract Scope of Work was completed in April, slightly ahead of schedule.

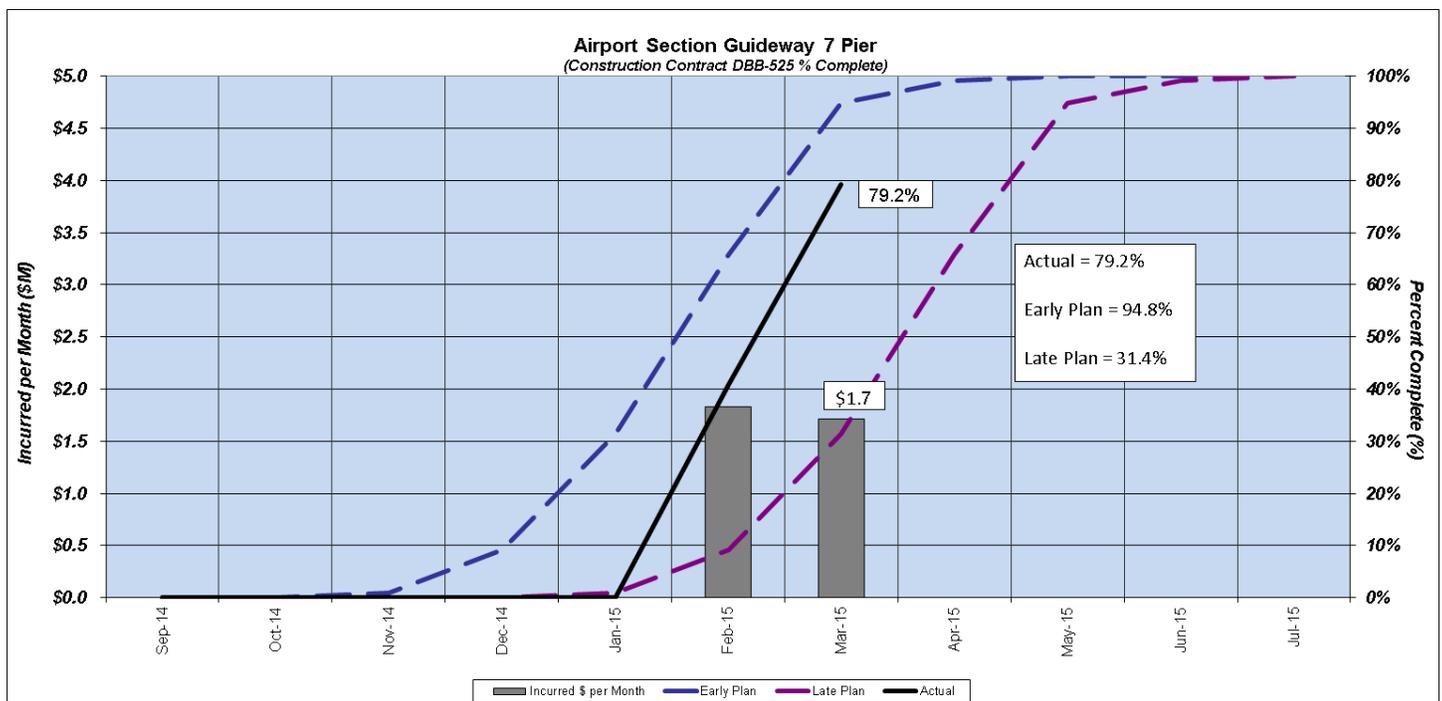
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$3,973,000</u>	<u>Incurred-to-Date:</u>	<u>\$3,536,152</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$4,463,863</u>	<u>Incurred in March:</u>	<u>\$1,710,142</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%

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



**SCHEDULE:**

March 2015 Update				Data Date: 27-Mar-2015, Printed On: 08-Apr-2015 18:56							
Activity Name	Start	Finish	Finish Variance	2015				2016			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Total</b>	18-Sep-2014 A	30-Apr-2015	0								
NTP	18-Sep-2014 A		0								
Mobilization	19-Sep-2014 A	28-Jan-2015 A	0								
Drilled Shafts	26-Jan-2015 A	17-Apr-2015	0								
Transition Zone Rebar Cages	09-Feb-2015 A	30-Apr-2015	0								
Pour Foundation Piers	11-Feb-2015 A	23-Apr-2015	0								

**CRITICAL PATH ISSUES:**

- None.

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 81%; Planned Value: 81%**

- Completed CMP casing work at all seven (7) piers.
- Concrete curbs and paving completed at Piers 552R, 551R and 550.
- Asphalt paving completed at Piers 546 and 548.
- Inspection for Substantial Completion was performed on April 22, 2015.
- Demobilization of M999 Crane and other equipment from the site.
- Attending weekly HDOT-Airport construction update meetings to monitor updates on Kiewit’s construction progress (INTERIM CAR RENTAL FACILITY) at Honolulu Airport.
- Weekly meetings with HART/CE&I/ HDCC/CJA JV to discuss coordination and key issues.
- Utility relocations ongoing in the field nearing completion.

Look Ahead:

- Complete final site demobilization and cleanup.
- Certification of CIL’s is to be completed and finalized.
- Responding to RFI’s and submittal reviews as required.
- Process outstanding change orders.
- HDCC to provide field data for preparation of as-builts.

**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
  - RFP Part 1 for DB (Qualifications): Issued April 2015
  - RFP Part 2 for DB (Proposals): July 2015

**Projected Substantial Completion (Construction):** June 2019

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

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



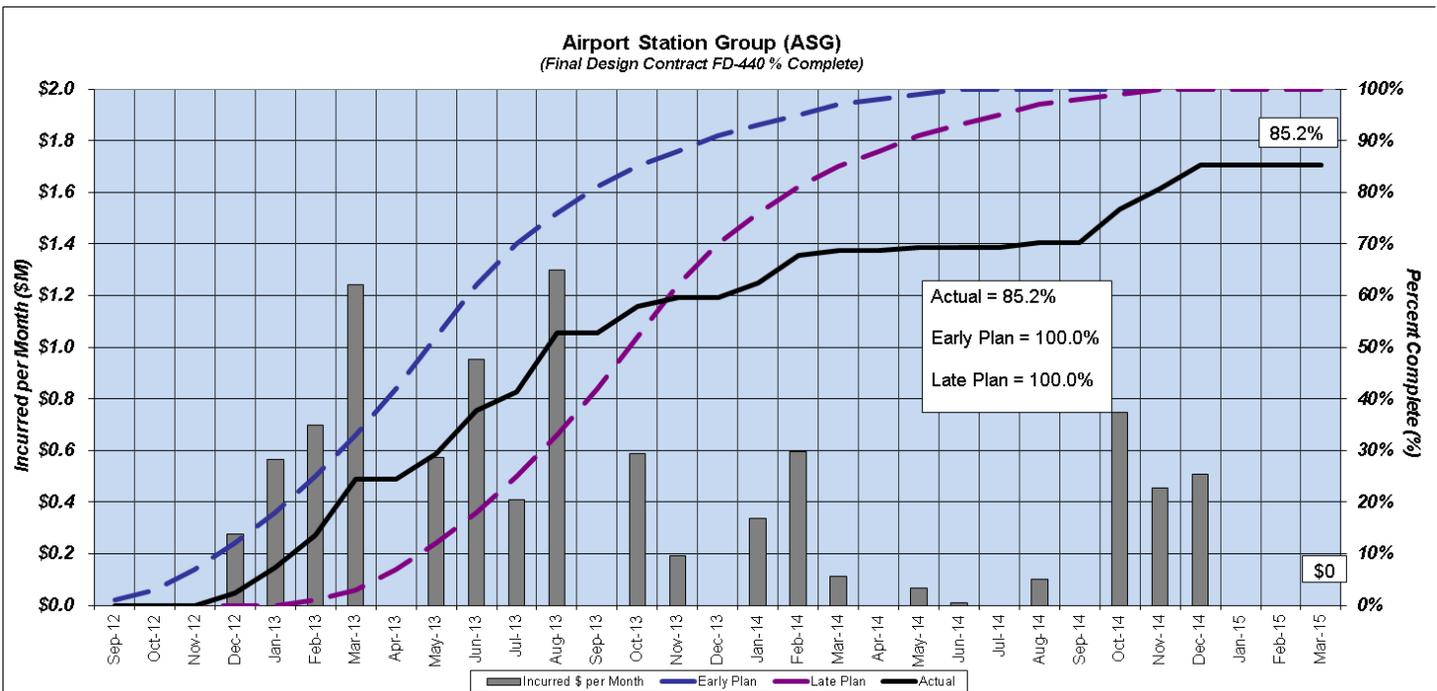
**COST INFORMATION:**

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

March Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$1,224,840</b>



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

**SCHEDULE:**

March 2015 Update			Data Date: 27-Mar-15, Printed On: 08-Apr-15																
Activity Name	Start	Finish	2015				2016				2017				2018				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Airport - Section 3</b>	02-May-11 A	02-Nov-18																	
<b>Airport Station Group</b>	02-May-11 A	02-Nov-18																	
Design - Airport Station Group	02-May-11 A	01-Feb-16																	
Construction - Airport Station Group	02-Mar-16	02-Nov-18																	
Pearl Harbor Station	02-Mar-16	22-Sep-17																	
HNL Airport Station	31-May-16	09-Jan-18																	
Lagoon Drive Station	18-Apr-16	06-Nov-17																	
Middle Street Station	15-Jul-16	02-Nov-18																	

**CRITICAL PATH ISSUES:**

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

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 88%.
- Combining stations and guideway documents into a single bid package.
- Preparing RFP Part 2 documents for station design, specifications and project constraints.
- Pre-bid Conference held with potential offerors.

Look Ahead:

- Prepare bid package for pre-advertisement review.
- Qualifications proposals are scheduled to be submitted in early June.

**KEY ISSUES:**

- Coordinating with the Core Systems team to determine requirements for Faraday shield for mitigating Electromagnetic Interference (EMI) due to the proximity of the AM radio tower near the Middle Street Station.
- Acquiring parcel for the Pearl Harbor Station site by closely coordinating with U.S. Navy.
- Preparing RFP Part 2 documents to capture functional and quality requirements while allowing for innovation and savings.

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

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

**Contract No.:** FD-530

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

**Contract Start Date:** July 2012

**Construction Docs Bid-Ready:**

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

**Projected Substantial Completion (Construction):** TBD



**Project Description:** The City Center Guideway and Utilities final design contract consists of 4.17 miles of elevated transit guideway serving eight (8) passenger stations, in addition to roadway widening, utility relocation and other improvements to facilitate construction of the guideway.

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

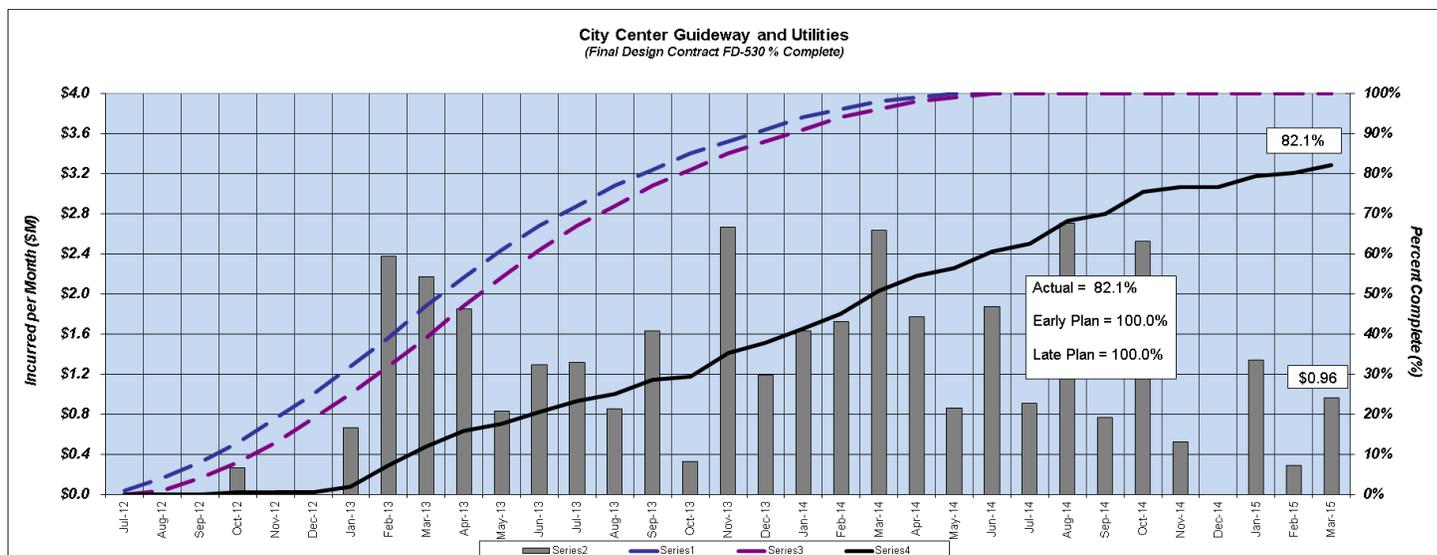
#### COST INFORMATION:

Original Contract:	\$43,948,220	Incurred-to-Date:	\$37,934,209
Current Contract Value <sup>1</sup> :	\$46,183,523	Incurred in March:	\$960,390

<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%

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



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

**SCHEDULE:**

March 2015 Update														Data Date: 27-Mar-15, Printed On: 04-May-15 14:04											
Activity Name	Start	Finish	2014			2015			2016				2017				2018				2019				
			Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
<b>Total</b>	19-Aug-11 A	30-Jun-19																							
City Center Programmatic	01-Nov-11 A	05-Oct-15																							
City Center Permits	19-Aug-11 A	08-Dec-15																							
Design - City Center Guideway & Utilities	01-Jul-12 A	03-May-15																							
Construction - City Center Guideway & Utilities	01-Jun-16	30-Jun-19																							

**CRITICAL PATH ISSUES:**

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

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 88%.
- Coordinating with HDOT, HECO and other stakeholders.
- Pursuing rights-of-way and rights of entry.

Look Ahead:

- Obtain third-party approvals.
- Determine appropriate scope to include in expedited utilities package.
- Develop requirements for DB bid package.

**KEY ISSUES:**

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

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

**Contract No.:** FD-550

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

**Contract Start Date:** August 2013

**Construction Docs Bid-Ready:**

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

**Projected Substantial Completion (Construction):** TBD



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

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

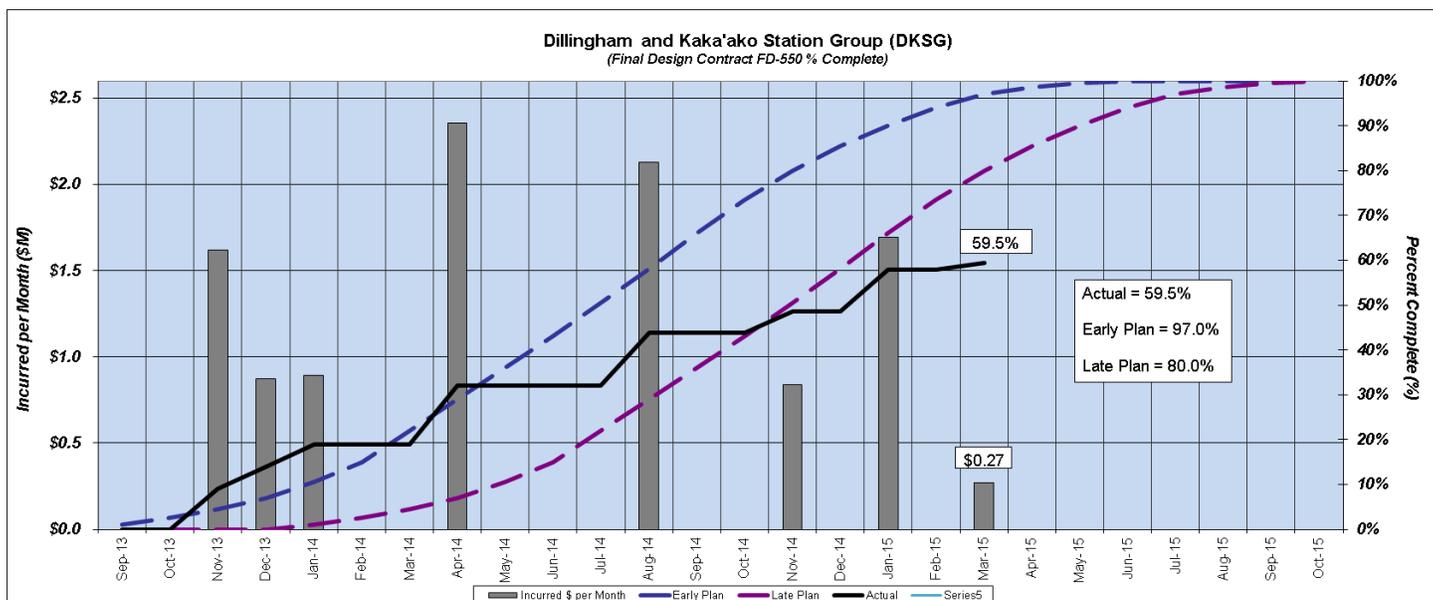
**COST INFORMATION:**

<u>Original Contract:</u> \$18,321,918	<u>Incurred-to-Date:</u> \$10,667,500
<u>Current Contract Value<sup>1</sup>:</u> \$18,974,447	<u>Incurred in March:</u> \$270,537

<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%

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



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



### 4.6 Project-Wide

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

Contract No.: MM-901

Contractor: InfraConsult LLC

Contract Start Date: March 8, 2012

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

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

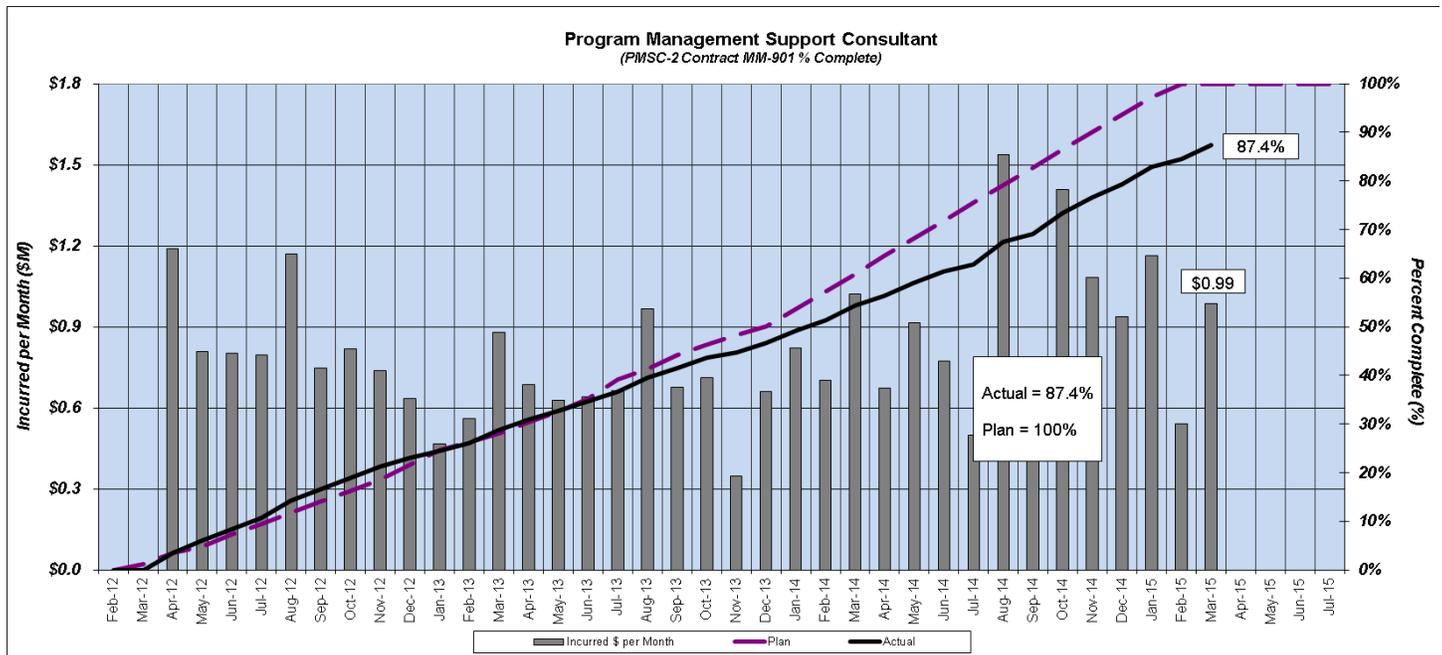
#### COST INFORMATION:

Original Contract:	\$33,376,897	Incurred-to-Date:	\$29,182,181
Current Contract Value <sup>1</sup> :	\$33,376,897	Incurred in March:	\$986,901

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

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

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



#### KEY ISSUES:

- The original contract completion date was March 7, 2015, with an option to renew the contract up to two years. An amendment to the contract to extend the contract for one year with an option to renew the remaining one year was entered into between HART and InfraConsult LLC, effective March 8, 2015.

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

**Contract No.:** MM-913

**Contractor:** CH2M HILL

**Contract Start Date:** December 2013

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

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

**Project Overview:** The GEC III supported HART’s efforts to provide the Navy critical information for the Makalapa Historic Districts and supported the release of the procurement for the Airport Guideway and Stations package.

