

# HONOLULU RAIL TRANSIT PROJECT



## May 2015 MONTHLY PROGRESS REPORT

# HART

HONOLULU AUTHORITY for RAPID TRANSPORTATION

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

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**REPORT FORMAT AND FOCUS**

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

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

**ON THE COVER:**

Left: West O'ahu Farrington Highway Guideway along Kualakai Parkway looking Diamond Head.

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

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

**TABLE OF CONTENTS**

TABLE OF FIGURES ..... 4

LIST OF ACRONYMS ..... 5

PROJECT MAP ..... 8

1 EXECUTIVE SUMMARY ..... 9

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

    2.1 Project Progress ..... 12

    2.2 Project Budget ..... 14

    2.3 Project Contingency ..... 14

    2.4 Project Funding ..... 16

    2.5 Project Revenue and Costs ..... 18

3 SCHEDULE..... 19

4 CONTRACT STATUS ..... 22

    4.1 System-Wide ..... 25

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

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

    4.4 Section III – Airport: Aloha Stadium to Middle Street Transit Center Station ..... 50

    4.5 Section IV – City Center: Middle Street Transit Center Station to Ala Moana Center..... 58

    4.6 Project-Wide ..... 62

5 OVERALL PROJECT-WIDE ACTIVITIES ..... 68

    5.1 Permits ..... 69

    5.2 Hawai’i Department of Transportation (HDOT) Agreements ..... 69

    5.3 Utility Agreements ..... 70

    5.4 Right-of-Way ..... 72

6 MANAGEMENT AND ADMINISTRATIVE UPDATES ..... 76

    6.1 Safety and Security ..... 79

    6.2 Quality Management ..... 81

    6.3 Buy America Compliance ..... 84

    6.4 Disadvantaged Business Enterprise (DBE) ..... 85

    6.5 Planning and Environment..... 85

    6.6 Risk Management ..... 86

    6.7 Community Outreach ..... 91

    6.8 Staffing ..... 92

APPENDICES..... 94

    A. Action Items ..... 95

    B. Project Contingency Management General Background and Clarifications ..... 96

    C. Project Cost Reports..... 102

    D. Procurement and Contract Status..... 109

    E. Vehicle Carshell Progress Tracker ..... 111

    F. DBE Participation..... 112

    G. Risk ..... 115

    H. Project Organization Chart..... 116

    I. Indices on Key Commodities ..... 117

    J. Project Photos ..... 118

**Table of Figures**

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

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

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

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

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

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

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

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

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

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

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

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

Figure 13. Utility Agreements Status ..... 70

Figure 14. Right-of-Way Status for the Parcels ..... 72

Figure 15. Relocation Status for the Occupants..... 73

Figure 16. Third-Party Agreement Status..... 74

Figure 17. DBE Participation this Month ..... 85

Figure 18. Risk Matrix..... 89

Figure 19. Top Project Risks ..... 89

Figure 20. Risks Added ..... 90

Figure 21. Risks Deleted ..... 90

Figure 22. HART participated in several outreach events this month, including a session on transit-oriented development ..... 91

Figure 23. HART provided project information and answered questions at several Neighborhood Board meetings this month ..... 91

Figure 24. Staffing Activities..... 92

Figure 25. Project Staffing (Actual vs. Planned) ..... 93

**LIST OF ACRONYMS**

AB	AnsaldoBreda	DTS	Department of Transportation Services
AFE	Authorized for Expenditure	ECP	Environmental Compliance Plan
AGS	Airport Guideway and Stations	E/E	Elevator/Escalator
AHJV	Ansaldo Honolulu Joint Venture	EMC	Electromagnetic Compatibility
AIS	Archaeological Inventory Survey	EMF	Electromagnetic Forces
APTA	American Public Transportation Association	EMI	Electromagnetic Interference
ARRA	American Recovery and Reinvestment Act	EMP	Environmental Management Plan
ASG	Airport Station Group	EOR	Engineer of Record
ASU	Airport Section Utilities	EOS	Electrically Operated Switches
ATC	Automated Train Control	ESA	Engineering Services Agreement
ATO	Automated Train Operation	FAA	Federal Aviation Administration
AVA	Anil Verma Associates, Inc.	FAI	First Article Inspections
BA	Buy America	FAT	Factory Acceptance Tests
BAC	Buy America Compliance	FD	Final Design
BACM	Buy America Compliance Matrix	FDC	Field Design Change
BCS	Balanced Cantilever System	FEIS	Final Environmental Impact Statement
BFS	Budget and Fiscal Services	FFC	Fixed Facility Contractors
BMP	Best Management Practice	FFGA	Full Funding Grant Agreement
BUE	Bottom-Up Estimate	FHSG	Farrington Highway Station Group
CAR	Corrective Actions	FLSWG	Fire Life Safety