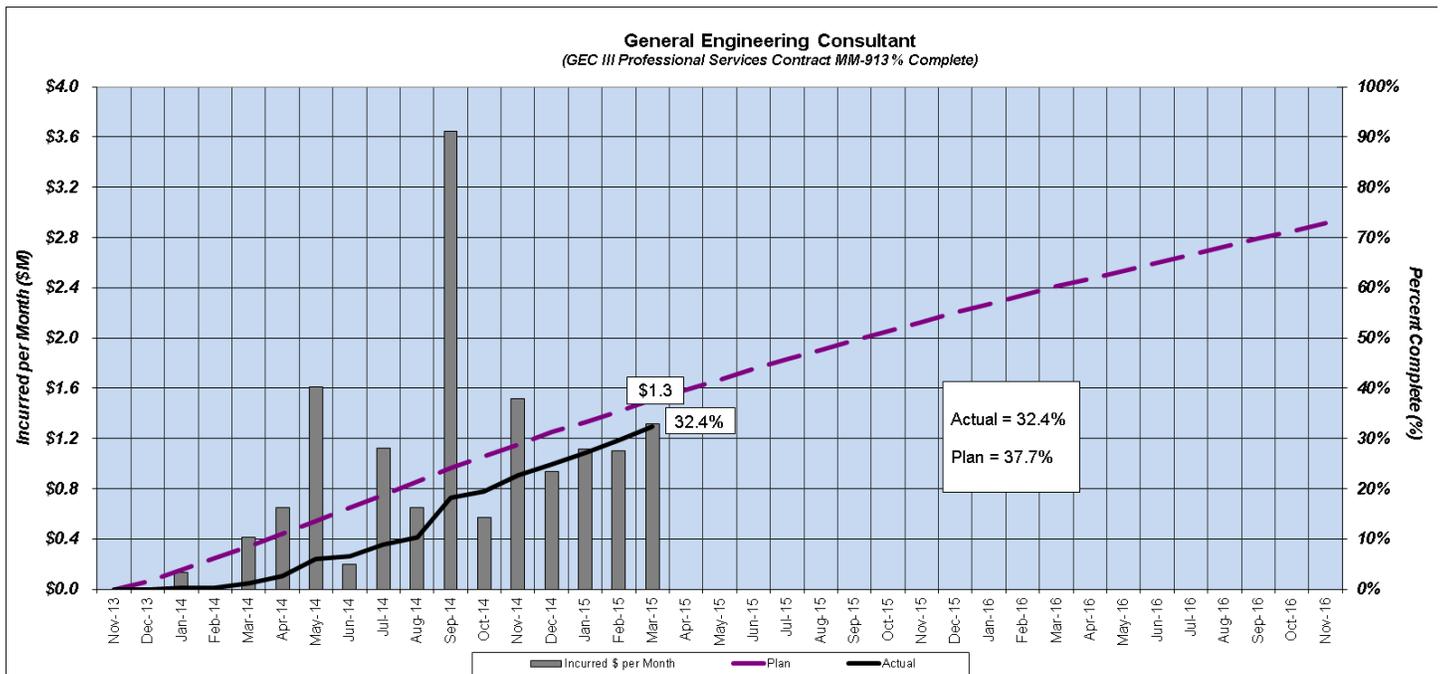
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$46,143,277</u>	<u>Incurred-to-Date:</u>	<u>\$14,972,227</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$46,143,277</u>	<u>Incurred in March:</u>	<u>\$1,316,004</u>

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

DBE Participation	
Actual DBE Participation:	\$980,821
DBE % Attained:	2.13%

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



**KEY ISSUES:**

- Performed schedule analysis of draft schedule for FFGA schedule and “Optimal” schedule for east sections by estimating work sequencing, crew sizing and productivity rates.
- For the West O’ahu Station Group, conduct interface risk assessment.
- Provide support to HART on documentation relative to the Makalapa site and coordination with the Navy.
- Provide support to WOSG and Airport Guideway and Stations (AGS) procurements. Replan level of service and support for DB delivery of east section.

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

**Contract No.:** MM-290

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

**Contract Start Date:** January 2014

**Contract Completion:** January 2020

**Projected Substantial Completion:** December 2018

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

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

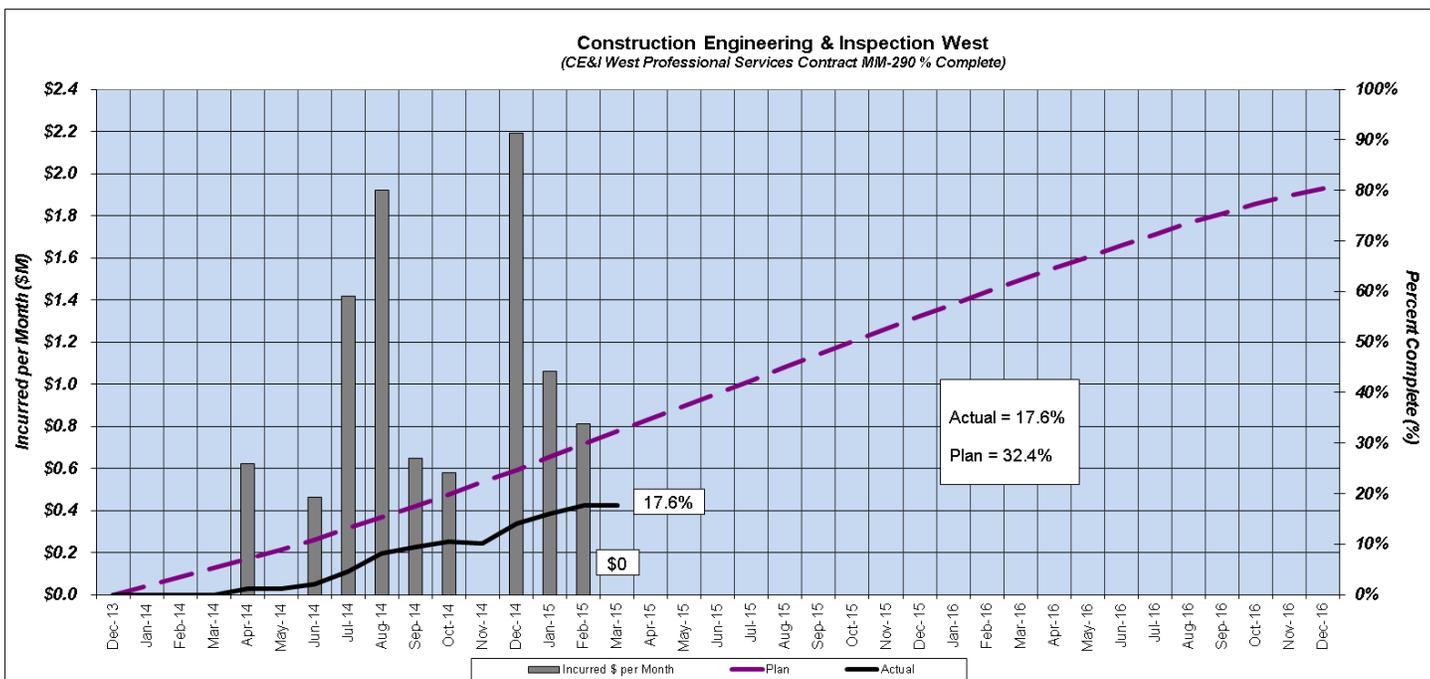
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$54,232,480</u>	<u>Incurred-to-Date:</u>	<u>\$9,544,338</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$54,232,480</u>	<u>Incurred in March:</u>	<u>\$0</u>

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

DBE Participation	
Actual DBE Participation:	\$509,363
DBE % Attained:	0.94%

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



**KEY ISSUES:**

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

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

**Contract No.:** MM-595

**Contractor:** URS Corporation

**Contract Start Date:** January 2014

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

**Projected Substantial Completion:** August 2018

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

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

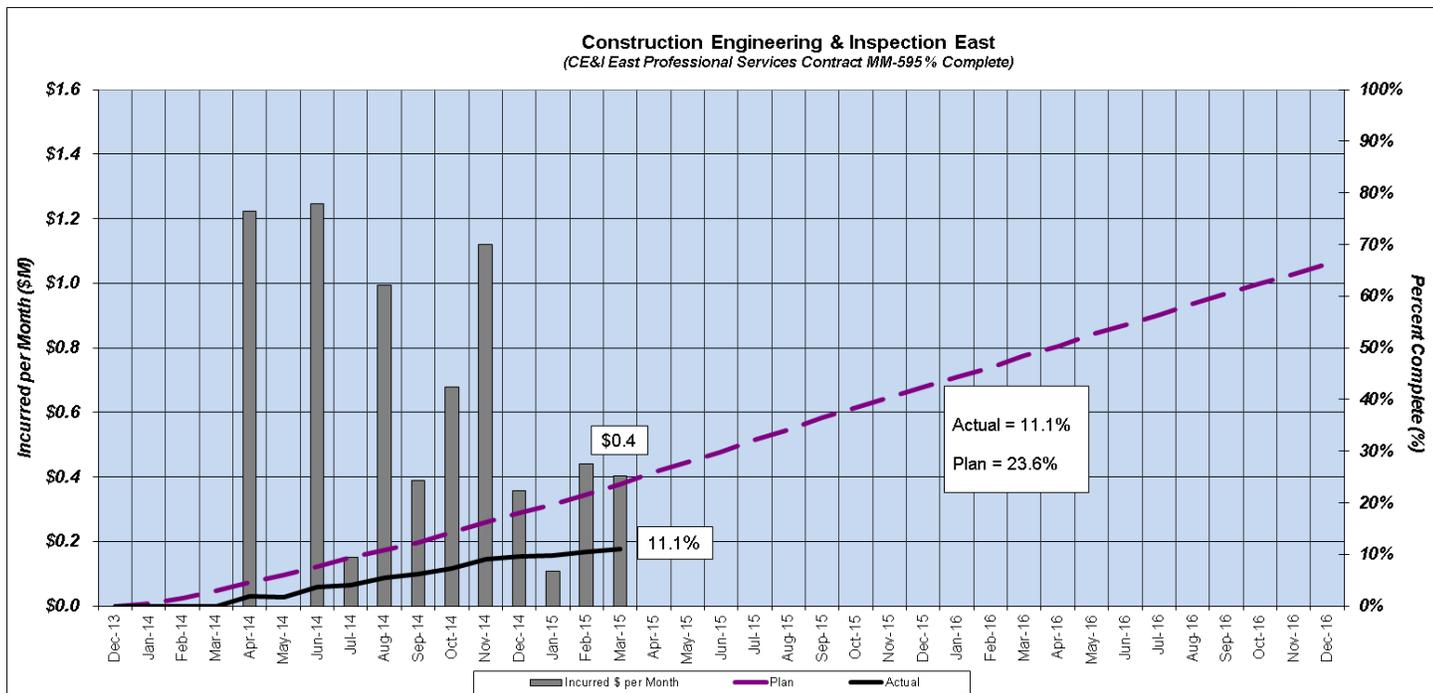
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$63,083,417</u>	<u>Incurred-to-Date:</u>	<u>\$7,010,106</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$63,083,417</u>	<u>Incurred in March:</u>	<u>\$402,253</u>

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

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

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



**KEY ISSUES:**

- The CONRAC A7 shafts are complete and the Contract Scope of Work was completed by the end of April 2015. Project closeout will extend through May 2015, and is being coordinated with HART and through CMS. The project is on schedule and within budget with minimal impacts to the overall program.
- The unresolved ROE and ROW on the Navy property within the east section corridor may cause a delay for the Airport Section Utilities project. This is currently being reviewed by senior management for possible resolution and a path forward.
- The Independent Cost Estimate (ICE) has been completed for the Airport and City Center DB Packages. HART is currently reviewing the data for any final questions/modifications. The Airport DB Package procurement Step 1 is currently out for bid.

**E. Core Systems Contract Oversight Consultant**

**Contract No.:** MM-962

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

**Contract Start Date:** February 2014

**Contract Completion:** August 2019

**Projected Substantial Completion:** N/A

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

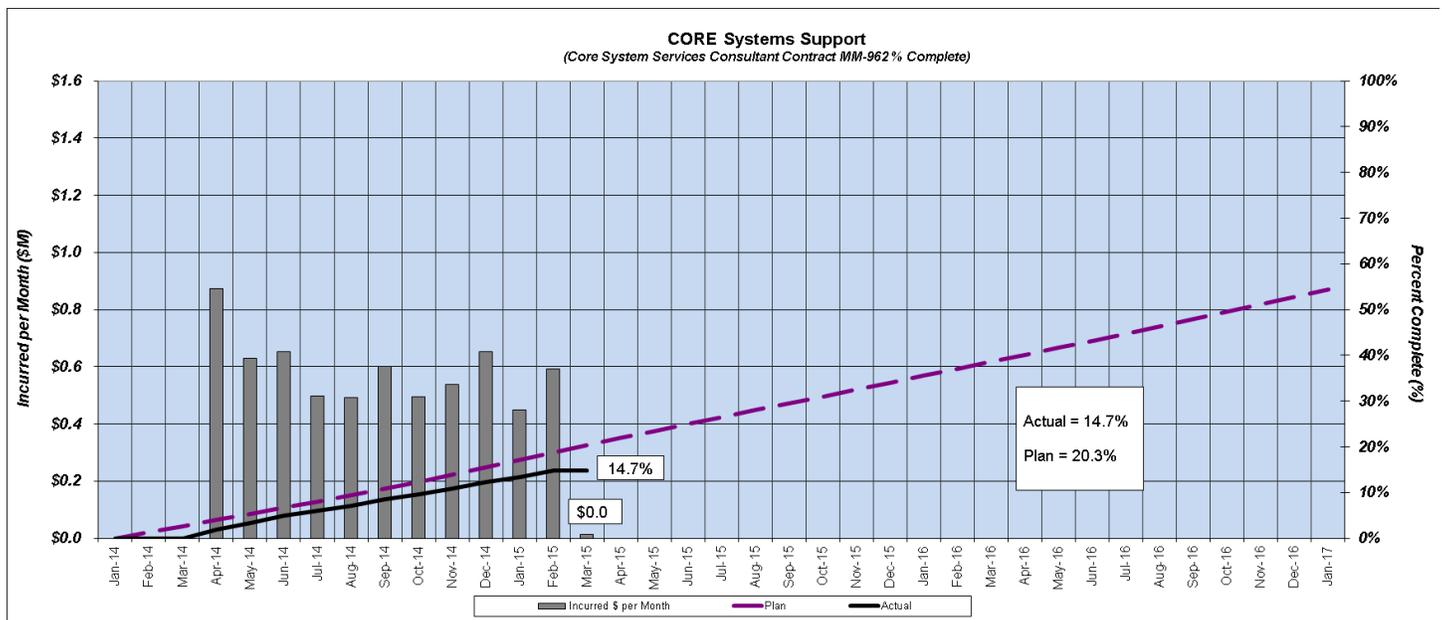
**COST INFORMATION:**

Original Contract:	\$43,988,989	Incurred-to-Date:	\$6,487,216
Current Contract Value <sup>1</sup> :	\$43,988,989	Incurred in March:	\$12,454

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

DBE Participation	
Actual DBE Participation:	\$179,255
DBE % Attained:	0.41%

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



**KEY ISSUES:**

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

**F. On-Call Construction Contractor**

**Contract No.:** MM-945

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

**Contract Start Date:** August 2014

**Contract Completion:** July 2019

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

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

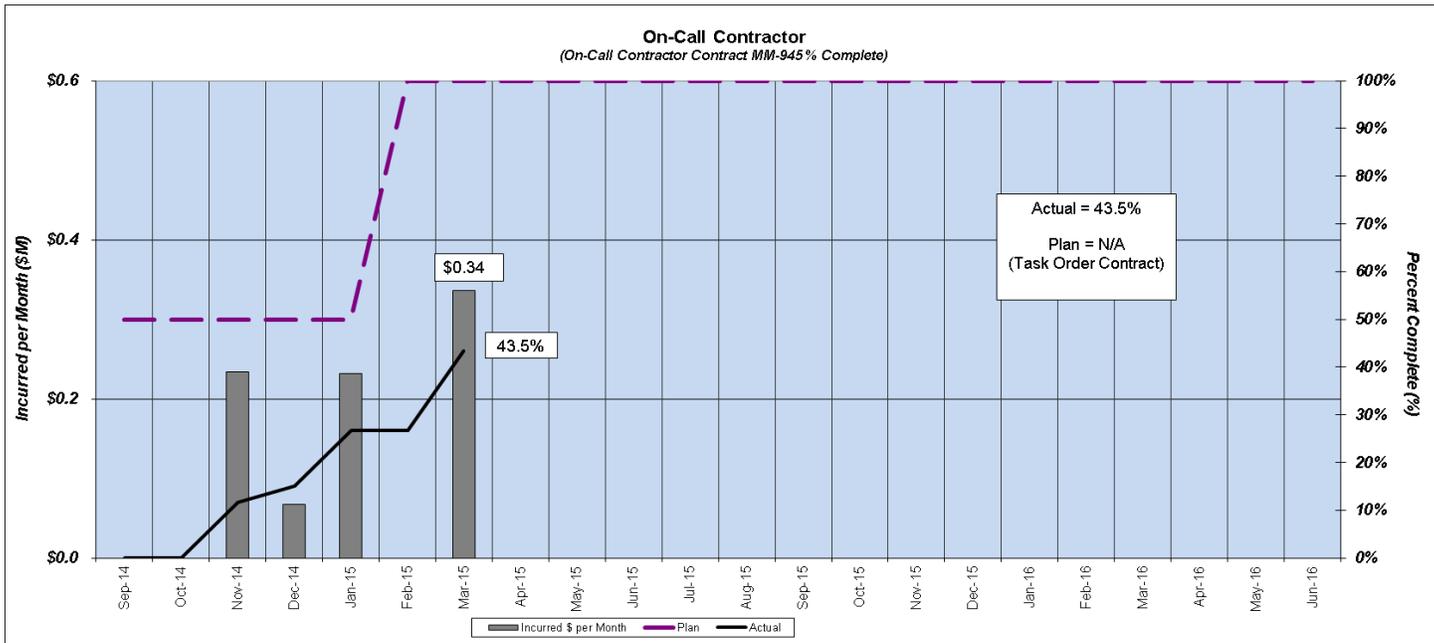
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$1,000,000</u>	<u>Incurred-to-Date:</u>	<u>\$869,431</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$2,000,000</u>	<u>Incurred in March:</u>	<u>\$336,174</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%

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



**KEY ISSUES:**

- The On-Call Contractor has successfully:
  - completed all field work necessary for the AIS supplemental report
  - demolished eight buildings located in the WOFH, KHG and City Center right-of-way
  - relocated/removed over 30 trees in the Airport right-of-way
  - repaired/protected multiple facilities owned by HART
- The On-Call Contractor is in the process of working with HART’s right-of-way group and owners in providing cost to cure solutions to properties which will need modification in achieving cleared right-of-way in the Airport and City Center sections of the guideway.
- Demolition of HART owned facilities in the Airport and City Center sections of the right-of-way is on hold pending resolution with the State Historic Preservation Division (SHPD) in meeting their requirements.

## 5 OVERALL PROJECT-WIDE ACTIVITIES

### Permits (Section 5.1)

#### OVERVIEW

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

#### KEY ISSUES

- HART has received approval of its Coastal Zone Management from the Department of Planning and Permitting for Waiawa Stream and Tributary.
- The comment period for the Section 401 Waiawa Stream and Tributary Permit closed on April 27, 2015. No comments were received. This permit is currently being processed for official signature at HDOH.
- HART's WOFH Community Noise Variance from Hawai'i Department of Health expired on April 12, 2015. HART met extensively with HDOH regarding noise reporting, monitoring, and mitigation, and a revised WOFH Community Noise Variance was signed and placed into effect on April 21, 2015.
- HART is waiting to receive approval of its Airport Community Noise Variance from the Hawai'i Department of Health. HART will resubmit an application for this variance to incorporate better noise monitoring and mitigation while specifying more clearly construction equipment, techniques, and expected noise levels.

### HDOT Agreements (Section 5.2)

#### OVERVIEW

- HART received approval from HDOT to control Airport segment of State Highway Right of way starting Feb. 2, 2015. JUOA execution is still pending.

### Utility Agreements (Section 5.3)

#### OVERVIEW

- Reviewing comments from AT&T Corp. for Airport/City Center construction agreement.
- Execution of an amendment to HTI KHG ESA contract was completed on April 14, 2015.
- Hawai'iGAS City Center UCA has been signed by Hawai'iGAS, and is routing for execution.

#### KEY ISSUES

- HART continues to encounter multiple issues with HECO that are impacting the design and construction of planned work. HART is continuing to meet with HECO on a weekly basis to resolve the issues. An executive meeting is scheduled for May 6.

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

#### OVERVIEW

- Right-of-Way acquisitions are under budget by \$10.5M, as of April 22, 2015.
- ROW has adjusted the anticipated acquisition dates to correspond with the revised timeline projected by the updated procurement strategy.
- HART has acquired nearly all needed property for the WOFH section.
- Nearly all private property site access for guideway is complete for Kamehameha. The contractor has identified locations that are believed to require permanent easements for utility relocation. ROW is working with KIWC to obtain.
- Currently, there are no impacts to City Center construction work because of ROW.

#### KEY ISSUES

- HART is working closely with the U.S. Navy to secure easements, licenses and fee acquisitions needed for construction in the Airport Section.
- Resolve third-party agreements with UH, the Navy and Post Office. These are all critical to allowing construction to proceed without delay.

## 5.1 Permits

- **Permits Submitted and In-Progress**

- HART submitted a revised WOFH Community Noise Variance to HDOH.

- **Permits and Approvals Granted**

- HART received a WOFH Community Noise Variance from HDOH on April 21, 2015.

- **Look Ahead**

- Upcoming significant permit activity:
  - HART will submit the Clean Water Act Section 404 permit application for Kapalama and Kalihi to the U.S. Army Corps of Engineers.
  - HART will submit the Clean Water Act Section 401 permit application for Kapalama and Kalihi to the Hawai'i Department of Health.
  - HART will submit a letter of Jurisdictional Determination to the U.S. Army Corps of Engineers for Aolele ditch.
  - HART will submit a letter requesting determination of permit required to the U.S. Army Corps of Engineers for Nu'uuanu stream.
  - HART will resubmit applications for Airport and City Center Noise Variances to HDOH, incorporating language and format from the recently-approved WOFH Community Noise Variance.

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

- **Activities this month**

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

- **Look Ahead**

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

5.3 Utility Agreements

Figure 13. Utility Agreements Status

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

Legend:  = Action this month  
 = Not applicable

COR = Corporation Counsel  
 ESA = Engineering Services Agreement

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

WOFH

- All WOFH agreements have been executed.

KHG

- All KHG agreements have been executed.

AIRPORT

- All engineering utility agreements for the Airport section have been executed.
- HART is reviewing AT&T comments to the draft Construction Agreement. It is not necessary for this agreement to be in place for the Airport Segment utility construction.
- HART has sent a draft of the Utility Construction Agreement to HTI for review/comments.
- Looking Ahead:
  - Execute HTI Airport UCA.

CITY CENTER

- All engineering utility agreements for the City Center section have been executed.
- HART is reviewing AT&T comments to the draft Construction Agreement.
- Hawai'iGAS has signed the City Center UCA, which is routing internally for execution.
- HART has prepared a draft of the Utility Construction Agreement for OTWC and is routing internally for review/comments.
- HART has prepared a draft of the Utility Construction Agreement for tw telecom and is routing internally for review/comments.
- Looking Ahead:
  - Execute Oceanic City Center UCA.
  - Execute Hawaiian Telcom City Center UCA.

HECO

- **Davis-Bacon requirements** – HECO has established a collective bargaining agreement – which does not align with Davis-Bacon requirements – for which HECO is requesting a waiver. HART is coordinating to resolve this with HECO.
- **HECO 46kV Substation near Rail Operations Center (ROC) area** – HECO indicates a need in the 2018-2019 timeframe for a new 46kV substation to feed the ROC area due to requirements in HECO Rule 13. Initial planning indicates that a currently un-used location on the ROC property may be suitable for this facility. HECO is investigating a 'system' substation, which would also feed the area surrounding the ROC.
- **Additional Clearances** – HECO indicates the need for additional horizontal working clearances from overhead pole alignments and additional buffer radial clearances from the actual overhead high-voltage lines.
  - **Horizontal Working Clearances Analysis** – HECO is reviewing the current overhead pole and line locations to identify areas where accessibility for HECO maintenance is a concern. HART is currently reviewing the results of HECO's analysis. Additional HECO re-evaluation is ongoing for pole locations with sub-optimal clearance. HART will also be setting up meetings to further discuss and resolve this with HECO.
  - **Bronto Bucket Truck Rental/Testing** – To allow for increased accessibility for HECO maintenance personnel when considering horizontal working clearances, HECO identified a bucket truck with a telescoping boom (versus a knuckle) and with extendable outrigger supports (versus swinging outrigger supports). The truck allows for greater accessibility and less required setup space than the current larger HECO bucket trucks. HART has agreed to reimburse HECO for 3 months of rental for an un-insulated model of the proposed Bronto Bucket Truck. HART is currently reviewing the HECO Horizontal Working Clearance study. HART will also be setting up meetings to further discuss and resolve this with HECO.
- **New Service Connections** – HECO service requests are required for new electrical services for the MSF, Passenger Stations and Systems Sites (traction power facilities). The Passenger Station designers are providing the service request for the stations and the Core Systems Contractor is providing the service request for the systems sites.
  - **MSF** – Service request approved via receipt of HECO Final Cost Letter and HECO design drawings. Coordination with HECO for installation is progressing.
  - **Passenger Stations and Systems Sites** – HECO service request reviews are in progress and approvals are anticipated in Q2 2015 for the west side stations. HECO is working to finalize its designs and cost estimates.
- An executive meeting is scheduled for May 6 to address the above issues.

**5.4 Right-of-Way (data as of April 22, 2015)**

**BUDGET**

- The ROW budget continues to show a favorable trend. \$71M was spent to acquire 35 properties. The budgeted amount for the 35 parcels was \$81.5M, resulting in a budget underrun of \$10.5M for acquisitions.
- \$5.4M has been expended to date for relocations.

**ACQUISITIONS**

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

	No. of Parcels Impacted	Current No. of Parcels Needed	Appraisals In Process	Appraisals Completed	Letters of Offer Sent	Offers Accepted	Possession Granted For Condemnation	Agreements Executed	Acquisitions Completed	Relocations Completed	Properties Available for Contractor
<b>Full Acquisition</b>											
W.Oahu\Farrington	16	16		14	14	13	1	4	15	10	16
Kamehameha	3	3		3	3	3			3	1	3
Airport	5	5	1	4	5	5			4	3	4
City Center	23	22		20	20	17			15	13	10
<b>TOTAL</b>	<b>47</b>	<b>46</b>	<b>1</b>	<b>41</b>	<b>42</b>	<b>38</b>	<b>1</b>	<b>4</b>	<b>37</b>	<b>27</b>	<b>33</b>
<b>Partial Acquisition</b>											
W.Oahu\Farrington	11	3		2	2	2		2	2		2
Kamehameha	19	4		3	3	1	1	1	1		3
Airport	9	9		3	3			1	1		1
City Center	88	77	10	42	37	6					1
<b>TOTAL</b>	<b>127</b>	<b>93</b>	<b>10</b>	<b>50</b>	<b>45</b>	<b>9</b>	<b>1</b>	<b>4</b>	<b>4</b>		<b>7</b>
<b>Easement</b>											
W.Oahu\Farrington	18	16	5	1	1			10	8		8
Kamehameha	6	6	1					9	5		5
Airport	44	38	2	5	5			26	26		26
City Center	45	35	15	4	2			1	1		1
<b>TOTAL</b>	<b>113</b>	<b>95</b>	<b>23</b>	<b>10</b>	<b>8</b>			<b>46</b>	<b>40</b>		<b>40</b>
<b>GRAND TOTAL</b>	<b>287</b>	<b>234</b>	<b>34</b>	<b>101</b>	<b>95</b>	<b>47</b>	<b>2</b>	<b>54</b>	<b>81</b>	<b>27</b>	<b>80</b>

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

**WEST O’AHU/FARRINGTON**

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

**KAMEHAMEHA**

- Issues:
  - All private property site access for guideway is complete for Kamehameha. The contractor has identified permanent easement locations for relocated utilities. ROW is expediting.

**AIRPORT**

- Issues:
  - HART has several easements pending from the U.S. Navy for the Airport Section, particularly needed for the Airport Utility contractor. These easements are extremely critical and are impacting construction work. HART is working closely with the U.S. Navy personnel to complete the documentation as quickly as possible. HART is meeting regularly with Navy.

- On multiple TMK’s, HART has completed the mapping process. This is important so HART can complete several key partial acquisitions.
- HART made an offer to the Post Office for easement at Honolulu International Airport, which is pending and is being closely monitored. They have requested modifications. The Post Office is reviewing HART’s response.
- Look Ahead:
  - Complete Post Office, Airport and Navy agreements.
  - On multiple TMK’s, HART requested that consultants expedite appraisal reports. This will allow offers to move forward on remaining airport parcels in anticipation of construction.
  - The remaining parcels are being prepared for eminent domain to ensure that the construction schedule is maintained.

**CITY CENTER**

- Issues:
  - Currently, there are no impacts to City Center construction work because of ROW.
  - There continues to be a great deal of effort toward acquiring City Center ROW parcels. Prioritization is being given to the Dillingham section and resolving remaining full acquisitions.
  - As indicated in the table, there are a number of appraisals and offers in progress.
  - HART also continues to track potential eminent domain. HART is actively reviewing pending offers for consideration for eminent domain, which could go before the HART Board of Directors in May.
- Look Ahead:
  - Continue with acquisitions in City Center.
  - Continued review of eminent domain needs.

**RELOCATIONS**

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

Section	Residential Relocations (a)	Business Relocations (b)	Not-For-Profit Relocations (c)	Total Relocations (a+b+c)	Relocation Assessment Completed	90-Day Notice Sent	30-Day Notice Sent	Relocations Completed for Occupants
W.Oahu\Farrington	18	6	1	25	11	12	8	25
Kamehameha		4		4	4	3	3	4
Airport		12		12	5	9		7
City Center	16	67		83	31	45	23	47
<b>Grand Total:</b>	<b>34</b>	<b>89</b>	<b>1</b>	<b>124</b>	<b>51</b>	<b>69</b>	<b>34</b>	<b>83</b>

**WEST O’AHU/FARRINGTON**

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

**AIRPORT**

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

**CITY CENTER**

- Look Ahead:
  - Complete relocation by May for several TMKs.
  - Start relocation on multiple TMKs.

**THIRD-PARTY AGREEMENTS**

Figure 16. Third-Party Agreement Status

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

Third-Party Agreements				
Agreement	Status	Target	Section	Notes/Remarks
DHHL License	Executed		WOFH, MSF	Consent to construct in place.
HDOT Master Agreement	Executed		WOFH	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Executed		WOFH	Consent to construct in place.
HDOT Master Agreement for KHG, Airport and City Center	Executed		KHG, Airport, City Center	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Executed		KHG	Consent to construct in place.
HDOT Joint Use & Occupancy (JU&O) Sub-agreement for Airport Division parcels	Executed		Airport	Consent to construct in place.
HDOT Easement Agreement for Airport Division parcels	Pending	August 2015	Airport	Process Easement Agreement.
HDOT Joint Use & Occupancy (JU&O) Sub-agreement for Airport leased/revenue parcels	Pending	October 2015	Airport	
HDOT Joint Use & Occupancy (JU&O) Sub-agreement	Pending	October 2015	City Center	
HDOT SOA MOU	Executed		Program	
OCCC/Hawai'i Department of Public Safety Agreement Dillingham Blvd	Pending	June 2015	City Center	Finalizing requirements.
HI Community Development Agreement (HCDA)	Pending	June 2015	City Center	Coordination is on-going.
Department of Accounting & General Services (DAGS)/HHFDC Right of Entry	Pending	June 2015	City Center	Processing.
Department of Accounting & General Services (DAGS)/HHFDC Easement	Pending	June 2015	City Center	Process Easement Agreement.
City Dept. of Transportation Services (DTS) Joint Use & Occupancy Agreement (Middle St.)	Pending	June 2015	Airport	Processing. Pending design.
U.S. Navy (17 Easements)	Pending	May 2015	WOFH, KHG, Airport	Easements are being processed by the Navy. Navy will not charge for all licenses and easements. Exemption granted.
U.S. Navy Pearl Harbor Station	Adopted		Airport	Congress passed bill to transfer property to City.
U.S. Post Office Honolulu Processing Center	Pending	May 2015	Airport	Offer tendered to the Post Master General. HART responded to their requested modifications. Post Office reviewing HART's response.
City Dept. of Transportation Services (DTS) (Middle St.)	Pending	July 2015	Airport	Jurisdictional Transfer 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	June 2015	City Center	Jurisdictional Transfer in process.
City Dept. of Facility Maintenance (DFM) (Kohou St.)	Pending	June 2015	City Center	Jurisdictional Transfer in process.
Federal Court House/GSA	Pending	August 2015	City Center	Draft agreement is under review and discussions on-going.
Pacific Guardian Center	Pending	December 2015	City Center	Awaiting final design requirements for the guideway and Downtown station.
Howard Hughes Corporation	Pending	December 2015	City Center	Appraisal and negotiations underway.
Sam House Development	Pending	December 2015	City Center	Negotiations underway.
GGP Ala Moana LLC	Pending	December 2015	City Center	Negotiations underway.

## 6 MANAGEMENT AND ADMINISTRATIVE UPDATES

### Safety and Security (Section 6.1)

#### OVERVIEW

- S&S Certification Program
  - Progress continues with the S&S Design Criteria (DC) Conformance checklists CIL/CEL design verification process. Priority of effort is to reach 100% design verification for all contracts that are currently under construction and for those contracts in the pre-bidding status for construction.
  - S&S construction specification conformance verification labors started this month and are underway for the WOFH, MSF and the Airport 7 piers contracts. HART SSRC is scheduled to review for approval H2R2, WOSG, KHSG, FHSG, and Airport Utilities Relocation Base S&S Construction Specification Conformance Checklists (CSCC) CEL/CILs in May 2015.
  - Project PHAs are being finalized to reflect actual mitigations designed into the project with final hazard ratings as contract designs reach the 100% design level. The MSF PHAs are finalized and the results are undergoing internal reviews. A PHA status report is now available that tracks the PHAs updates and SSRC approval status. Core Systems Contract (CSC) sub-systems Hazard Analysis (HAs) development continues and all sub-systems HAs are reviewed by HART Safety after each update/review cycle as needed in preparation for SSRC final review/approval.
  - A certification Open Items List (OIL) that tracks issues and/or non-compliance items related to design criteria and/or construction specification requirements is now active via a database with procedures being developed on how to address and close the open items with the project managers.
  - A Hazard Tracking Log (HTL) is under revision to better define the hazard and to track all potential hazards identified by design changes and/or construction change orders. This officially documents identified hazards with recommended mitigations to reduce the hazard ratings to an acceptable level. Procedures are under development on how to address and close these hazards with the project managers and how these hazards are integrated into the overall project PHAs.
  - Key S&S Certification related meetings held in April 2015:
    - HDOT/SSO quarterly review workshop, April 6-10, 2015
    - Fire Life Safety Working Group (FLSWG) meeting, April 14, 2015
    - PMOC quarterly review meeting with FTA representatives in attendance, April 20-22, 2015
    - SSRC meeting, April 29, 2015
    - Bi-weekly project coordination meetings with Core Systems, WOFH and KHG, and monthly coordination meetings with MSF
- Site access control at MSF has been developed to ensure contractors are aware of work schedule and work areas for contractors.
- HART Safety and Security and HDOT continue to meet weekly to discuss issues and concerns.

#### KEY ISSUES

- Planning for Interim Certification requirements in support of vehicle testing requirements remains a critical planning activity and is based on the actual delivery date of the first vehicles and the completion status of the MSF, Rail Yard, WOFH Guideway, and associated systems contracts. Detailed Interim Certification requirements will be determined 4-6 months out from the actual delivery date of the first vehicle.
- Continued Engineering Leadership support is essential to fully implement the S&S CSCC verification process, the construction and equipment procurement submittal review/approval process for verification efforts, and the resolution process for closing items on the certification OIL and HTL.
- The vehicle SSHA and O&SHA are critical safety analyses that need to be completed as soon as possible as the first vehicle is currently in production.
- HECO-Power for testing and verification needs to be complete prior to AHJV vehicle arrival in early 2016.

## Quality Management (Section 6.2)

### OVERVIEW

- The HART QMP and HART-approved QAPs of contractors, consultants and suppliers have been assimilated by their respective employees and are being implemented as standard operating procedures. Therefore, less Nonconformance Reports (NCR) are reported or encountered.

### KEY ISSUES

- QA audit of KHSG Final Design prior to issuance for bid solicitation.
- QA Audit of Airport Guideway (AECOM) and ASG (AECOM) Final Design prior to issuance for bid solicitation.
- Closeout of combined QA and Buy America Audit of WOFH, KHG and MSF.
- QA review of procurement document package for the Airport Segment and Station Group DB RFP.
- Replacement of cracked segments 1, 2, 11 and 12 of Span 17. KIWC is currently performing the root cause analysis and corrective action to prevent recurrence; preparing an NCR; and the disposition is to replace the cracked segments. A Remediation Plan has been requested from KIWC.
- Realignment and final bearing placement of Span 105.
- Construction of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, etc.
- Construction of WOFH Balanced Cantilever Segmental Span across H-1.
- Timely closeout of open NCRs (HART, WOFH, KHG, ASU, MSF and CSC/PV).

## Buy America Compliance (Section 6.3)

### OVERVIEW and KEY ISSUES

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

## Disadvantaged Business Enterprise (Section 6.4)

### OVERVIEW

- \$21,898,670 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 4/30/15.

## Planning and Environment (Section 6.5)

### OVERVIEW

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

### KEY ISSUES

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

## Risk Management (Section 6.6)

### OVERVIEW

- There are a total of 173 risks in the April 2015 risk register. There were 18 risks deleted and 2 risks added for the month of April. Reviews were conducted on the MSF, Airport Guideway, Airport Stations and City Center Stations (DKSG). City Center Guideway was not reviewed and will be scheduled during the month of May.
  - Risk deletions were a combination of avoidance and transfer through mitigation as HART moves through procurement of West Side Station procurements and packaging for the Airport Guideway and Stations Group Design Build.

- Risk additions were construction related. The complexity of the Chinatown Station construction and being in proximity to older structures will require additional vibration mitigation to be placed in the contract special provisions. At MSF, there may be a schedule impact due to the WOFH construction of the West and East Yard leads. This could impact interim opening dates. At this point, new risks are relatively low.

#### KEY ISSUES

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

### **Community Outreach (Section 6.7)**

#### OVERVIEW

- HART's construction outreach focuses on businesses along the alignment in Waipahu, Pearl City, Aiea and Mililani areas.

#### KEY ISSUES

- HART's Board of Directors voted this month to televise board meetings live on Olelo's public access channel. The gavel-to-gavel coverage can be viewed live each month on channel 55.
- HART's outreach team responded to more than 180 public inquiries this month that came in through the project's 24-hour hotline, the website and via email. Traffic and questions about construction were among the key issues raised by the community.

### **Staffing (Section 6.8)**

#### OVERVIEW

- All key positions are filled.
- Two Transit Contract Managers started on April 1, 2015.
- A Budget Analyst has been selected and the confirmed start date is July 1, 2015.
- The Secretary position in Planning has been filled and the confirmed start date is May 1, 2015.
- The programs Director of Design and Construction will be leaving the program in May. HART has advertised the job description for the Director of Design and Construction.
- Planner VI, Planner V, and Planner III interviews have commenced to fill vacant positions in Planning.
- HART prioritizes filling all vacancies with city employees and supplements the city staff with consultants when required and appropriate.

#### KEY ISSUES

- The latest organization chart is dated Jan. 14, 2015. A new chart is in the works that will reflect minor revisions and personnel changes.

6.1 Safety and Security

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

S & S Design Criteria (DC) Conformance Checklist			
Design Verification Status			
Contracts: DC Conformance Checklists (CEL/CILs)	% Design Verified	% Increase from last FTA Report	Comments:
<b>Under Construction</b>			
DB-200, MSF	99%	-	SSRC approved 1/28/2015
DB-120, WOFH Guideway 38 total – Sub CEL/CIL Packages	98%	+7%	28 - Sub CELs/CILs, SSRC approved 1/28/2015, 02/25/2015, 03/25/2015, and 4/29/2015
DB-320, KHG Guideway 38 total – Sub CEL/CIL Packages	96%	-	29 – Sub CELs/CILs, SSRC approved 1/28/2015, 02/25/2015, 3/25/2015, and 4/29/2015
FD-430, Airport Utilities	100%	-	SSRC approved – 6/25/2014
FD-430, 7 – Shafts	88%	-	Designer CEL/CIL update underway
<b>Under Design</b>			
FD-140, West Oahu Station Group	46%	-	Designer CEL/CIL update underway
FD-240, Farrington Hwy Station Group	8%	-	Designer CEL/CIL update underway
DB-275, Pearl Highlands PS/Bus Transit Center	-	-	TBD – Base CEL/CIL not yet SSRC approved
FD H2R2 Ramps	96%	+96%	Base CEL/CIL not yet SSRC approved
FD-340, Kamehameha Highway Station Group	98%	+11%	2 - station CEL/CILs SSRC approved - 4/29/2015 1 - station CEL/CIL ready for SSRC approval
DB-xxx, Airport Guideway and Stations Group	38%	-	Contract change underway
DB-xxx, City Center Guideway & D&K Stations Grp	-	-	Contract change underway
FD-530, City Center Utilities	-	-	Designer input is underway
FD-600, West O’ahu Park & Ride	-	-	TBD – Base CEL/CIL not yet SSRC approved
DBOM-920, Core Systems			
- Traction Electrification System	-	-	Designer input underway
- Communication System	-	-	Designer input underway
- Fire Detection Alarm System	-	-	Designer input underway
- Passenger vehicle	-	-	Designer input underway
- Train Control	-	-	Designer input underway
- Supervisory Control & Data Acquisition (SCADA)	-	-	Designer input underway
- Platform Screen Gate System	-	-	Designer input underway
- MOW Vehicles	-	-	Base CEL/CIL not yet SSRC approved
- Yard systems Bungalows	64%	+64%	Base CEL/CIL not yet SSRC approved
MI-930, Elevators & Escalators	-	-	TBD – Base CEL/CIL not yet SSRC approved

S & S Construction Specification Conformance Checklists Construction Installation/Testing Verification Status			
Contracts	% Construction Installation Testing Verified	% Increase from last FTA Monthly Report	Comments
<b>Under Construction</b>			
DB-200, MSF	22%	+22%	Verification underway
DB-120, WOFH Guideway	15%	+15%	Verification underway
DB-320, KHG Guideway	-	-	Coordination underway
DBB-505, Airport Utilities	-	-	Base checklist ready for SSRC approval
FD-430, AGU 7 Drilled Shafts	77%	+77%	Verification underway
<b>Still under Design or in Pre-bidding Process</b>			
DBB-171, West O'ahu Station Group	-	-	Draft spec conform checklist under review
DBB-271, Farrington Hwy Station Group	-	-	Draft spec conform checklist under review
DB-275, Pearl Highlands PS/ Bus Transit Center	-	-	TBD
DBB-371, Kamehameha Hwy Stations Grp	-	-	Draft spec conform checklist under review
DBB-385, H2R2 Ramps	-	-	Base checklist ready for SSRC approval
DB-xxx, Airport Guideway & Stations Grp	-	-	Draft spec conform checklists in hand
DBB-xxx, City Center Utilities	-	-	TBD
DB-xxx, City Center Guideway & D&K Stations Grp	-	-	Draft spec conform checklists in hand
DBB-600, West O'ahu Park & Ride	-	-	TBD
DBOM-920, Core Systems	-	-	TBD
- System Integration Testing Checklist	-	-	Under development
- Traction Electrification System CIL	-	-	TBD
- Communication System CIL	-	-	TBD
- Fire Detection Alarm System	-	-	TBD
- Passenger vehicle Spec/testing CIL	-	-	Under development
- Train Control CIL	-	-	TBD
- Supervisory Control & Data Acquisition (SCADA)	-	-	TBD
- Platform Screen Gate System (PSGS)	-	-	TBD
- MOW Vehicles	-	-	Under development
- Yard systems Bungalows	-	-	TBD
MI-930, Elevators & Escalators	-	-	TBD
Operational CEL/CILs	-	-	Under development

Project-Wide Incident Activity					
Event Type	Total Number of Events since 1/1/2007	Total Number of Events for April 2015	Loss Type	Date	Event Description
Environment	12	0			
Loss or Damage	19	0			
*Reportable Occupational Injury/Illness	0	0			
Security	43	0			
**Loss Time Occupational Injury/Illness	6	0			
Road/Vehicle - Driving	58	7	Minor Damage Minor Damage Minor Damage Minor Damage	a) 4/9/2015 b) 4/10/2015 c) 4/22/2015 d) 4/22/2015	a) MSF - Forklift boom grazed the bottom of a precast panel. b) KHG - Sweeper truck backed into concrete truck. c) MSF - Subcontractor work truck damaged by defective remote control trench compactor. d) KHG - Island Movers tractor and lowboy trailer struck fire hydrant while exiting haul road back onto Farrington Hwy.
Service Strike	37	3	Minor Damage Minor Damage Minor Damage	e) 4/22/2015 f) 4/24/2015 g) 4/29/2015 a) 4/9/2015 b) 4/22/2015 c) 4/23/2015	e) WOFH - Citizen's vehicle struck an Island Movers truck. f) WOFH - A citizen's vehicle drove through a road closure and over a trench. g) WOFH - Employee transporting an auger bit punctured a water truck tire. a) WOFH - While excavating for traffic signals an unmarked Air Relief Valve was broken. b) WOFH - Contractor hit and broke an 8 inch water line. c) Airport - 12" abandoned cast iron 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.					

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

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

## 6.2 Quality Management

### • Overview

- The HART QMP and HART-approved QAPs of contractors, consultants and suppliers have been assimilated by their respective employees and are being implemented as standard operating procedures. Therefore, less Nonconformance Reports (NCR) are reported or encountered.
- Review and approve contractors, consultants and suppliers new and updated QAPs including Inspection and Test Plans (ITP).
- Conducted biweekly Quality Task Force (QTF) meetings with CE&I, contractors and consultants QA teams to discuss the status of: design and construction activities; procurement activities; inspection and testing; NCRs; Corrective Actions (CARs) and Preventative Actions (PARs); quality compliance; various process improvements; quality economics, and Buy America compliance.
- Participated in Pre-Activity Meeting for scheduled construction activities on WOFH (Column 14) and Airport Section Utilities (Street Lightings).
- 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 5

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
CCH-100	Honolulu Authority for Rapid Transportation (HART)	HART	15-009 QA	6/16 - 6/23		
	Honolulu Authority for Rapid Transportation (HART) -Security & Safety Only		15-009 SS	6/16 - 6/23		
CT-HRT-10HO137	West O'ahu/Farrington Highway Guideway Design-Build (WOFH)	KIWC - HI	15-001 QA	2/17 - 2/19	2/17 - 2/18	4/17/15
CT-HRT-11HO195	Kamehameha Highway Guideway Design-Build (KHG)		15-001 BA	2/17 - 2/19	2/17 - 2/18	4/17/15
CH-HRT-10HO449	Maintenance and Storage Facility Design-Build (MSF)	KKJV - HI	15-003 QA	2/25 - 2/26	2/25 - 2/26	4/14/15
			15-003 BA	2/25 - 2/26	2/25 - 2/26	
CT-HRT-11HO195	WOFH-KHG Casting Yard	KIWC - HI	15-011	7/15 - 7/16		
CT-HRT-10HO137	WOFH, KHG, MSF) Audit Surveying and Alignments	KIWC/KKJV - HI	15-013	8/19 - 8/20		
CT-HRT-1200106	Core Systems Contract (CSC) Design-Build-Operate-Maintain	ASTS Italy	TBD	TBD		
		AB Italy	TBD	TBD		
		AB USA	TBD	TBD		
CT-HRT-1200106	Core Systems Contract (CSC)	AHJV - HI	15-010	6/25 - 6/26		
SC-HRT-1200116	West O'ahu Station Group Final Design (WOSG)	AECOM - HI	15-005	3/18 - 3/19	3/18 - 3/19	
FD-245	Pearl Highlands Parking Structure/Bus Transit Center Final Design	TBD	TBD	TBD		



HONOLULU AUTHORITY for RAPID TRANSPORTATION

## COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: **2015** Rev 5

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



HONOLULU AUTHORITY for RAPID TRANSPORTATION

## COMBINED MANAGEMENT SYSTEM AUDIT SCHEDULE

YEAR: **2015** Rev 5

KEY	Local Audit	Remote Audit	Continental U.S. Audit	International Audit		
CONTRACT PACKAGE NUMBER	DESCRIPTION	CONTRACTOR / CONSULTANT / SUPPLIER	AUDIT NUMBER	DATE SCHEDULED	DATE PERFORMED	DATE CLOSED
DBB-	Kamehameha Hi-way Station Group Construction	TBD	TBD	TBD		
SC-HRT-1200038	Airport Section Utilities Construction	NAN, Inc	15-012	7/29 - 7/30		
CT-HTR-1500080	Airport Section Guideway Seven Pier Construction	HDCC/CJA JV	15-006 QA	3/11	3/11 - 3/24	3/31/15
			15-006 BA	3/11	3/11 - 3/24	3/31/15
DB-	Airport Section Guideway and Stations	TBD	TBD	TBD		
DB-	City Center Section Guideway and Stations	TBD	TBD	TBD		
DBB-600	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes Construction	TBD	TBD	TBD		
CT-HRT-1300318	Elevator and Escalator - Manufacture, Install and Maintain	US Schindler - HI	15-015	9/8 - 9/10		
		US Schindler - NJ				
SC-HRT-1400050	West O'ahu, Farrington Highway, and Kamehameha Highway Station Groups "West Side Stations" CE&I	PGH Wong - HI	15-014	9/2 - 9/3		
	Pearl Highlands Parking Structure/Bus Transit Center CE&I		TBD	TBD		
	UH West O'ahu Park-and-Ride and Ho'opili Station Finishes CE&I		TBD	TBD		
TBD	CE&I East	TBD	TBD	TBD		
SC-HRT-1400027	General Engineering Consultant III for Final Design and Construction (GEC III)	CH2M Hill	15-007	5/20 - 5/21		

• **Key Issues**

HART NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
<b>32 (Audits)</b>	<b>31</b>	<b>1</b>
<b>1 (Construction)</b>	<b>1</b>	<b>0</b>

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

- QA audit of Airport Guideway and Station Group Final Design prior to issuance of DB RFP.
- Replacement of cracked segments 1, 2, 11 and 12 of Span 17 (KIWC preparing Remediation Plan).
- Construction of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, etc.
- Construction of Balanced Cantilever Segmented Span across H-1.
- Timely closeout of contractors, consultants and suppliers open NCRs.
- Passenger Vehicle: Carbody(s) manufacturing in Ansaldo Breda’s facility in Reggio Calabria, Italy.

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

• **Interim Buy America Audit**

- An Interim Buy America audit was conducted by Raul v. Bravo + Associates, Inc., who has subject matter expertise in Buy America audits, March 23-25, 2015. Raul v. Bravo’s report is expected to be submitted shortly.

• **Utilities**

- HART has entered into construction agreements with the following utility companies, under which each of the listed utility company has signed the Buy America compliance certification:
  - Hawaiian Electric Company
  - Oceanic
  - Hawaiian Telcom
  - Hawai’iGAS
  - Hawaii Independent Energy (formerly Tesoro)

• **Look Ahead**

- Will provide updates on any new construction agreements HART enters into with a utility company.
- Will provide updates on the Buy America Interim Audit for rolling stock.

**6.4 Disadvantaged Business Enterprise (DBE)**

• **Activities this month**

- \$21,898,670 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 4/30/15
  - 5.87% = DBE utilization on total disbursed FTA funds received to date (\$21,898,670 divided by \$373,171,075)
  - 1.24% = DBE utilization to date on total Project FTA funds (\$21,898,670 divided by \$1,763,903,901)

*Total DBE Participation = \$21.9M  
(previous report = \$21.3M)*

Figure 17. DBE Participation this Month

DBE Participation in April		
DBE Firm	Contract Number	Participation
Lawson & Associates	SC-HRT-1400061 MM-964	\$51,586
ADS System Safety Consulting	SC-HRT-1400061 MM-964	\$88,599
LKG-CMC	SC-HRT-1400049 MM-962	\$13,893
Anil Verma Associates, Inc.	SC-HRT-1200111 FD-340	\$42,170
FIC, LLC	SC-HRT-1400051 MM-595	\$330,024
AMR Estimating Services	SC-HRT-1400027 MM-913	\$44,451
LKG-CMC	SC-HRT-1400051 MM-595	\$72,984
<b>TOTAL FOR THE MONTH</b>		<b>\$643,707</b>

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

## 6.5 Planning and Environment

### • Activities this month

- Programmatic Agreement Activities:
  - HART participated in the Kākoʻo Meeting with Programmatic Agreement Signatory and Consulting Parties on April 16, 2015.
  - HART’s Programmatic Agreement (PA) team met with SHPD on April 7, 2015, as part of ongoing consultation with the division.
  - HART’s PA team prepared a report on demolitions that occurred in 2014 per Stipulation IX.C. and distributed this report to Consulting Parties via the Kākoʻo.
- Planning, Environmental, and Cultural Activities:
  - SHPD accepted HART’s supplemental AIS report for the project’s Kaka’ako-Ward-Queen Street Alignment Shift on April 1, 2015.
  - The O’ahu Island Burial Council (OIBC) made a determination on HART’s Burial Treatment Plan on April 8, 2015, noting that preservation-in-place will apply to all human skeletal remains encountered within City Center. One exception was made with a find that will undergo a relocation within close proximity of its original location.
  - HART has submitted Post-ROD documentation for the Middle Street Station and right-of-way to the FTA for review and is awaiting comments for finalization.
  - The UHWO Interim Park-and-Ride Facility Post-ROD was formally approved by FTA on April 7, 2015.
  - HART continues to coordinate with the City and County of Honolulu, Hawai’i Community Development Authority, and other State agencies and legislators on transit-oriented development.

### • Looking Ahead

- Attend regular monthly OIBC meetings.
- A meeting with Recognized Cultural Descendants is scheduled for May 6, 2015.
- Ongoing coordination with DTS to ensure consistent planning of seamless bus and rail services focusing on rail’s interim opening date.
- Conduct regular monthly HART/SHPD consultation meetings.
- Attend monthly scheduled Kākoʻo Meetings with Programmatic Agreement Signatory and Consulting Parties.
- Continue resolution of Post-ROD documentation.

## 6.6 Risk Management

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 management is the systematic process of identifying, analyzing, and responding to risk in a timely manner. 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.

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. Some risks are directly within HART’s control while others are not.

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.” Construction of the Project involves systematically using equipment and materials through a variety of means and methods to create a quality transit system. Therefore, 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 program wide risks which is an aggregate of the individual contract risks of the same category. Key metrics are subject to change as more is learned about the risks while implementing mitigation of avoidance, minimization and transfer, and as additional expertise is brought in to implement various aspects of the Project. By actively managing the RR, HART is able to actively manage the Project.

### **NOTES OF SIGNIFICANCE**

- Corrective actions are underway to improve cost estimates and forecasting methods as well as cost containment measures being implemented and evaluated to more accurately reflect budget and market conditions.
- Additional focus is being placed on Hawaiian Electric Co. coordination and issue resolution.
- Securing Navy property is critical. The processing time for property and site access was first highlighted over a year ago and progress has been slow. The Airport Utility contract will be the first to be adversely impacted without resolution.
- Securing a Section 401 from DOH is becoming critical for the Waiawa Stream crossing area on the WOFH Guideway and Pearl Highlands Station.

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

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

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

Mitigation Plan:

- Seek Construction Industry feedback regarding market conditions, trends and future outlook to inform Delivery and Procurement Plan. **Action: Ongoing industry forums.**
- Revise Contract Packaging Plan based on Contractor Industry feedback. **Action:**
  - **Provide direction and change order to HART designers to complete packages for bidding per the new procurement plan. – Date: April 2015 – Complete.**
- Refine list of primary and secondary mitigation measures. **Action:**
  - **Finalize recommendations for primary and secondary mitigation measures and submit to Project Director for Action. – Date: Likely June 2015, depending upon the outcome of the legislative session.**
- Identify opportunities within project scope for alternative funding sources. **Actions:**
  - **Reach agreement on possible HDOT funding of utility, widening, ITS and Intersection Improvements. – Date: TBD.**
  - **Research State Law relative to Public Private Partnership funding relative to TOD and parking opportunities. – Date: June 2015.**
- Seek additional GET extension of funding to close the gap for market conditions and delay beyond HART's control. **Actions: Bills have passed through both House and Senate. The bills are being referred to conference committee for resolution of content differences.**
  - **Work with Board, City/County Honolulu and Legislative Committee members to develop proposed Legislative Bill to extend the GET and respond to frequently asked questions. – Complete.**
  - **Respond to Legislators and provide testimony as needed. – Date: TBD and Ongoing throughout the session.**

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

Mitigation Plan:

- Resources to relocate HECO facilities are not readily available. HART is subject to availability of resources and schedules are frequently set for relocation contractors to be deployed on other islands. This has had an impact on cost and schedule. **Actions:**
  - **Seek commitment from HECO (senior, mid and front line management) to dedicate adequate resources for relocation work, design work to ensure opening. – Date to be determined. Executive management meeting is scheduled for May 6.**
  - **Revise Utility Agreements accordingly. – Date: TBD.**
- Responses from HECO with respect to the 138kV vertical and horizontal clearance from HART fixed facilities are lagging HART's needs for information and specificity. Cost exposure could be \$60-150M to underground the 138kV line. Affected contracts are KHG, Airport Guideway and City Center Guideway. **Actions:**
  - **Secure DB Guideway design, define and evaluate remaining 138kV line undergrounding due to horizontal and vertical conflict resolution needs with HECO. – Date: June 2015.**
  - **Meet with HECO to finalize undergrounding plans for 138kV line. – Date: June 2015.**
- Weatherhead to weatherhead service connections are in violation of current code. The corrections required to remedy code violations are much more extensive than estimated at the time of FFGA. The cure is site specific requiring significant data collection and consultation with HECO. Cost impacts to correct the code violation condition could create additional costs (i.e. 100-150 services for \$10-15K per hook up) for HART not included in the FFGA and also require additional construction property easements to access sites. **Action:**
  - **Coordinate design and construction requirements with HECO, HART designer and Right-of-Way to resolve issues for each site. – Airport - Complete, City Center – May 2015.**

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

Mitigation Plan:

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

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

Mitigation Plan:

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

- **Contractor is implementing mitigation measures to avoid additional delay such as adding another traveler and additional equipment for column pours.**

**E) Core Systems Interface** – Delays in access milestones of the Maintenance Storage Facility, Stations or Guideway interfaces to systems results in delays to the Core Systems Contractor substantial completion milestones. There is a concern that updates to contractor schedules will not synchronize with the Core Systems Contractor due to a variety of reasons; delay in station procurement and/or delay resulting from productivity issues with respect to the guideway.

Mitigation Plan:

- Efforts to minimize further delay to the Core Systems Contractor include: 1) Issuing revised access dates and requesting an updated baseline schedule. 2) Extend dates; need to define completion dates. 3) HART and AHJV will work to re-sequence activities to minimize overall cost impact to the project. 4) Joint HART/AHJV workshop to work out details of schedule rebaseline. **Actions:**
  - **Implement four step mitigation plan to correctly understand the schedule implications of new station procurement and guideway/station procurement dates. Coordinate Core Systems schedule impacts and report results to Project Controls and Project Director. – Complete.**
  - **Evaluate the need for going with a separate TPSS Bungalow to mitigate station access impacts and develop recommendation prior to the procurement of the next station package. – Complete.**

**F) U.S. Navy Property** – There are a number of property easements required for site access. These properties have an impact to construction in the Airport Section. The Pearl Harbor Station is also affected. A certain level of delay was expected due to the coordination required locally through command channels to Washington, D.C. through the various federal processes. It is apparent the approvals required are not moving as HART was anticipating.

Mitigation Plan:

- Efforts to accelerate the process are underway through an increased number of meetings with the Navy at various levels to attempt to educate, learn and communicate at the multiple levels within each Agency. **Action:**
  - **Meet and resolve technical issues of reporting items of historic significance and other matters relating to Navy approvals of property access rights. – Date: Mar. 2015 and ongoing.**

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

Figure 18. Risk Matrix

Risk Matrix					
Legend	Low (1)	Med (2)	High (3)	Very High (4)	Significant (5)
Probability	< 10%	10><50%	> 50%	75% ><90%	>90%
Cost	< \$250K	\$250K><\$1M	\$1M><\$3M	\$3M><\$10M	>\$10M
Schedule	< 1 Mths	1 ><3 Mths	3><6 Mths	6><12 Mths	> 12 Mths
Rating	< =3	3.1-9.49	> =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 April 2015								
Current Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	Apr. '15 Risk Rating	Mar. '15 Risk Rating
111.05	Airport Guideway	Market -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	Market - Estimates for remaining guideway contracts may be low due to adjustments using pricing from WOFH Bid.	90%	5	5	4	22.5	22.5
20.08	Core Systems Contract	Interface - Delays in access milestones of stations, or guideway interfaces to systems results in delays to core systems contractor substantial completion milestones.	100%	5	5	4	22.5	22.5
65.06	City Center Guideway	Utilities - The relocation of the 138 kv overhead power lines may require new lines erected to provide redundancy during the 'relocation.'	75%	4	5	4	18	18
110.06	City Center Guideway	Market - 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	Third Party Utility - Insufficient utility company resources available to meet the design, approvals, and/or construction schedule.	75%	4	5	3	16	16
20.03	West Oahu/Farrington Highway Guideway	Interface - Late delivery of/or acceptance of civils, stations, or systems interface to guideway results in change orders.	90%	5	3	3	15	15
83.06	City Center Guideway	Utility - 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	Third Parties - Permits and approvals by other agencies may not be provided in a timely manner and delay the project.	75%	4	4	3	14	14
106.13	Airport Station Group	Third Party - ROW acquisition at Pearl Harbor may take longer due to Navy NEPA/Section 106 process requirements.	75%	4	3	4	14	14
129.13	Airport Station Group	Third Party - Pearl Harbor Station - Potential delays due to community actions concerning historical Pearl Harbor site.	75%	4	2	5	14	14

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

Figure 20. Risks Added

Risks Added in April 2015							
Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	Risk Rating
182.14	City Center Stations	Chinatown station construction complexity could potentially cause damage from noise or vibration to nearby structures.	25%	2	2	2	4
183.07	MSF	West Yard Lead (retaining wall) and East Yard Lead (utility relocations of water line) may not be completed timely for arrival and testing of train.	25%	2	3	2	5

Figure 21. Risks Deleted

Risks Deleted in April 2015					
Current Risk ID	Contract Package	Risk Description	Comments	Risk Rating	
				Apr. '15	Mar. '15
3.05	Airport Guideway	HDOT reviews of Interstate Crossings are not provided in a timely manner and delay the project. (WOFH, Kamehameha, and Airport Guideway Segments).	HDOT has agreed to the design parameters including the balanced cantilever. The new administration seems willing to work with HART should anything come up in the future.	4	4
4.05	Airport Guideway	Additional costs may arise through complicated stations and guideway integration.	Risk has been transferred to the DB contractor.	3	3
7.05	Airport Guideway	More fiber optic cable lines than estimated may need to be relocated (number and type of cables in ducts to be relocated not known).	Potholing by contractor and other data collection proves the concern is not significant.	4.5	4.5
20.05	Airport Guideway	Late delivery of / or acceptance of civils, structures or guideway contracts may delay systems installations.	Stations and guideway have been combined. CSC design has been sufficiently interfaced.	3.5	3.5
28.05	Airport Guideway	Potential for design related issues identified during construction resulting in delays to revenue service opening.	Final design related risk to DBB construction has been transferred to the DB contractor. This deletion eliminates design related and not DB construction contract related delay risk.	4	4
29.08	Core Systems Contract	If Interim Opening then, HART will be responsible for earlier warranty period for up to 1 year early and may require additional remedial work (prior to system wide opening).	This is not a capital construction related risk and falls to Operations and Maintenance risk.	2.5	2.5
35.15	Airport Utilities	Due to court delays, limited geotechnical information available at PE level. Additional costs for redesign may be incurred.	Potholing and data collection results are favorable. Foreseeable conditions are suitable for foundation design.	4	4
54.05	Airport Guideway	Staging, schedule and cost may be greater than assumed for the Keehi interchange.	Issues have been resolved and/or transferred to the DB contractor.	4	4
56.05	Airport Guideway	Guideway design in the area of the inter island terminal parking access ramp and the Paiea underpass connecting with Aoalele may require special structures to address the skew.	Risk is no longer relevant.	7	7
57.05	Airport Guideway	Segment surface street delivery routes may suffer settlement and general damage (including utilities) due to excessive loads and require replacement and or re-surfacing.	The issue will be addressed in the special provisions and transferred to the contractor.	2	2

Risks Deleted in April 2015 (continued)					
Current Risk ID	Contract Package	Risk Description	Comments	Risk Rating	
				Apr. '15	Mar. '15
90.13	Airport Station Group	Input from 3rd party stakeholders may result in changes for the Pearl Harbor Station.	Historic issues have been resolved with the Navy. There is still a process the Navy will go through that will be covered under other risk items covered in the Risk Register.	7.5	7.5
127.13	Airport Station Group	Middle Street - Construction access conflicts with Guideway Contractor for the erection of the relocated KLHT/KHKA Radio Station tower and access road.	Evaluation of relocation sites is underway.	4	4
130.13	Airport Station Group	Incomplete station construction documents for platform safety facilities [Platform Screens/Pedestrian Edge Doors (PED)] due to late CSC design development.	Design is fairly mature compared to typical DB documents. Design is being transferred to the contractor to improve upon.	5	5
131.13	Airport Station Group	Insufficient conduit and utility chase installation in station construction documents for Core Systems due to late CSC design development.	Fare collection systems is all that remains and can be satisfied with available space for conduit.	4.5	4.5
138.13	Airport Station Group	Hawaii Airport Station - Impacts from loadings on existing HIA International and Overseas Parking Garages resulting from construction of new pedestrian bridges.	Pedestrian bridge can be designed as a free standing structure. There is a match that will allow for minor differences in elevation to account for differences in loading.	4.5	4.5
143.13	Airport Station Group	Middle Street - Potential contractor delays due to restrictions on work in the Kalihi Transit Center and FAA Clearance for relocated KLHT/KHKA tower required for FCC permit.	Tower is last remaining issue and will be relocated.	7	7
154.07	Maintenance & Storage Facility Contract	Operations Services Building (OSB) equipment not installed or accepted in a timely manner.	CSC and MSF contracts have been interfaced sufficiently through design and each now involved with construction.	4	4
160.11	WOSG	Ho'opili issues may cause schedule/cost impacts: grade difference, development of surrounding property, temporary access road by others, holding tanks, etc.	Issues have been resolved and/or transferred to the DB contractor.	12.5	12.5

**6.7 Community Outreach**

**• Activities this month**

- With construction in the Waipahu, Aiea and Pearl City areas underway, and the project’s finances under review by the state Legislature, HART’s public outreach included presentations and question-and-answer sessions with numerous community associations and business groups. HART’s public outreach team participated in about 20

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

- *1,797 presentations and events*
- *977 Neighborhood Board meetings*

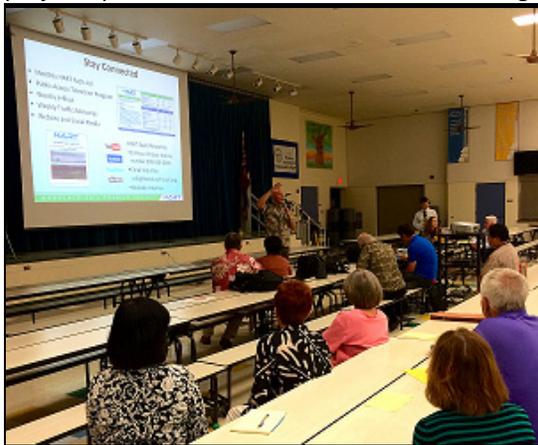
presentations, meetings and events this month, including canvassing in construction zones in Aiea to notify residents and business of upcoming work and traffic changes. In addition to HART’s regular monthly updates, HART also provided more than a dozen construction updates tailored to address the concerns of businesses and residents in key portions of the alignment as well as other areas of the island. In coordination with several area lawmakers, HART attended several town-hall meetings to provide project updates and answer questions about the project and its finances.

**• Construction Outreach**

- More than two dozen business owners and managers from Aiea attended a meeting this month, which focused on the impact of construction and related traffic and road closures on their businesses. In addition to answering traffic questions and concerns, HART and its contractor Kiewit provided a schedule of upcoming work in the months ahead to help businesses plan in advance. HART’s public outreach team and representatives from Kiewit also met with residents living near Kamehameha Highway to hear their concerns and suggestions regarding the impact of construction in their community. Concerns about dust and construction storage areas were heard and addressed.

- o Traffic during construction remains one of the top concerns. HART continued to provide regular traffic updates to the media, issued weekly press releases and posted key traffic updates using social media. In coordination with state and city transportation teams, HART also highlighted *Go Akamai*, which provides real-time traffic updates online, as another resource for commuters. Links to *Go Akamai* are on HART’s website and were provided in its weekly eBlast.

Figure 22. HART’s public outreach included a project update at the Mililani Town Hall Meeting.



HART Executive Director and CEO Dan Grabauskas and the HART team provided the community with a project update and answered questions about the project’s construction and its finances. The meeting was sponsored by Mililani’s state representatives.

Figure 23. HART’s public outreach team meets with residents along the rail route.



HART’s Director of Communications, Jeanne Mariani-Belding, and the HART and Kiewit outreach team provided a project update and addressed questions from Aiea residents living near Kamehameha Highway as part of HART’s construction outreach program.

• **Community Input**

- o HART’s public information team responded to more than 180 inquiries and requests in April that came in via the agency’s website, email and 24-hour hotline. Inquiries this month primarily focused on construction activities, particularly traffic, and questions about the project’s finances.

• **Look Ahead**

Coming in May:

- o Meetings for businesses and the community along the rail alignment to provide construction and traffic updates.
- o HART’s Business Outreach Program helps local businesses through the construction process.
- o Presentations at community town hall meetings, Neighborhood Board meetings and community events to provide construction updates and reports on the project’s finances.

6.8 Staffing

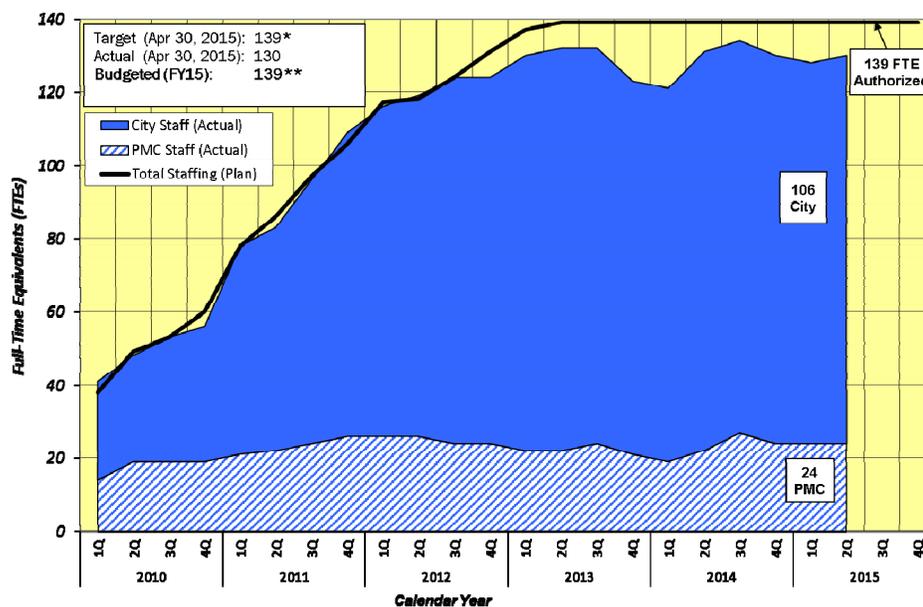
Figure 24. Staffing Activities

Staffing Activities				
Title	Group	New/Existing HART position (City or PMC)	Position Status	Start Month
<b>Executive Management</b>				
Senior Clerk (Receptionist)	Executive Management	Existing (City)	Recruiting via Civil Service	
<b>Design and Construction</b>				
Director of Design & Construction	Design & Construction	Existing (City)	Recruiting	
Assistant Project Manager	Construction (KHG)	New (City)	Recruiting	
Assistant Project Manager	Construction (WOFH)	New (City)	Recruiting	
HECO Coordinator	Design & Construction	Existing (City)	Creating Position/Recruiting	
Electrical Engineer	Core Systems	Existing (City)	Recruiting	
<b>Budget and Finance</b>				
Budget Analyst	Budget and Finance	New (City)	Selected/Processing	Jul
<b>Procurement</b>				
Deputy Director of Procurement & Contracts	Procurement & Contracts	Existing (City)	Recruiting/Interviewing	
<b>Contract Administration and Change</b>				
Transit Contracts Manager* (2)	Contract Administration and Change Management	Existing (City)	Filled (2)	Apr
<b>Planning, Permits &amp; Right-of-Way</b>				
Planner V (Land Use)	Planning	Existing (City)	Recruiting via Civil Service	
Planner III* (Environmental)	Planning	Existing (City)	Recruiting	
Planner V* (Mitigation Compliance)	Planning	Existing (City)	Recruiting	
Planner VI* (Permits /Hazmat)	Planning	Existing (City)	Recruiting	
Secretary I	ROW	Existing (City)	Selected/Processing	Jul
Secretary I	Planning	Existing (City)	Selected	May
<b>Administrative Services</b>				
Personnel Clerk	Administrative Services	New (City)	Recruiting via Civil Service	

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

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

Figure 25. Project Staffing (Actual vs. Planned)



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

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

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

# APPENDICES

## Appendix A. Action Items

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

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

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

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

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

*Current Contingency Balance = \$510.6M*

*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 04/24/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (H)	Contingency Code
<b>July '12 (Bottoms-Up Estimate)</b>					
<b>Beg. Balance:</b>				<b>\$643.6</b>	
1)	FD-240	Farmington Highway Stations Group FD	Budget Transfer at Bottoms-Up Estimate from Project Scope to Contingency (contract allowance)	\$58,443	80 09 - Contract Allowance
2)	FD-430	Airport Section Guideway Utilities FD	Budget Transfer for Contract Award less than the ASGU FD contract budget	\$2,054,106	80 02 - Allocated Contingency
3)	MM-375	LEED Commissioning Services	Budget Transfer for Contract Award above the LEED Comm. Services contract budget	(\$36,673)	80 02 - Allocated Contingency
4)	DB-320	Kahehameha Highway Guideway DB	Budget Transfer for Contract Award above the KHG DB contract budget	(\$220,883)	80 02 - Allocated Contingency
5)	DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer for Ins. Covg per executed CO No. 004	\$3,985,230	80 02 - Allocated Contingency
July '12 Contingency Drawdown				\$5,881,273	
<b>July '12 - Ending Contingency Balance</b>				<b>\$649.4</b>	
<b>August '12</b>					
<b>Beg. Balance:</b>				<b>\$649.4</b>	
1)	FD-140	West Oahu Stations Group FD	Budget Transfer for Contract Award under MOSES FD contract budget	\$1,908,200	80 02 - Allocated Contingency
2)	FD-500	City Center Guideway Utilities FD	Budget Transfer for Contract Award under COGU FD contract budget	\$5,917,945	80 02 - Allocated Contingency
3)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 17 - Pileup and install Portable Buildings	(\$2,670,000)	80 02 - Allocated Contingency
August '12 Contingency Drawdown				\$5,966,145	
<b>August '12 - Ending Contingency Balance</b>				<b>\$654.5</b>	
<b>Beg. Balance:</b>				<b>\$654.5</b>	
<b>September '12</b>					
<b>Beg. Balance:</b>				<b>\$654.5</b>	
No Contingency Drawdown				\$0	
<b>September '12 - Ending Contingency Balance</b>				<b>\$654.5</b>	
<b>October '12</b>					
<b>Beg. Balance:</b>				<b>\$654.5</b>	
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 21 - Builders Risk Insurances Coverage	(\$46,893)	80 02 - Allocated Contingency
October '12 Contingency Drawdown				(\$46,893)	
<b>October '12 - Ending Contingency Balance</b>				<b>\$654.4</b>	
<b>November '12</b>					
<b>Beg. Balance:</b>				<b>\$654.4</b>	
1)	FD-440	Airport Stations Group FD	Budget Transfer for Contract Award under ASG FD the contract budget	\$227,784	80 09 - Contract Allowance
2)	FD-340	Kahehameha Highway Station's Group FD	Budget Transfer for Contract Award under KHSG FD the contract budget	\$202,468	80 09 - Contract Allowance
3)	MM-305	General Engineering Consultant	Budget Transfer to align contract budget with Committed value	(\$120,830)	80 02 - Allocated Contingency
November '12 Contingency Drawdown				\$309,623	
<b>November '12 - Ending Contingency Balance</b>				<b>\$654.7</b>	
<b>December '12</b>					
<b>Beg. Balance:</b>				<b>\$654.7</b>	
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 01 - Design & Engineering Cost Estimates	(\$275,000)	80 02 - Allocated Contingency
December '12 Contingency Drawdown				(\$275,000)	
<b>December '12 - Ending Contingency Balance</b>				<b>\$654.4</b>	
<b>January '13</b>					
<b>Beg. Balance:</b>				<b>\$654.4</b>	
1)	DB-320	Kahehameha Highway Guideway DB	Executed Change Order No. 01 - Acacia Rd alternative analysis	(\$15,861)	80 02 - Allocated Contingency
January '13 Contingency Drawdown				(\$15,861)	
<b>January '13 - Ending Contingency Balance</b>				<b>\$654.4</b>	
<b>February '13</b>					
<b>Beg. Balance:</b>				<b>\$654.4</b>	
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 26 - Ins. Covg Requirement/Additional Policy at Ft. Weaver Rd	(\$1,670,178)	80 02 - Allocated Contingency
February '13 Contingency Drawdown				(\$1,670,178)	
<b>February '13 - Ending Contingency Balance</b>				<b>\$652.8</b>	
<b>March '13</b>					
<b>Beg. Balance:</b>				<b>\$652.8</b>	
1)	FD-240	Farmington Highway Stations Group FD	Executed Contract Amendment No. 09 - Waipahu Station sewer	(\$3,885)	80 09 - Contract Allowance
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 06 - Ins. Covg Requirements/ Dbi Crossovers Insulated Joints	(\$464,878)	80 02 - Allocated Contingency
March '13 Contingency Drawdown				(\$468,763)	
<b>March '13 - Ending Balance</b>				<b>\$652.3</b>	
<b>April '13</b>					
<b>Beg. Balance:</b>				<b>\$652.3</b>	
1)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 01 - Second elevator provision	(\$1,113)	80 09 - Contract Allowance
2)	DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer to offset Ins. Covg Requirement for Change Order No. 28	\$1,670,178	80 02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Budget Transfer to offset Ins. Covg Requirement for Change Order No. 06	\$494,000	80 02 - Allocated Contingency
4)	DB-320	Kahehameha Highway Guideway DB	Budget Transfer to Align current budget to contract Schedule of Milestones	\$900	80 02 - Allocated Contingency
April '13 Contingency Drawdown				\$2,023,786	
<b>April '13 - Ending Contingency Balance</b>				<b>\$654.3</b>	
<b>May '13</b>					
<b>Beg. Balance:</b>				<b>\$654.3</b>	
No Contingency Drawdown				\$0	
<b>May '13 - Ending Contingency Balance</b>				<b>\$654.3</b>	
<b>June '13</b>					
<b>Beg. Balance:</b>				<b>\$654.3</b>	
No Contingency Drawdown				\$0	
<b>June '13 - Ending Contingency Balance</b>				<b>\$654.3</b>	

# HART Project Contingency Drawdown with Details

Data as of 04/24/15

Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (\$)	Contingency Code
<b>July '13</b>				
1)	FD-430 Airport Section Guideway Utilities FD	Executed Contract Amendment No. 04 - Antenna Engineering Design Services	\$654.3	90.02 - Allocated Contingency
2)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 07 - Archeological Inventory Survey (AIS) Provisional Sum Part 2	\$3,000,000	90.02 - Allocated Contingency
3)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 08 - Maintenance & Storage Facility Yard Switch Machines	\$559,000	90.02 - Allocated Contingency
4)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 09 - Yard Layout Revisions	\$514,426	90.02 - Allocated Contingency
5)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 10 - Train Configuration	\$27,000	90.02 - Allocated Contingency
6)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 11 - Preliminary Design & Supplemental Project Mit	\$884,886	90.02 - Allocated Contingency
		July '13 Contingency Drawdown	<b>\$6,254,406</b>	
<b>August '13</b>				
		July '13 - Ending Contingency Balance	<b>\$649.1</b>	
1)	DB-120 West Oahu Fannington Highway Guideway DB	Executed Change Order No. 30 - Archeological Inventory Survey (AIS) Provisional Part 2	\$5,800,000	90.02 - Allocated Contingency
2)	DB-120 West Oahu Fannington Highway Guideway DB	Executed Change Order No. 32 - Kaloa Channel Station Mof Concept	\$12,381	90.02 - Allocated Contingency
3)	DB-120 West Oahu Fannington Highway Guideway DB	Executed Change Order No. 34 - Traditional Cultural Property Construction Partial Suspension	\$1,185,094	90.02 - Allocated Contingency
4)	DB-120 West Oahu Fannington Highway Guideway DB	Executed Change Order No. 36 - Hoboli Station Relocation Design	\$480,815	90.02 - Allocated Contingency
5)	DB-320 Kanehama Highway Guideway DB	Executed Change Order No. 06 - Archeological Inventory Survey (AIS) Provisional Part 2	\$1,500,000	90.02 - Allocated Contingency
6)	FD-140 West Oahu Stations Group FD	Executed Contract Amendment No. 02 - Canopy Redesign	\$504,388	90.03 - Contract Allowance
7)	MM-380 Elevator & Escalator Install/amt	Budget Transfer for Contract Awarded under E&E/IM contract budget	\$3,738,472	90.02 - Allocated Contingency
		August '13 Contingency Drawdown	<b>\$6,824,004</b>	
		August '13 - Ending Contingency Balance	<b>\$643.2</b>	
<b>September '13</b>				
1)	DB-120 West Oahu Fannington Highway Guideway DB	Executed Change Order No. 33 - Provisional Sum HDOT Joint Use and Occupancy	\$4,800,000	90.02 - Allocated Contingency
2)	DB-120 West Oahu Fannington Highway Guideway DB	Executed Change Order No. 35 - Aesthetic Column Design Conflict	\$1,20,812	90.02 - Allocated Contingency
3)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 12 - HNTB Design Escalator	\$823,500	90.02 - Allocated Contingency
4)	FD-240 Fannington Highway Stations Group FD	Executed Contract Amendment No. 10 - NTP 2 Delay/Design Delay from Core Systems Contract & West Oahu Fannington Highway DB Contract	\$270,885	90.02 - Allocated Contingency
		September '13 Contingency Drawdown	<b>\$6,116,297</b>	
		September '13 - Ending Contingency Balance	<b>\$637.1</b>	
<b>October '13</b>				
1)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 13 - Ins. Covg. Requirements/ Roof Access Modification	\$287,155	90.02 - Allocated Contingency
2)	DB-200 Maintenance & Storage Facility DB	Budget Transfer for Change Order No. 12 for Ins. Covg. Requirements	\$286,800	90.02 - Allocated Contingency
3)	DB-120 West Oahu Fannington Highway Guideway DB	Executed Change Order No. 37 - Ala He Street Mof Work at DR Horton & Fannington HWY	\$24,815	90.02 - Allocated Contingency
4)	DB-OM-920 Core Systems Design Build O/M	Executed Change Order No. 05 - Platform Screen Gates Systems	\$23,301,657	90.02 - Allocated Contingency
5)	FD-550 Dunningham and Kaala stations group FU	Budget Transfer for Contract awarded under DMSG FU contract budget	\$1,157,260	90.01 - Unallocated Contingency
		October '13 Contingency Drawdown	<b>\$22,134,737</b>	
		October '13 - Ending Contingency Balance	<b>\$615.0</b>	
<b>November '13</b>				
1)	DB-120 West Oahu Fannington Highway Guideway DB	Executed Change Order No. 38 - Insurance Coverage Requirement Q4 2013	\$1,800,000	90.02 - Allocated Contingency
2)	DB-200 Maintenance & Storage Facility DB	Budget Transfer for Change Order No. 038 for Ins. Covg. Requirements	\$1,800,000	90.02 - Allocated Contingency
3)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 014 - Preliminary Design & Supplemental Project Management 2	\$214,846	90.02 - Allocated Contingency
4)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 015 - Yard Layout Revisions/RFP Structural Steel Modification	\$1,293,000	90.02 - Allocated Contingency
5)	DB-200 Maintenance & Storage Facility DB	Budget Transfer for Change Order No. 015 for Ins. Covg. Requirements	\$223,000	90.02 - Allocated Contingency
6)	FD-530 City Center Guideway Utilities FD	Executed Contract Amendment No. 01 - Archeological Inventory Survey (AIS) Suspension	\$532,800	90.02 - Allocated Contingency
7)	FD-240 Fannington Highway Station Group FU	Budget Transfer for Contract Award for FHS6 Fd II	\$2,001,265	90.01 - Unallocated Contingency
		November '13 Contingency Drawdown	<b>\$6,434,861</b>	
		November '13 - Ending Contingency Balance	<b>\$610.0</b>	
<b>December '13</b>				
1)	FD-430 Airport Section Guideway Utilities FD	Executed Contract Amendment No. 09 - Ulena St redesign scope impact	\$248,358	90.02 - Allocated Contingency
2)	FD-140 West Oahu Station Group FD	Executed Contract Amendment No. 03 - Design relocation of HECO 48kV and fiber optic lines	\$23,828	90.02 - Allocated Contingency
		December '13 Contingency Drawdown	<b>\$272,886</b>	
		December '13 - Ending Contingency Balance	<b>\$609.8</b>	
<b>January '14</b>				
1)	FD-430 Airport Section Guideway Utilities FD	Executed Contract Amendment No. 08 - Archeological Inventory Survey (AIS) Suspension	\$2,308,450	90.02 - Allocated Contingency
2)	FD-530 City Center Guideway Utilities FD	Executed Contract Amendment No. 02 - Sag Resilience Test and Max Sag Calculation	\$408,153	90.02 - Allocated Contingency
3)	MM-380 Construction Engineering & Inspection West	Budget Transfer for Contract Award less than CE&I West Contract budget	\$181,083	90.02 - Allocated Contingency
4)	MM-380 Construction Engineering & Inspection East	Budget Transfer for Contract Award less than CE&I East Contract budget	\$1,102,817	90.02 - Allocated Contingency
		January '14 Contingency Drawdown	<b>\$4,192,718</b>	
		January '14 - Ending Contingency Balance	<b>\$608.3</b>	
<b>February '14</b>				
1)	FD-430 Airport Section Guideway Utilities FD	Executed Contract Amendment No. 07 - Resst. & Sag Geotech. Investigation	\$132,900	90.02 - Allocated Contingency
2)	HRT-201 HART OOC	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract	\$11,487	90.02 - Allocated Contingency
3)	MM-310 GEC II	Budget Transfer for Contract Award - Archeological & Cultural Monitoring & Core Systems Support contracts	\$4,424,178	90.02 - Allocated Contingency
4)	MM-360 Archeological & Cultural Monitoring	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract	\$36,761	90.02 - Allocated Contingency
5)	MM-362 Core Systems Support	Budget Transfer for Contract Award - Core Systems Support contract	\$4,398,889	90.02 - Allocated Contingency
		February '14 Contingency Drawdown	<b>\$132,900</b>	
		February '14 - Ending Contingency Balance	<b>\$608.2</b>	

# HART Project Contingency Drawdown with Details

Data as of 04/24/15

#	Project No.	Project Desc.	Budget Transfer/Change Description		Contingency Drawdown (4x)	Contingency Code
			Beg. Balance:	Ending Contingency Balance		
	N/A	March '14	No Contingency Drawdown		\$608.2	
			March '14 Contingency Drawdown		\$0	
					\$0	
		April '14	March '14 - Ending Contingency Balance		\$608.2	
1)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 04 - East Kapolei Staff Room Pre-Final Submittal		(\$80,293)	90.00 - Contract Allowance
2)	FD-300	Airport Section Guideway Utility FD	Executed Contract Amendment No. 08 - Notice-to-Proceed 483/Provisional Sum for Design Support during bid		(\$1,588,014)	90.00 - Contract Allowance
3)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 016 - Rail Locomotors		(\$107,000)	90.00 - Contract Allowance
4)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 017 - Yard Layout Reconfiguration/Automated Train Operation Design		(\$2,125,000)	90.00 - Contract Allowance
5)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 018 - Rail Material Storage Plan		(\$370,000)	90.00 - Contract Allowance
6)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 019 - Train Wash Facility Shortening		\$0	90.00 - Contract Allowance
7)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 040 - Precast Yard Alternative Site		(\$12,400,638)	90.00 - Contract Allowance
8)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 041 - Revised Track Alignment and Profile		(\$48,800)	90.00 - Contract Allowance
9)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 042 - Sandwhich Isles Communications Utility Relocation @ North South Rd		(\$188,048)	90.00 - Contract Allowance
10)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 005 - Rebar Clear Spacing Design Criteria		\$0	90.00 - Contract Allowance
			April '14 Contingency Drawdown		(\$17,490,762)	
			April '14 - Ending Contingency Balance		\$590.7	
		May '14	April '14 - Ending Contingency Balance		\$590.7	
1)	FD-140	West Oahu Stations Group FD	Budget Transfer for Executed Contract Amendment No. 05 - Final Design for relocated Hoopii Station		\$200,123	90.00 - Contract Allowance
2)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 008 - APHC work restrictions/abandoned utilities removal		(\$565,874)	90.00 - Contract Allowance
3)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 009 - Emergency walkway/insurance covg. Requirements 2013		(\$839,000)	90.00 - Contract Allowance
4)	DBOM-920	Core Systems Contract Design Build OM	Executed Change Order No. 017 - Relocate TPSS to system site #3		\$287,054	90.00 - Contract Allowance
5)	MM-9175	HOOT MOTT Consultant	Budget Transfer for Executed Contract Amendment No. 002 - increase T&M contract value		(\$8,910)	90.00 - Contract Allowance
6)	MM-976	MSE LEED Consultant	Budget Transfer for Executed Contract Amendment No. 001 - LEED measurement and verification plan		(\$22,500,000)	90.01 - Unallocated Contingency
7)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 020 - CSC consolidated changes construction		\$170,000	90.00 - Contract Allowance
8)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 025 - OSB reconfiguration		(\$22,310,918)	
			May '14 Contingency Drawdown		\$568.4	
			May '14 - Ending Contingency Balance		\$568.4	
		June '14	May '14 - Ending Contingency Balance		\$568.4	
1)	DB-200	Maintenance & Storage Facility DB	Board Approved RF CC 00010 - Amendment I Non-Rail Escalator		(\$5,000,000)	90.00 - Contract Allowance
			June '14 Contingency Drawdown		(\$5,000,000)	
			June '14 - Ending Contingency Balance		\$563.4	
		July '14	June '14 - Ending Contingency Balance		\$563.4	
1)	DBOM-920	Core Systems Contract Design Build OM	Executed Change Order No. 008 - Platform Screen Gates Mobilization		(\$398,194)	90.00 - Contract Allowance
2)	ROW	Real Estate Right-of-Way	Budget Transfer for Contract Award above the Real Estate Map & Survey budget		(\$1,944,412)	90.00 - Contract Allowance
3)	DB-200	Maintenance & Storage Facility DB	Budget Transfer to Project Contingency from remaining known changes balance		\$1,007,680	90.00 - Contract Allowance
4)	DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer to Project Contingency from remaining known changes balance		\$1,566,877	90.00 - Contract Allowance
			July '14 Contingency Drawdown		\$321,881	
			July '14 - Ending Contingency Balance		\$563.7	
		August '14	July '14 - Ending Contingency Balance		\$563.7	
1)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 010 - Delay in issuance of Notice-to-Proceed 2 & 3		(\$1,828,000)	90.00 - Contract Allowance
2)	FD-140	West Oahu Stations Group FD	Executed Amendment No. 006 - Passenger screen gates		(\$80,233)	90.00 - Contract Allowance
3)	DBS-505	Airport Section Utility Construction DBB	Budget Transfer for Contract Award above Airport Section Utility Construction original budget		(\$2,755,321)	90.00 - Contract Allowance
4)	MM-946	On Call Hazmat Removal Consultant	Budget Transfer due to scope transfer from ROW to Hazmat consultant		\$470,823	90.00 - Contract Allowance
5)	MM-945	On Call Contractor	Budget Transfer for Contract Award above On Call Contractor original budget		(\$130,435)	90.00 - Contract Allowance
			August '14 Contingency Drawdown		(\$4,323,166)	
			August '14 - Ending Contingency Balance		\$559.4	
		September '14	August '14 - Ending Contingency Balance		\$559.4	
1)	MM-950	CCIP Consultant Contract	Budget Transfer to unallocated contingency as estimate at completion is less than current budget		\$750,000	90.00 - Contract Allowance
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 027 - Traditional Cultural Properties (TCP) Suspension		(\$473,593)	90.00 - Contract Allowance
3)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 026 - Insurance Coverage Requirements 2014		(\$1,112,000)	90.00 - Contract Allowance
4)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 011 - Revised Vehicle Criteria/Construction Safety Security Plan		(\$231,500)	90.00 - Contract Allowance
5)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 012 - Insurance Coverage Requirements 9/17/13 - 6/30/14		(\$1,400,000)	90.00 - Contract Allowance
6)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 046 - Standard Specification Revision 2.0		(\$2,650,000)	90.00 - Contract Allowance
7)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 046 - Insurance Coverage Requirements 2014		(\$2,400,000)	90.00 - Contract Allowance
8)	FD-530	City Center Guideway Utilities FD	Executed Contract Amendment 004 - Aesthetic Station Column		(\$271,650)	90.00 - Contract Allowance
9)	FD-530	City Center Guideway Utilities FD	Executed Contract Amendment 005 - City Center Station Rescue Cart Scope Impact		(\$27,932)	90.00 - Contract Allowance
10)	FD-340	Kamehameha Highway Stations Group FD	Executed Contract Amendment 001 - Special Provisions Update/Shear Wave Analysis		(\$71,911)	90.00 - Contract Allowance
11)	FD-340	Kamehameha Highway Stations Group FD	Executed Contract Amendment 003 - Historic Architecture/Replace Highway Sign		(\$28,893)	90.00 - Contract Allowance
12)	FD-340	Kamehameha Highway Stations Group FD	Executed Contract Amendment 005 - Added Bus Shelters at Aloha Stadium Station		(\$238,750)	90.00 - Contract Allowance
13)	FD-430	Airport Section Guideway Utility FD	Executed Contract Amendment 010 - Aesthetic Station Column and Pearl Harbor Station Redesign		(\$45,000)	90.00 - Contract Allowance
14)	FD-430	Airport Section Guideway Utility FD	Executed Contract Amendment 011 - Airport Station Rescue Cart Scope Impact		(\$45,000)	90.00 - Contract Allowance
15)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment 007 - Traffic Signal Conflict UHWOHOPli Access Road		(\$9,722)	90.00 - Contract Allowance
			September '14 Contingency Drawdown		(\$9,336,161)	
			September '14 - Ending Contingency Balance		\$550.1	
		October '14	September '14 - Ending Contingency Balance		\$550.1	
1)	DBOM-920	Core Systems Contract Design Build OM	Executed Change Order No. 009 - WOGH Guideway Alignment for CSC		(\$145,000)	90.00 - Contract Allowance
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 028 - Escalator due to Schedule Impacts		(\$5,500,000)	90.01 - Unallocated Contingency

# HART Project Contingency Drawdown with Details

Data as of 04/24/15

Project #	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (+/-)	Contingency Code
3)	DB-320 Kamehameha Highway Guideway DB	Executed Change Order No. 013 - Station Load & Configuration Mods	(\$1,830,000)	90.02 - Allocated Contingency
4)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 047 - Station Load & Configuration Mods	(\$4,400,000)	90.01 - Unallocated Contingency
5)	FD-440 Airport Stations Group FD	Executed Contract Amendment No. 002 - Extension of PM Services	(\$30,000)	90.02 - Allocated Contingency
6)	FD-440 Airport Stations Group FD	Executed Contract Amendment No. 003 - Add Pedestrian Bridges to HIA Stations	(\$38,940)	90.02 - Allocated Contingency
7)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 001 - Extension of PM Services	(\$297,500)	90.03 - Contract Allowance
8)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 002 - Incorporation of Comments	(\$268,756)	90.01 - Unallocated Contingency
9)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 003 - Value Engineering	(\$472,705)	90.01 - Unallocated Contingency
10)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 004 - EOR/ACR	(\$48,539)	90.01 - Unallocated Contingency
11)	FD-140 West Oahu Stations Group FD	Executed Contract Amendment No. 010 - Temporary Parking Lot Near UHWO/UHWO & Hobbli Sewage Holding Tank	(\$107,288)	90.03 - Contract Allowance
12)	FD-140 West Oahu Stations Group FD	Executed Contract Amendment No. 011 - Extension of PM Services	(\$297,500)	90.02 - Allocated Contingency
<b>October '14 Contingency Drawdown</b>				
			<b>(\$18,307,188)</b>	
<b>November '14</b>				
<b>October '14 - Ending Contingency Balance</b>			<b>\$531.8</b>	
1)	DBOM-920 Core Systems Contract Design Build OIM	Executed Change Order No. 012 - Delete Ticket Vending Machines	\$10,350,000	90.02 - Allocated Contingency
2)	FD-550 Dillingham Kakaako Stations Group FD	Executed Contract Amendment No. 002 - General Excise Tax credit	\$385,586	90.02 - Allocated Contingency
			<b>\$10,735,586</b>	
<b>December '14</b>				
<b>November '14 - Ending Contingency Balance</b>			<b>\$542.49</b>	
1)	DBOM-920 Core Systems Contract Design Build OIM	Executed Change Order No. 010 - HRT Train Mock-up Shipment/Delivery	(\$63,715)	90.02 - Allocated Contingency
3)	DBOM-920 Core Systems Contract Design Build OIM	Executed Change Order No. 013 - HECO Connection Charges	(\$150,000)	90.02 - Allocated Contingency
4)	DB-320 Kamehameha Highway Guideway DB	Executed Change Order No. 014 - Escalation due to Schedule Impacts	(\$3,500,000)	90.02 - Allocated Contingency
5)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 048 - Escalation due to Schedule Impacts	(\$15,000,000)	90.01 - Unallocated Contingency
			<b>(\$18,719,715)</b>	
<b>January '15</b>				
<b>December '14 - Ending Contingency Balance</b>			<b>\$523.78</b>	
1)	DBOM-920 Core Systems Contract Design Build OIM	Executed Change Order No. 011 - Eliminate Station Manager Booths	\$310,000	90.02 - Allocated Contingency
2)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 050 - Escalation due to Schedule Impacts Subcontractor Ameron Aggregate	(\$464,413)	90.01 - Unallocated Contingency
3)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 051 - Escalation due to Schedule Impacts Subcontractor Anti-Graffiti Paint	(\$21,476)	90.01 - Unallocated Contingency
4)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 052 - Escalation due to Schedule Impacts Subcontractor HPD Spec Duty Officer	(\$156,123)	90.01 - Unallocated Contingency
5)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 053 - Escalation due to Schedule Impacts Subcontractor MESA Blocks	(\$71,863)	90.01 - Unallocated Contingency
6)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 054 - Escalation due to Schedule Impacts Subcontractor Road Builder	(\$716,655)	90.01 - Unallocated Contingency
7)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 055 - Escalation due to Schedule Impacts Subcontractor Post Tension Strand Accessories	(\$17,177)	90.01 - Unallocated Contingency
8)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 056 - Escalation due to Schedule Impacts Subcontractor Ameron Rolled Drilled Shaft Casings	(\$102,675)	90.01 - Unallocated Contingency
9)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 057 - Escalation due to Schedule Impacts Subcontractor PAC Electric	(\$777,893)	90.01 - Unallocated Contingency
10)	DBOM-920 Core Systems Contract Design Build OIM	Executed Change Order No. 014 - Eliminate Secondary Emergency Access at MSF	(\$59,700)	90.02 - Allocated Contingency
11)	FD-430 Airport Section Guideway Utilities FD	Executed Contract Amendment No. 012 - Contaminated Soil - 7 Piers Wayside Lubricators	(\$80,000)	90.02 - Allocated Contingency
12)	FD-550 Dillingham Kakaako Stations Group FD	Executed Contract Amendment No. 003 - Scope for Downtown Stop/Civic Center/StarKakapala Sta & Blue Ramps	(\$480,017)	90.02 - Allocated Contingency
13)	FD-550 Dillingham Kakaako Stations Group FD	Executed Contract Amendment No. 004 - Ala Moana Transit Ctr-Chinatown Sta Geotech Expedited Station Loads	(\$18,716)	90.02 - Allocated Contingency
14)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 005 - Addition of Bike Ramps to FHSG Stations	(\$17,744)	90.02 - Allocated Contingency
15)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 006 - Addition of 30' Guideway Section West Loch and Waipahu Stations	(\$57,000)	90.02 - Allocated Contingency
16)	FD-240 Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 007 - M OOS to West Loch and Waipahu Girder Design	(\$39,000)	90.02 - Allocated Contingency
			<b>(\$3,986,243)</b>	
<b>January '15 Contingency Drawdown</b>				
<b>January '15 - Ending Contingency Balance</b>			<b>\$519.79</b>	
<b>February '15</b>				
<b>January '15 - Ending Contingency Balance</b>			<b>\$519.79</b>	
1)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 058 - Kaihi Drainage Channel Geotechnical	(\$397,500)	90.02 - Allocated Contingency
2)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 059 - Revision of Waipahu Guideway, LCC Station & Pedestrian Vibration Criteria	(\$301,052)	90.02 - Allocated Contingency
3)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 060 - Waawa Scour Design Actuals	(\$289,494)	90.02 - Allocated Contingency
4)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 081 - Kaihi Scour Design Actuals	(\$636,571)	90.02 - Allocated Contingency
5)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 082 - West Loch and UHWO Station Revisions of Guideway	(\$64,212)	90.02 - Allocated Contingency
6)	DB-120 West Oahu Farrington Highway Guideway DB	Executed Change Order No. 083 - Procurement & Delivery LCC Modular Bldg	(\$1,919,021)	90.01 - Unallocated Contingency
			<b>(\$4,196,851)</b>	
<b>February '15 Contingency Drawdown</b>				
<b>February '15 - Ending Contingency Balance</b>			<b>\$515.59</b>	
<b>March '15</b>				
<b>February '15 - Ending Contingency Balance</b>			<b>\$515.59</b>	
1)	DBOM-920 Core Systems Contract Design Build OIM	Executed Change Amendment No. 015 - Test and Storage Track Changes at MSF	(\$2,310,000)	90.02 - Allocated Contingency
2)	FD-140 West Oahu Stations Group FD	Executed Change Amendment No. 013 - WOSG Rapid and VE Items, 4&8 Bay Station Canopy Roofs, Change to CSC Dev location	(\$360,000)	90.02 - Allocated Contingency
3)	FD-140 West Oahu Stations Group FD	Executed Change Amendment No. 014 - WOSG Rapid and VE Items, 4&8 Bay Station Canopy Roofs, Change to CSC Dev location	(\$245,000)	90.03 - Contract Allowance
4)	FD-530 City Center Guideway Utilities FD	Executed Change Amendment No. 006 - Management Extension thru October 2014	(\$952,500)	90.02 - Allocated Contingency
5)	FD-530 Airport Section Guideway - 7 Pier Construction	Executed Change Order No. 001 - HDOT A Utility Relocation at Piers	(\$480,863)	90.02 - Allocated Contingency
6)	FD-340 Kamehameha Highway Stations Group FD	Executed Change Amendment No. 006 - Misc. RFI's Interface Items	(\$309,176)	90.02 - Allocated Contingency
7)	FD-340 Kamehameha Highway Stations Group FD	Executed Change Amendment No. 006 - Alpha Stadium Low Impact Development Requirement	(\$43,000)	90.03 - Contract Allowance
			<b>(\$4,910,539)</b>	
<b>March '15 Contingency Drawdown</b>				
<b>March '15 - Ending Contingency Balance</b>			<b>\$510.68</b>	
<b>*March '15 - Board Approved Changes Only - Pending execution</b>				
N/A	N/A	No changes brought to the board this period	\$0	
			<b>\$0</b>	
<b>Subtotal Board Approved Contingency Drawdown</b>				
<b>March '15 - Ending Contingency Balance (Pending Execution)</b>			<b>\$510.68</b>	

Appendix C. Project Cost Reports (data as of March 27, 2015)

Project Costs by Contract

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



Costs Reported as of Month Ending: March 2015

Project Monthly Cost Report by Contract - One Line Summary

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CPP No	Title	T&M	A		B		C=A+B		D		E		F	
			Original	Changes	COMMITTED	Changes	Current *	AFE**	AFE**	Incurred To Date	Incurred To Date	PERCENT	PERCENT	
ART	Project Wide ART		0	0	0	0	0	0	0	0	0	0	0	0%
CCH-100	Inactive Hart/City.CCH		15,348,443	0	15,348,443	0	0	14,923,228	0	0	0	14,923,228	0	37%
CCH-101	HART/City Dept of BFS		105,092	0	105,092	0	0	0	0	0	0	0	0	0%
CCH-102	HART/City DDC Land Division		256,201	0	256,201	0	0	173,182	0	0	0	173,182	0	68%
CCH-107	HART/City Corporation Counsel (COR)		1,632,366	0	1,632,366	0	0	149,466	0	0	0	149,466	0	9%
CCH-108	Board of Water Supply (BWS)		928,325	0	928,325	0	0	928,325	0	0	0	928,325	0	100%
DB-120	West Oahu/Farrington Hwy Guideway	SOM	482,924,000	140,882,472	623,806,472	623,806,472	0	377,175,209	623,806,472	0	0	377,175,209	0	60%
DB-200	Maintenance & Storage Facility DB	SOM	195,238,000	79,100,008	274,338,008	274,338,008	0	185,123,743	207,388,742	0	0	185,123,743	0	67%
DB-320	Kamehameha Hwy Guideway DB	SOM	372,150,000	16,365,363	388,515,363	388,515,363	0	132,892,290	388,515,363	0	0	132,892,290	0	34%
DBB-185	SPCD - West Side SG Construction	SOV	0	0	0	0	0	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-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	0	0	0	27,383,022	0	0	0	0	0%
DBB-510	City Center Section Utilities Constr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-520	SPCD-Airport-City Center Gdway Cnstr.	SOV	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-525	Airport Section Guideway 7 Pier Cnstr	SOV	3,973,000	490,863	4,463,863	4,463,863	0	3,336,152	4,463,863	0	0	3,336,152	0	79%
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/Kaka'ako SG 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%
DBO M-920	Core Systems Design Build O/M	SOM	573,782,793	21,248,044	595,025,837	573,110,825	0	118,156,179	573,110,825	0	0	118,156,179	0	20%
FD-140	West Oahu Station Group FD	SOM	7,789,000	2,131,305	9,920,305	8,989,505	0	8,587,327	8,989,505	0	0	8,587,327	0	87%
FD-240	Farrington Highway Stations Group 2	SOM	9,300,696	4,897,349	14,198,045	12,930,376	0	12,366,404	12,930,376	0	0	12,366,404	0	87%
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	8,702,592	309,176	9,011,768	8,356,672	0	7,867,143	8,356,672	0	0	7,867,143	0	87%
FD-450	Airport Sect. Guideway/Utilities FD	SOM	38,840,960	3,769,872	42,610,832	42,610,832	0	39,626,445	42,610,832	0	0	39,626,445	0	93%
FD-480	Airport Station Group FD	SOM	10,177,365	1,224,840	11,402,205	10,852,862	0	9,716,742	10,852,862	0	0	9,716,742	0	85%
FD-530	City Center Guideway/Utilities FD	SOM	43,948,220	2,235,303	46,183,523	43,567,202	0	37,934,208	43,567,202	0	0	37,934,208	0	82%
FD-542	SPCD-City Center Stations (3), FD	SOV	0	0	0	0	0	0	0	0	0	0	0	0%

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

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CPP No	Title	A		B		C=A+B		D		E		F	
		Original	Changes	COMMITTED	Changes	Current *	Current *	AFE**	AFE**	Incurred To Date	Incurred To Date	PERCENT	PERCENT
FD-550	Dillingham and Kaka'ako SG, FD	18,321,918	652,529	18,374,447	15,399,142	10,667,500	56%						
FD-600	Park-and-Ride Lots Final Design	0	0	0	0	0	0%						
HRT-200	HART Labor	36,951,942	0	36,951,942	0	36,559,388	99%						
HRT-201	HART ODC Contracts	15,759,154	0	15,759,154	0	14,363,417	91%						
MM-800	Project Wide Fare Collection DFI	0	0	0	0	0	0%						
MM-930	Elevators & Escalators Install/Maint	50,982,714	0	50,982,714	5,442,108	3,738,473	7%						
MM-180	SPCD-West Oahu/Farrington Stat CEI	0	0	0	0	0	0%						
MM-280	SPCD-WO/FH/KHSG CE&I (REPA/CKA/GED)	0	0	0	0	0	0%						
MM-290	Construction Engng & Inspection West	54,232,480	0	54,232,480	16,650,000	9,544,338	18%						
MM-385	SPCD-Pearl Highlands Garage Rmpps CEI	0	0	0	0	0	0%						
MM480	SPCD-Airport Guidways/Utilities CEI	0	0	0	0	0	0%						
MM-500	SPCD-By M M959 CEI East	0	0	0	0	0	0%						
MM-525	SPCD-By M M959 CEI East	0	0	0	0	0	0%						
MM-580	SPCD-City Center Guideway/Hi CEI	0	0	0	0	0	0%						
MM-590	SPCD-By M M959 CEI East	0	0	0	0	0	0%						
MM-595	Construction Engng & Inspection East	63,083,417	0	63,083,417	15,257,000	7,010,106	11%						
MM-600	SPCD-UHWO Pkg-Hoopili Stn Fresh CEI	0	0	0	0	0	0%						
MM-900	Program Mgt Support Const (PM SC-1)	36,727,162	0	36,727,162	20,700,000	0	0%						
MM-901	Program Mgt Support Const (PM SC-2)	33,376,897	0	33,376,897	26,680,790	29,182,181	87%						
MM-905	MM-905 Gen Engng Const EIS/PE	0	78,564,942	78,564,942	78,564,942	74,157,822	94%						
MM-910	MM-910 Gen Engng Const FD-Construct	150,000,000	0	150,000,000	150,000,000	149,306,913	100%						
MM-913	MM-913 Gen Engng Recomplete	46,143,277	0	46,143,277	13,078,208	14,372,227	32%						
MM-915	HDOT Traffic Mgmt. Consult.	1,600,000	1,400,000	3,000,000	4,000,000	2,110,362	70%						
MM-920	HDOT Coordination Const WDFH	3,000,000	7,500,000	10,500,000	10,000,000	6,076,789	58%						
MM-921	HDOT Coordination Const KHG	10,000,000	-1,400,000	8,600,000	5,000,000	2,891,163	34%						
MM-922	HDOT Coord. Const. Airport	12,000,000	-5,600,000	6,400,000	3,000,000	1,889,847	30%						
MM-923	HDOT Coordination Const City Center	0	0	0	0	0	0%						
MM-925	HDOT Labor - Highway Group	550,000	0	550,000	815,633	1,271,931	231%						
MM-926	HDOT Labor - Airport Group	0	0	0	0	0	0%						
MM-930	HDOT State SOA Manager & Consultant	1,272,400	583,142	1,855,542	843,167	634,987	34%						
MM-935	Real Estate Consultant	3,000,000	3,327,665	6,327,665	4,817,665	3,445,419	54%						
MM-937	Real Estate Consultant - Maps/surv.	2,998,000	0	2,998,000	1,500,000	508,128	17%						
MM-940	Kako'o Consultant	1,000,000	0	1,000,000	500,000	466,566	47%						

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Costs Reported as of Month Ending: March 2015

Project Monthly Cost Report by Contract - One Line Summary

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CPP No	Title	A		B	C=A+B		D	E	F
		Original	Changes		COMMITTED	Current *			
MM-945	On-Call Contractor	1,000,000	1,000,000	T8MT:	2,000,000	1,000,000	1,000,000	869,431	43%
MM-946	On-Call Hazmat Removal Contractor	3,075,000	0	T8MT:	3,075,000	1,000,000	1,000,000	1,813,286	59%
MM-950	O/CIP Consultant	1,250,000	0	FFF	1,250,000	833,750	833,750	816,406	65%
MM-951	Owner-Controlled Insurance Program	41,000,000	0	FFF	41,000,000	0	0	19,584,117	48%
MM-960	Archaeological & Cultural Monitoring	459,517	0	T8M	459,517	459,517	459,517	318,512	69%
MM-962	Core Systems Support	43,988,989	0	C.PFF	43,988,989	3,600,000	3,600,000	6,487,216	15%
MM-964	Safety and Security Consultant	4,699,573	0	FFF	4,699,573	1,200,000	1,200,000	1,442,574	31%
MM-975	LEED Commissioning Services for MSF	278,630	9,910	T8M	288,540	288,540	288,540	58,660	20%
OTHER	Project Wide	0	0		0	0	0	0	0%
PA-101	Programmatic Agreement Humanities	0	0	PA	0	0	0	0	0%
PA-102	Programmatic Agreement HP C	400,000	0	T8MT:	400,000	2,000,000	2,000,000	137,683	34%
PA-103	Programmatic Agreement HP C Park Impr	0	0	PA	0	0	0	0	0%
ROW	Real Estate / Right-of-Way	89,885,511	0		89,885,511	121,932	121,932	77,203,291	86%
UTIL	Utilities by Utility Companies	90,560,619	8,027,656	T8M	98,588,275	78,901,537	78,901,537	18,500,803	19%
<b>Total Project:</b>		<b>2,611,188,226</b>	<b>366,515,439</b>		<b>2,977,703,665</b>	<b>2,417,098,786</b>	<b>2,417,098,786</b>	<b>1,445,189,579</b>	

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

Project Costs by SCC – Summary

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

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



SCC	Title	A	B	C=A+B	D	E	F	G	H=C-G	I
	Baseline	BUDGET	Transfers	Current	COMMITTED	AFE	Changes ID'd***	Est. At Completion****	Variance	Incurred To Date
<b>1. Subtotal 10 - 80 SCC Costs</b>										
10.	Guideway & Track Elements	1,114,215,147	39,357,677	1,153,572,824	544,241,270	30,527,709	17,378	1,153,572,824	0	166,700,715
20.	Stations/Stops/Terminals/Intermodal	421,804,740	(25,138,472)	396,666,268	50,982,714	0	0	396,666,268	0	3,738,473
30.	Support Facilities: Yards, Shops, Admin	92,535,015	21,771,122	114,306,137	114,306,137	17,962,473	0	114,306,137	0	59,242,474
40.	Sitework & Special Conditions	983,178,121	50,741,529	1,033,919,650	718,481,720	161,815,344	(270,304)	1,033,919,650	0	410,963,273
50.	Systems	221,284,301	26,296,231	247,580,532	232,420,319	27,038,099	0	247,580,532	0	23,464,663
60.	ROW, Land, Existing Improvements	197,397,947	528,621	197,926,568	99,215,331	329,820	5,000,000	197,926,568	0	80,926,510
70.	Vehicles	186,829,020	4,713,997	191,543,017	191,474,521	1,446,224	0	191,543,017	0	21,203,994
80.	Professional Services	1,087,830,119	14,592,672	1,102,422,791	1,025,032,138	127,388,122	(17,714,234)	1,102,422,791	0	675,264,275
A.C.	Provisional Pay Requests	0	0	0	0	0	0	0	0	3,324,972
<b>Subtotal:</b>		4,305,074,410	132,863,377	4,437,937,787	2,970,164,150	366,502,791	(12,967,220)	4,437,937,787	0	1,444,828,751
<b>2. NTP</b>										
	NTP Authorized For Expenditure	0	0	0	0	2,046,598,706	0	0	0	0
<b>Subtotal:</b>		0	0	0	0	2,046,598,706	0	0	0	0
<b>3. Contingency</b>										
	CNTR Alllocated Contingency	541,689,343	(77,455,156)	464,234,187	7,539,515	3,997,289	235,590,148	464,234,187	0	360,828
	PRJ Unallocated Contingency	101,871,170	(55,408,221)	46,462,949	0	0	0	46,462,949	0	0
<b>Subtotal:</b>		643,560,513	(132,863,377)	510,697,136	7,539,515	3,997,289	235,590,148	510,697,136	0	360,828
<b>4. Finance Charges - Eligible</b>										
	OTH Finance Charges	173,058,243	0	173,058,243	0	0	0	173,058,243	0	0
<b>Subtotal:</b>		173,058,243	0	173,058,243	0	0	0	173,058,243	0	0
<b>FIA TOTAL PROJECT COSTS 5,121,693,166</b>										
		0	0	5,121,693,166	2,977,703,665	2,417,098,786	222,622,928	5,121,693,166	0	1,445,189,579
<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
<b>Subtotal:</b>		42,000,000	0	42,000,000	0	0	0	42,000,000	0	0
<b>INELIGIBLE COSTS</b>										
		42,000,000	0	42,000,000	0	0	0	42,000,000	0	0
<b>Total Project:</b>		5,163,693,166	0	5,163,693,166	2,977,703,665	2,417,098,786	222,622,928	5,163,693,166	0	1,445,189,579

Report: M\_C00\_pnoc\_monthly\_Scc\_summary - No. 22

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

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

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Project Costs by SCC – Level 2

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



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

SCC	Title	BUDGET		COMMITTED		AFE		ESTIMATE AT COMPLETION		INCURRED	
		Baseline	Transfers	Current	Current*	AFE**	Changes ID#***	Est. At Completion***	Variance	Incurred To Date	
		A	B	C=A+B	D	E	F	G	H=C-G	I	
<b>1. Subtotal 10 - 80 SCC Costs</b>											
10.01	Guideway & Track Elements	1,114,215,147	39,357,677	1,153,572,824	544,241,270	30,527,709	17,378	1,153,572,824	0	166,700,715	
10.02	Guideway: At-grade semi-exclusive	0	0	0	0	0	17,378	0	0	0	
10.04	Guideway: Aerial Structure	1,022,380,671	36,381,516	1,058,762,187	458,938,433	20,865,982	0	1,058,762,187	0	121,413,088	
10.08	Guideway: Retained Cut or Fill	7,482,944	(1,056,688)	6,426,256	6,426,256	0	0	6,426,256	0	0	
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	45,287,627	
10.11	Track: Ballasted	3,293,724	(595,848)	2,697,875	2,697,875	0	0	2,697,875	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	
20. Stations, Stops, Terminals, Intermodal	421,804,740	(25,138,472)	396,666,268	50,382,714	0	0	0	396,666,268	0	3,738,473	
20.01	At-grade station, stop, shelter...	6,111,332	0	6,111,332	0	0	0	6,111,332	0	0	
20.02	Aerial station, stop, shelter, mall	294,563,457	(21,400,000)	273,163,457	0	0	0	273,163,457	0	0	
20.06	Automobile parking multi-story str	66,408,765	0	66,408,765	0	0	0	66,408,765	0	0	
20.07	Elevators, Escalators	54,721,186	(3,738,472)	50,982,714	50,982,714	0	0	50,982,714	0	3,738,473	
30. Support Facilities: Yards, Shops, Admin	92,535,015	21,771,122	114,306,137	114,306,137	17,962,473	0	0	114,306,137	0	59,242,474	
30.02	Light Maintenance Facility	7,591,888	(5,095)	7,586,793	7,586,793	0	0	7,586,793	0	1,330,103	
30.03	Heavy Maintenance Facility	38,099,138	4,595,814	42,694,952	42,694,952	4,837,922	0	42,694,952	0	16,572,526	
30.04	Storage or Maintenance of Way Bull	7,737,460	964,571	8,702,031	8,762,031	1,026,121	0	8,762,031	0	3,034,614	
30.05	Yard and Yard Track	39,046,529	16,215,832	55,262,361	55,262,361	12,098,430	0	55,262,361	0	38,305,231	
40. Sitework & Special Conditions	983,178,121	50,741,529	1,033,919,650	718,491,720	161,815,344	(270,304)	0	1,033,919,650	0	410,963,273	
40.01	Demolition, Clearing, Earthwork	29,980,158	(1,741,059)	28,239,099	8,589,446	632,302	0	28,239,099	0	1,337,145	
40.02	Site Utilities, Utility Relocation	299,449,756	9,384,408	308,834,164	201,049,008	14,636,176	0	308,834,164	0	53,443,376	
40.03	Haz. mat'l, contain'd soil removal	9,199,237	(5,421,634)	3,777,603	3,091,085	16,085	(270,304)	3,777,603	0	1,829,371	
40.04	Environmental Mitigation	26,979,122	4,976,801	31,955,923	16,543,497	2,689	0	31,955,923	0	8,255,641	
40.05	Site structures, retaining walls,	7,998,960	1,134,077	9,133,037	8,374,511	71,663	0	9,133,037	0	2,436,091	
40.06	Pedestrian/bike access/landscaping	41,073,897	741,177	41,815,074	4,991,868	(4,566)	0	41,815,074	0	347,500	
40.07	Auto, bus, van accessways	181,979,367	(10,796,652)	171,182,515	36,270,071	1,501,555	0	171,182,515	0	3,965,621	
40.08	Temporary Facilities/Indirect Cost	396,517,624	52,464,611	438,982,235	438,982,235	144,897,440	0	438,982,235	0	339,948,529	
50. Systems	221,284,301	26,296,231	247,580,532	232,420,319	27,038,099	0	0	247,580,532	0	23,464,663	
50.01	Train control and signals	81,982,556	24,381,140	106,363,696	106,363,696	23,961,050	0	106,363,696	0	2,250,372	
50.02	Traffic signals and crossing prot.	10,458,226	(206,890)	10,251,336	0	0	0	10,251,336	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	342,747	
50.04	Traction power distribution: cate	32,878,150	5,059,838	37,937,988	33,023,111	7,941,115	0	37,937,988	0	12,159,477	

Report: M\_CRM\_pm\_cc\_monthly\_Scc\_Detail - No. 23

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



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

SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G	I
		Baseline	Transfers	BUDGET	Current	COMMITTED	AFE**	Changes ID'd***	ESTIMATE 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	27,038,099	0	247,580,532	0	247,580,532	0	23,464,663	0
50.05 Communications		53,631,339	6,133,477	59,824,816	59,824,816	5,573,419	0	59,824,816	0	59,824,816	0	9,843,368	0
50.06 Fare collection system and equipme		9,139,277	(10,291,178)	(1,151,901)	(1,151,901)	(10,330,000)	0	(1,151,901)	0	(1,151,901)	0	(1,131,901)	0
50.07 Central Control		3,613,827	(160,036)	3,453,791	3,453,791	0	0	3,453,791	0	3,453,791	0	0	0
60. ROW, Land, Existing Improvements		197,397,947	528,621	197,926,568	93,215,331	329,820	5,000,000	197,926,568	0	197,926,568	0	80,926,510	0
60.01 Purchase or lease of real estate		179,360,664	230,821	179,611,485	86,269,654	52,020	5,000,000	179,611,485	0	179,611,485	0	73,365,879	0
60.02 Relocation of existing households		18,037,283	277,800	18,315,083	6,945,477	277,800	0	18,315,083	0	18,315,083	0	7,560,631	0
70. Vehicles		186,829,020	4,713,937	191,543,017	191,474,521	1,446,224	0	191,543,017	0	191,543,017	0	21,203,394	0
70.01 Light Rail		166,721,386	5,915,687	172,637,073	172,568,577	1,446,224	0	172,637,073	0	172,637,073	0	14,473,908	0
70.06 Non-revenue vehicles		14,346,923	(1,320,375)	13,026,548	13,026,548	0	0	13,026,548	0	13,026,548	0	6,729,486	0
70.07 Spare parts		5,760,711	118,685	5,879,396	5,879,396	0	0	5,879,396	0	5,879,396	0	0	0
80. Professional Services		1,067,830,119	14,532,672	1,102,422,791	1,025,032,138	127,383,122	(17,714,294)	1,102,422,791	0	1,102,422,791	0	675,264,275	0
80.01 Preliminary Engineering		94,055,262	24,644,185	118,699,447	109,367,127	20,905,682	0	118,699,447	0	118,699,447	0	101,789,664	0
80.02 Final Design		228,321,632	(5,490,555)	222,831,077	205,777,380	30,862,953	365,418	222,831,077	0	222,831,077	0	153,102,410	0
80.03 Project Management Design & Cons		363,849,768	(44,051,182)	319,798,586	355,880,099	65,946,774	(17,323,901)	319,798,586	0	319,798,586	0	278,006,369	0
80.04 Constr. Admin. & Management		199,656,728	(35,961,872)	163,694,857	158,430,336	40,457,664	0	163,694,857	0	163,694,857	0	63,347,647	0
80.05 Professional Liability & other Ins		46,549,724	28,781,938	75,331,662	43,174,657	700,500	0	75,331,662	0	75,331,662	0	21,359,823	0
80.06 Legal; Permits; Review Fees ect..		67,641,005	(211,086)	67,429,919	35,564,005	2,516,420	0	67,429,919	0	67,429,919	0	17,493,798	0
80.07 Surveys, Testing, Investigation, I		21,759,336	47,111,928	68,871,264	67,769,497	1,443,121	20,000	68,871,264	0	68,871,264	0	21,999,861	0
80.08 Start up		65,996,664	(230,685)	65,765,980	48,868,377	961,909	(775,809)	65,765,980	0	65,765,980	0	18,164,704	0
A.C. Provisional Pay Requests		0	0	0	0	0	0	0	0	0	0	3,324,972	0
ACR. Provisional Request For Payment		0	0	0	0	0	0	0	0	0	0	3,324,972	0
<b>Subtotal:</b>		4,305,074,410	132,863,377	4,437,937,787	2,370,164,150	366,502,791	(12,367,220)	4,437,937,787	0	4,437,937,787	0	1,444,828,751	0
<b>2. NTP</b>													
NTP Authorized For Expenditure		0	0	0	0	2,046,598,706	0	2,046,598,706	0	2,046,598,706	0	0	0
NTP Notice To Proceed		0	0	0	0	2,046,598,706	0	2,046,598,706	0	2,046,598,706	0	0	0
<b>Subtotal:</b>		0	0	0	0	2,046,598,706	0	2,046,598,706	0	2,046,598,706	0	0	0

Report: M\_C100\_pmtoc\_monthly\_Soc\_details - No. 23

\* Current Committed = Original Contract + CCO/Amendment

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

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

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

Print Date: 4/10/15 14:29



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

SCC	Title	A		B		C=A+B		D		E		F		G		H=C-G		I		
		Baseline	Transfers	Current	Transfers	Current	Current *	AFE**	AFE**	Changes ID'd***	Est. At Completion***	Variance	Incurred To Date							
<b>3. Contingency</b>																				
CNTR	Allocated Contingency	541,689,343	(77,455,156)	464,234,187	7,539,515	3,997,289	235,590,148	464,234,187	0	360,828										
90.02	Allocated Contract Contingency	540,101,329	(80,069,636)	460,031,694	3,997,289	3,997,289	227,063,246	460,031,694	0	360,828										
90.03	Allowances	1,588,014	2,614,479	4,202,493	3,542,226	0	8,526,901	4,202,493	0	0										
90.07	Known Change Contingency	0	0	0	0	0	0	0	0	0										
PRJ	Unallocated Contingency	101,871,170	(55,408,221)	46,462,949	0	0	0	46,462,949	0	0										
90.01	Unallocated Project Contingency	101,871,170	(55,408,221)	46,462,949	0	0	0	46,462,949	0	0										
<b>Subtotal:</b>		643,560,513	(132,863,377)	510,697,136	7,539,515	3,997,289	235,590,148	510,697,136	0	360,828										
<b>4. Finance Charges - Eligible</b>																				
OTH	Finance Charges	173,058,243	0	173,058,243	0	0	0	173,058,243	0	0										
100.1	Finance Charges: Project-Eligible	173,058,243	0	173,058,243	0	0	0	173,058,243	0	0										
<b>Subtotal:</b>		173,058,243	0	173,058,243	0	0	0	173,058,243	0	0										
<b>FTA TOTAL PROJECT COSTS 5,121,693,166 (0) 5,421,693,166 2,977,703,665 2,417,098,786 222,622,928 5,121,693,166 0 1,445,189,579</b>																				
<b>4. Finance Charges - Ineligible Costs</b>																				
FINC	Finance Charges	42,000,000	0	42,000,000	0	0	0	42,000,000	0	0										
100.2	FTA Non-Eligible Costs	42,000,000	0	42,000,000	0	0	0	42,000,000	0	0										
<b>Subtotal:</b>		42,000,000	0	42,000,000	0	0	0	42,000,000	0	0										
<b>INELIGIBLE COSTS 42,000,000 0 42,000,000 0 0 42,000,000 0 0 42,000,000 0 0 1,445,189,579</b>																				
<b>Total Project: 5,163,693,166 (0) 5,163,693,166 2,977,703,665 2,417,098,786 222,622,928 5,163,693,166 0 1,445,189,579</b>																				

\* 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

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	Oct 31 '16
FD-430	Airport Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Jan 26 '11	Dec 22 '11	Jan 05 '12	Jun 30 '17
FD-530	City Center Section Guideway and Utilities Final Design and Support	AECOM Technical Services, Inc.	Dec 16 '11	Jul 30 '12	Jul 31 '12	Apr 30 '18
FD-440	Airport Station Group Final Design and Support	AECOM Technical Services, Inc.	Mar 30 '12	Nov 7 '12	Nov 14 '12	Jul 15 '17
FD-550	Dillingham and Kaka'ako Station Groups "East Side Stations" Final Design and	Perkins+Will	Nov 16 '12	Aug 15 '13	Jul 31 '13	Jul 30 '18
MM-290	Construction Engineering & Inspection West Side Sections	PGH Wong Engineering, Inc.	Jul 26 '13	Jan 9 '14	Jan 09 '14	Mar 01 '19
MM-595	Construction Engineering & Inspection East Side Sections	URS Corporation	Jul 26 '13	Jan 07 '14	Jan 09 '14	Mar 01 '19
MM-901	Program Management Support Consultant -2 (PMSC-2)	InfraConsult LLC	Aug 03 '11	Feb 28 '12	Mar 08 '12	Mar 07 '16
MM-910	General Engineering Consultant II (GEC-2) (Final Design and Construction)	Parsons Brinckerhoff	Sep 03 '09	Jun 30 '11	Aug 02 '11	Dec 31 '14
MM-913	General Engineering Consultant III (GEC-3)	CH2M HILL	Jul 26 '13	Dec 5 '13	Dec 05 '13	Apr 5 '19
MM-935	Real Estate Consultant	Paragon Partners, Ltd.	Apr 01 '11	Mar 14 '12	Mar 14 '12	Mar 13 '17
MM-937	Real Estate Mapping & Surveying	R.M. Towill Corporation	Nov 15 '13	May 22 '14	May 23 '14	Dec 30 '17
MM-940	Kāko'o Consultant	Pacific Legacy, Inc.	May 20 '11	Mar 29 '12	Mar 30 '12	Feb 14 '17
MM-950	Owner-Controlled Insurance Program (OCIP) Consultant	Marsh USA, Inc.	Jan 31 '12	May 10 '12	Jun 05 '12	May 09 '17
MM-951	Owner-Controlled Insurance Program (OCIP) Brokerage Services	Aon Risk Services, Inc., of Hawaii	Jun 04 '13	Apr 9 '14	Apr 08 '14	Mar 30 '19
MM-960	Archaeological & Cultural Monitoring	Cultural Surveys Hawai'i	Sep 10 '13	Jan 15 '14	Jan 15 '14	May 30 '18
MM-962	CORE Systems Support	Lea+Elliott, Inc.	Sep 13 '13	Feb 10 '14	Feb 11 '14	Mar 01 '19
MM-964	Safety / Security Support	Lawson & Associates, Inc.	Oct 23 '13	Apr 23 '14	May 01 '14	Dec 14 '17
MM-975	LEED Commissioning Services for the Maintenance and Storage Facility (MSF)	Enovity, Inc.		Oct 6 '10	Oct 07 '10	Jan 14 '16
PA-102	Historic Architecture Design Services	Fung Associates, Inc.	Mar 15 '13	Aug 1 '13	Aug 01 '13	May 01 '16
MM-915	HDOT Traffic Management Coordination Consultant	ICX Transportation Group, Inc.	Aug 15 '11	Jun 5 '12	Jun 12 '12	Jul 01 '17
MM-920	HDOT Design Coordination Consultant - West O'ahu/Farrington Highway	AECOM Technical Services, Inc.		Jun 7 '11	Jun 08 '11	Jun 15 '18
MM-921	HDOT Design Coordination Consultant - Kamehameha Highway Guideway Section	AECOM Technical Services, Inc.		Jun 28 '12	Jun 29 '12	Jul 15 '16
MM-922	HDOT Design Coordination Consultant - Airport and City Center Guideway	SSFM International, Inc.		Jun 8 '12	Jun 12 '12	Jun 15 '18
MM-925	HDOT Labor Master Agreement WOFH	HDOT		Oct 27 '10	Oct 27 '10	Oct 27 '19
MM-945	On-Call Construction Contractor	Royal Contracting Co. Ltd.	Jun 02 '14	Aug 6 '14	Aug 14 '14	Mar 03 '19
MM-946	On-Call Hazardous Materials (HazMat) Removal Contractor	CH2M HILL		Aug 23 '12	Sep 07 '12	Feb 15 '17
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	TBD

Remaining Contracts						
Contract Code	Contract Name	Advertise Date	Bids Due/Part 1 Proposals Due	RFP Part 2 Proposals Due	Issue NTP	Projected Substantial Completion Date
AP00	Art-in-Transit	May 9 '13	-	-	TBD	TBD
DB-275	Pearl Highlands Parking Structure / Bus Transit Center	Mar 03 '14	Jun 03 '14	TBD	TBD	TBD
DBB-271	Farrington Hwy Stations Group Construction	Dec 19 '14	Mar 03 '15	-	TBD	TBD
DBB-385	Ramp H2R2	Jan 30 '15	Apr 28 '15	-	May 22 '15	May 31 '16
MM-947	On-Call Construction Contractor II	Mar 17 '15	Apr 20 '15	-	May 09 '15	TBD
MM-970	Fare Collection System Technical Support Consultant	Mar 24 '15	Apr 27 '15	-	May 15 '15	TBD
MM-596	Construction Engineering and Inspection (CE&I) II Contract	Mar 25 '15	May 20 '15	-	-	TBD
DB-450	Airport Guideway and Stations	Apr 07 '15	Jun 09 '15	Dec 15 '15	Feb 1 '16 May 2 '16	Jun 28 '19
DBB-171	West O'ahu Stations Group Construction	Apr 13 '15	Jun 16 '15	-	Jul 08 '15	Nov 30 '17
DBB-510	City Center Utilities	Jun 01 '15	Aug 20 '15	-	Oct 01 '15	Mar 31 '17
DB-550	City Center Guideway and Stations	Aug 04 '15	Oct 01 '15	Apr 15 '16	Jun 1 '16 Nov 1 '16	TBD
DBB-371	Kamehameha Hwy Stations Group Construction	Aug 18 '15	Nov 03 '15	-	Dec 01 '15	Aug 31 '18
DBB-600	East Kapolei and UH/West O'ahu Park and Ride Lots	Nov 14 '16	Feb 15 '17	-	Apr 03 '17	Mar 01 '19

## Appendix E. 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 4/30/15)						
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	\$52,821	\$189,437
Glad's Landscaping	561730	APA	M	CT-HRT-10H0137 DB-120	\$303,790	\$303,790
Don's Makiki	484110	APA	M	CT-HRT-10H0137 DB-120	\$537,031	
				CT-HRT-10H0449 DB-200	\$41,232	
				CT-DTS-1100195 DB-320	\$60,714	\$638,977
Pacific Preferred Contractors Corp.	237310	APA	M	CT-HRT-10H0137 DB-120	\$59,881	\$59,881
PAC Electric	238210	APA	F	CT-HRT-10H0137 DB-120	\$2,730,278	\$2,730,278
PMJ Builders	238310	APA	M	CT-HRT-10H0137 DB-120	\$43,866	
				CT-DTS-1100195 DB-320	\$107,100	\$150,966
Standard Sheetmetal & Mechanical	236220	APA	M	CT-HRT-10H0449 DB-200	\$6,105	\$6,105
LP&D Hawaii	541320	APA	M	SC-DTS-1100013 FD-240	\$219,911	\$219,911
Ace Land Surveying	541370	NA	M	SC-DTS-1100013 FD-240	\$38,700	\$38,700
Integrated Security Tech.	561621	O	F	CT-HRT-1200106 DBOM-920	\$105,180	\$105,180
LKG-CMC	541618	O	F	SC-HRT-11H0131 MM-905	\$2,600,462	
				SC-DTS-0700001 **** MM-910	\$2,783,277	
				SC-HRT-1400051 MM-595	\$165,546	
				SC-HRT-1400049 MM-962	\$179,255	\$5,728,540
Lawson & Associates	541690	O	F	SC-HRT-11H0131 MM-905	\$740,962	
				SC-DTS-0700001 **** MM-910	\$150,141	
				SC-HRT-1400061 MM-964	\$568,214	\$1,459,317
Gary K. Omori	541618	APA	M	SC-HRT-11H0131 MM-905	\$388,609	
				SC-DTS-0700001 **** MM-910	\$392,920	\$781,529
Pat Lee & Assoc.	541618	APA	M	SC-HRT-11H0131 MM-905	\$402,791	
				SC-DTS-0700001 **** MM-910	\$374,110	\$776,901
212 Harakawa	541430	APA	F	SC-HRT-11H0131 MM-905	\$358,141	

DBE Participation (9/24/07 to 4/30/15)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
				SC-DTS-0700001 **** MM-910	\$354,758	\$712,899
JAD & Associates	541330	APA	M	SC-DTS-0700001 **** MM-910	\$508,355	\$508,355
Pacific Architects	541310	APA	M	SC-DTS-0700001 **** MM-910	\$39,273	\$39,273
Nagame Okawa*	541310	APA	M	SC-DTS-0700001 MM-910	\$67,014	\$67,014
Consulting Structural Hawaii	541330	APA	M	SC-DTS-0700001 **** MM-910	\$298,557	\$298,557
Bright Light Marketing Group	541613	APA	F	SC-HRT-1200038 FD-430	\$162,813	
				SC-HRT-1200149 FD-530	\$191,227	
				SC-HRT-1300022 FD-440	\$134,912	\$488,952
Ki Concepts	541320	APA	M	SC-HRT-1200077 MM-922/923	\$25,020	\$25,020
Miyabara Associates	541320	APA	M	SC-HRT-1300022 FD-440	\$99,850	\$99,850
Anil Verma Associates, Inc.**	541350	HA	M	SC-HRT-1200111 FD-340	\$3,281,530	\$3,281,530
AMR Estimating Services ***	541330	HA	M	SC-HRT-11H0131 MM-905	\$135,281	
				SC-HRT-1400027 MM-913	\$469,074	\$604,355
The Nako Companies	541620	NA	M	CT-HRT-1200106 DBOM-920	\$3,843	\$3,843
Hawaiya Technologies	238210	APA	F	CT-HRT-10H0449 DB-200	\$27,514	
				CT-HRT-1200106 DBOM-920	\$20,142	\$47,656
Element Environmental	541620	APA	M	SC-HRT-1400050 MM-290	\$387,544	\$387,544
PSC Consultants	541330	APA	M	SC-HRT-1400050 MM-290	\$4,477	\$4,477
Bow Construction Management	541330	APA	M	SC-HRT-1400050 MM-290	\$117,342	\$117,342
FIC, LLC	541611	APA	M	SC-HRT-1400051 MM-595	\$784,178	\$784,178
The Solis Group	541620	O	F	SC-HRT-1400027 MM-913	\$511,747	\$511,747
Island Hauling	484110	APA	M	CT-HRT-1000449 DB-200	\$18,147	\$18,147
ADS System Safety Consulting ****	541620	BA	M	SC-HRT-1400061 MM-964	\$708,419	\$708,419
<b>Total</b>						<b>\$21,898,670</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 F. Risk**

Risk by Contract Package				
Contract Packages	Mar. 2015 # of Risks	April 2015 Update		
		Total # of Risks	New Risks	Deleted Risks
Project Wide	4	4	0	0
WOFH Guideway	21	21	0	0
Pearl Highlands	4	4	0	0
Maintenance and Storage Facility	5	5	1	1
Kamehameha Highway Guideway	18	18	0	0
Core Systems Contract	10	9	0	1
Elevator/Escalator	2	2	0	0
Airport Utilities	3	2	0	1
Farrington Highway Stations	5	5	0	0
West Oahu Stations	6	5	0	1
Kam. Highway Stations	8	8	0	0
Airport Guideway	27	19	0	8
City Center Guideway	41	41	0	0
Airport Section Stations	22	16	0	6
City Center Section Stations	13	14	1	0
<b>Total</b>	<b>189</b>	<b>173</b>	<b>2</b>	<b>18</b>

**Notes of Significance:**

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

Comparison of Risk Ratings								
Contract Package/Section	March 2015 # of Risks				April 2015 Update # of Risks			
	Total	High	Medium	Low	Total	High	Medium	Low
Project Wide	4	1	2	1	4	1	2	1
WOFH Guideway	21	4	12	5	21	4	12	5
Pearl Highlands	4	0	4	0	4	0	4	0
Maintenance and Storage Facility	5	0	4	1	5	0	4	1
Kamehameha Highway Guideway	18	1	10	7	18	1	10	7
Core Systems Contract	10	1	4	5	9	1	4	4
Elevator/Escalator	2	0	2	0	2	0	2	0
Airport Utilities	3	0	3	0	2	1	1	0
Farrington Highway Stations	5	0	5	0	5	0	5	0
West Oahu Stations	6	1	5	0	5	0	5	0
Kam. Highway Stations	8	0	3	5	8	0	3	5
Airport Guideway	27	3	21	3	19	3	14	2
City Center Guideway	41	9	27	5	41	9	27	5
Airport Stations	22	4	17	1	16	3	12	1
City Center Stations	13	0	11	2	14	0	12	2
<b>Total</b>	<b>189</b>	<b>24</b>	<b>130</b>	<b>35</b>	<b>173</b>	<b>23</b>	<b>117</b>	<b>33</b>

**Notes:**

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

Appendix G. Project Organization Chart

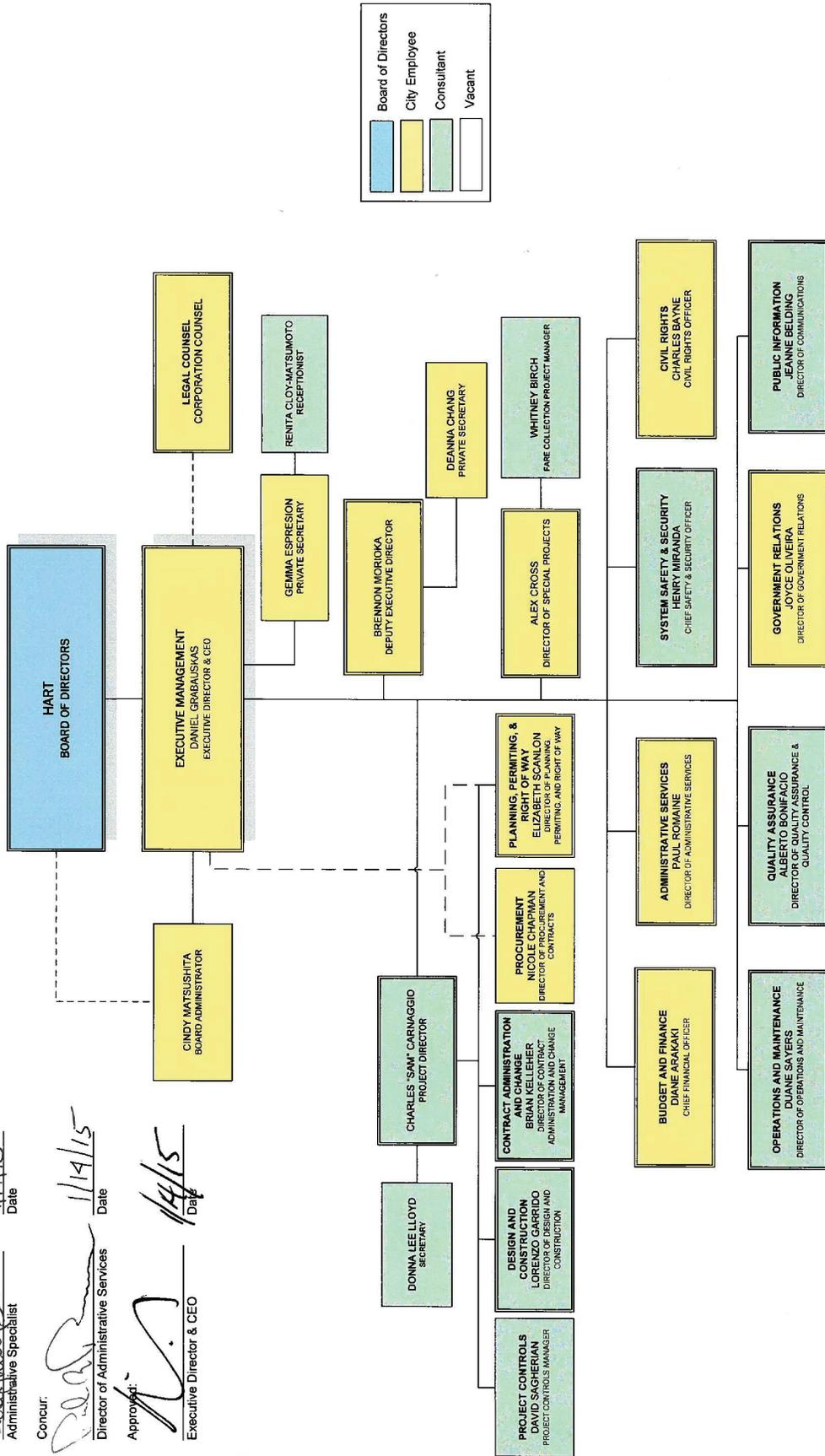
January 14, 2015

HONOLULU AUTHORITY FOR RAPID TRANSPORTATION (HART)

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

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

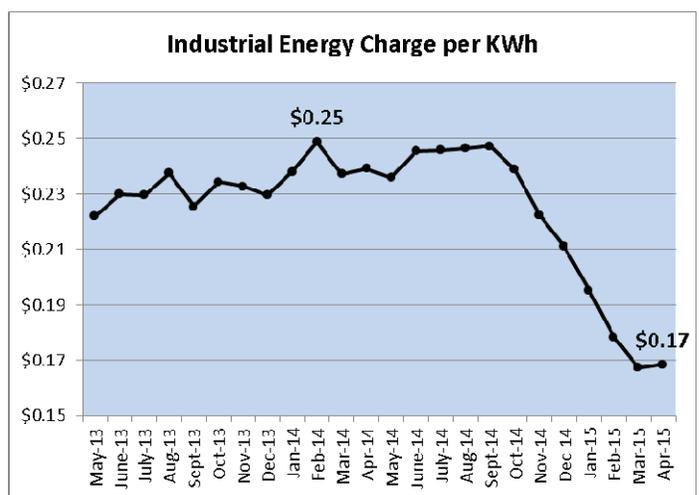
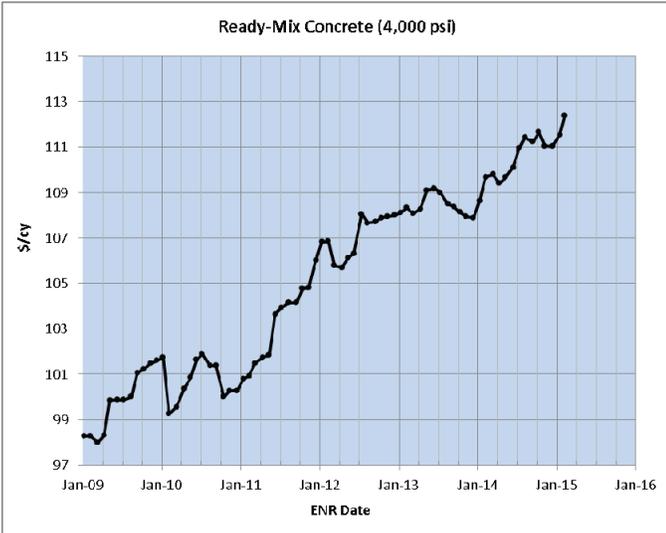
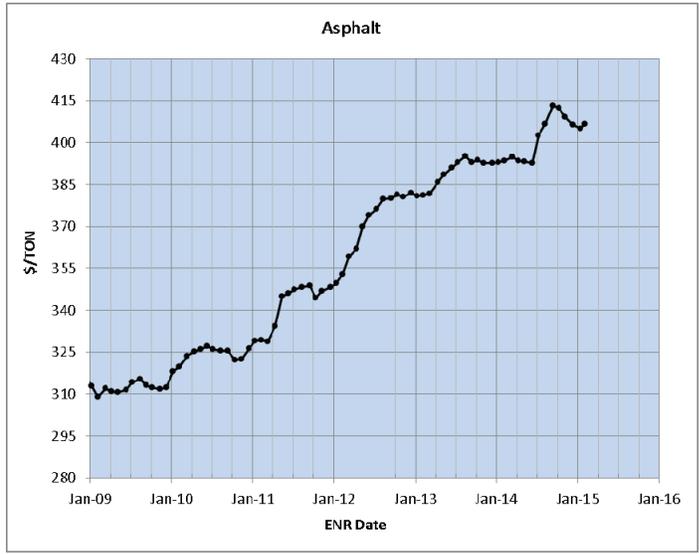
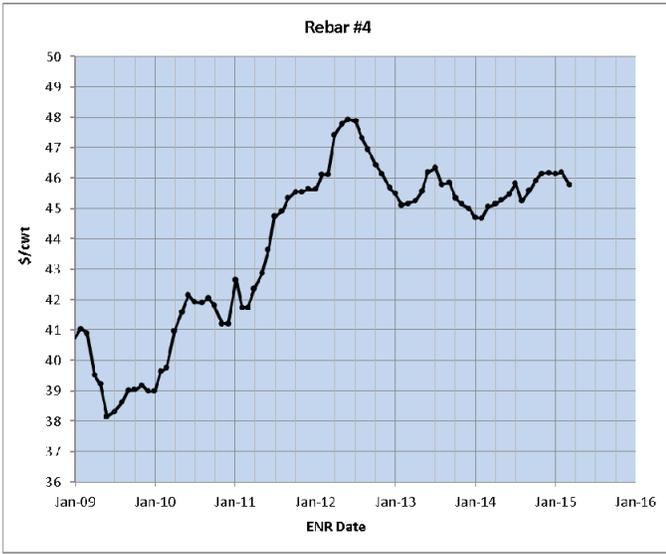
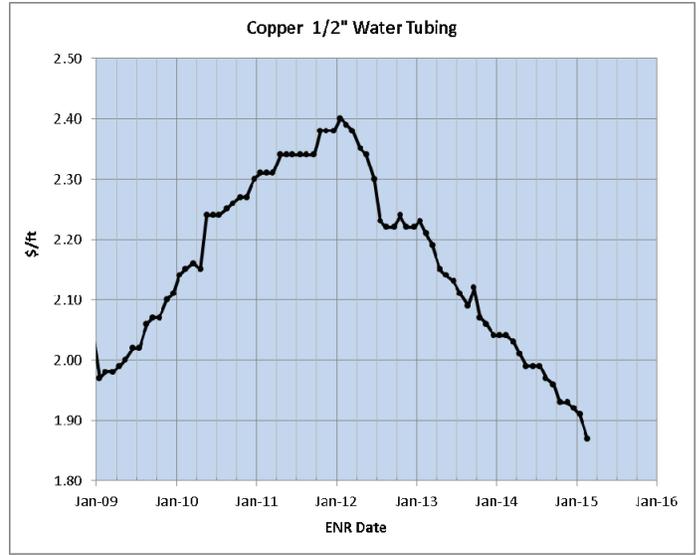
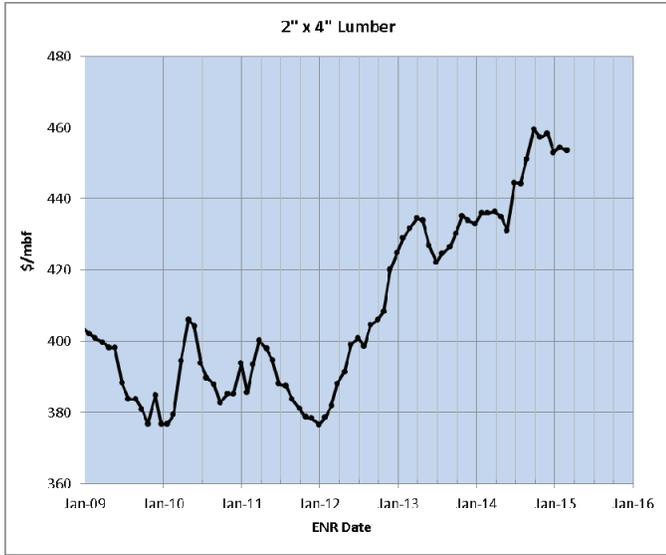
Approved: [Signature] Date: 1/14/15  
 Executive Director & CEO



Board of Directors  
 City Employee  
 Consultant  
 Vacant

### Appendix H. Indices on Key Commodities

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



Source: HECO: Effective Rate Summary for DS Rate

**Appendix I. FTA Letter**

U.S. Department  
of Transportation  
**Federal Transit  
Administration**

Administrator

1200 New Jersey Ave., S.E.  
Washington, DC 20590

APR 03 2015

Mr. Daniel Grabauskas  
Executive Director  
and Chief Executive Officer  
Honolulu Authority for Rail Transportation  
1099 Alakea Street, 17<sup>th</sup> Floor  
Honolulu, HI 96813

Dear Mr. Grabauskas:

Thank you for your letter requesting confirmation of the essential elements of discussions that the Federal Transit Administration (FTA) had with Honolulu Mayor Kirk Caldwell and separately with Honolulu City Council Chair Ernie Martin and Council Members Manahan, Ozawa, and Elefante. Your letter addressed four major topics, each of which is addressed below. These responses track the information that was provided to Mayor Caldwell and the Members of the Honolulu City Council and those recent meetings.

With respect to the technology of the project, your understanding is correct that the Honolulu Rail Transit Project Full Funding Grant Agreement (FFGA) contract and the Federal funds provided under that contract is limited exclusively to the project described in the FFGA's "Scope of the Project." Only a 20-mile grade separated fixed rail system from East Kapolei to the Ala Moana Center operating on an exclusive right of way and powered by third rail electrification that propels light metro fully automated driverless rail vehicles qualifies for the funds provided under the FFGA. Should Honolulu, and/or the Honolulu Authority for Rail Transit (HART) elect to change the technology now, however, the current project would come to an immediate end, the FTA would seek repayment of the Federal funds provided to the project thus far, and HART would need to initiate a new project under the current FTA Capital Investment Grant (CIG) process, which is significantly different than the process under which the current project was developed. Moreover, there is no guarantee that a revised resubmitted project would be approved. It would have to undergo the entire CIG evaluation and rating process, which is extremely competitive.

Additionally, we would note that the revised CIG project development process no longer includes the Alternatives Analysis step that was a part of the former New Starts process. Activities prior to initiation of the step now known as Project Development must be accomplished without CIG program funds and cannot be counted as part of the local match for a CIG project. We also would note that, as stated in the FFGA, defaulting on the current project would be a factor considered before a decision is made to approve any new project FFGA.

With respect to the route of the project, you are correct that any deviation from the project's length of 20 miles, number of stations (21), and the project's route approved under the Record of

Decision issued at completion of the National Environmental Policy Act (NEPA) process would constitute a breach of the FFGA. As noted above, such a breach would result in termination of the FFGA and a requirement that the Federal funds expended to date be repaid to FTA. Should HART and the City desire to proceed with a different project, it would also necessitate, at a minimum, the completion of a new NEPA document, possibly a Supplemental Environmental Impact Statement (SEIS), or even a new Environmental Impact Statement (EIS), likely resulting in considerable delay in delivering such a project.

With respect to repayment of Federal funds, if the City and/or HART are unable to complete the project as specified in the FFGA or make changes to the project that constitute a breach that is not cured, the FFGA provides that "in the event of a default, the Government may demand all Federal funds provided to the Grantee for the project be returned to the Government." Additionally, making alterations to the project route, number and location of stations, and essential elements of the project included or incorporated by reference into the FFGA also would constitute a breach of the FFGA. If that breach were not cured to restore the essential elements of the project, repayment of the Federal funds would be required.

With respect to the deletion of FTA formula funds in the project's Financial Plan, although the final Financial Plan for the project incorporated use of \$210 million in Section 5307 Urbanized Area Formula funds apportioned to Honolulu, FTA understands the City and HART's concern that use of those funds for the rail project might adversely affect that transit service currently provided by TheBus. The FTA shares those concerns. In fact, FTA should and received assurances in a letter dated September 2011, from then-Mayor Peter Carlisle, that the programming of Section 5307 funds for the rail project would not undercut services provided by TheBus and that the City would maintain its historical commitment to fully fund TheBus services and planned enhancements. However, the removal of the \$210 million in Section 5307 funding from the project's Financial Plan requires that the City and HART replace the \$210 million from some other non-CIG funding source and that the alternative source of funding have similar assurances of availability to the project as was the case with respect to the Section 5307 Urbanized Area Formula funding. In other words, the replacement funds must be dedicated to the project, fully committed, thus not requiring any further legislative action by State or local bodies.

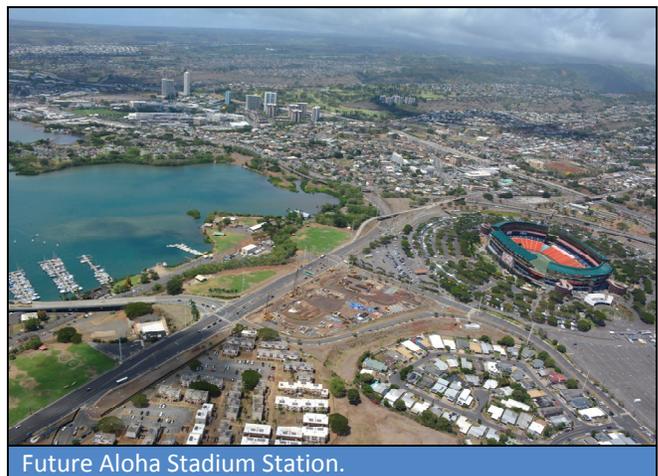
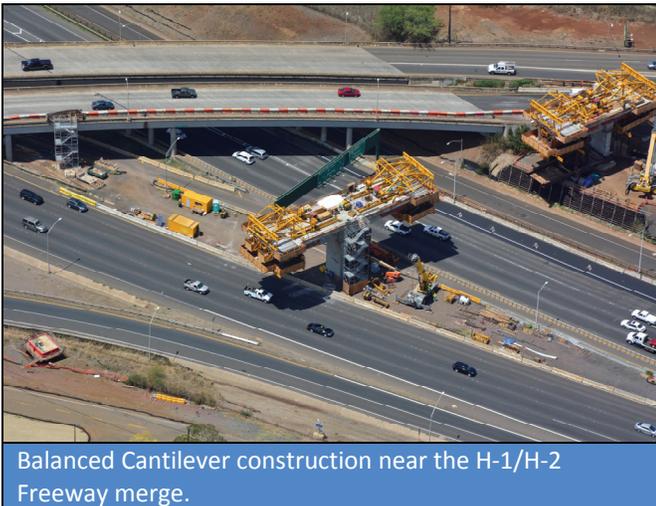
We hope this letter responds to the concerns that you have expressed and look forward to working with you as the City and HART continue their efforts to implement the Honolulu Rail Transit Project. Please do not hesitate to contact me if you have any further questions on (202) 366-4040.

Sincerely,



Therese W. McMillan  
Acting Administrator

### Appendix J. Project Photos





Operations and Servicing Building (OSB).



Wheel Truing Building and OSB.



Maintenance of Way Building.



Casting Yard.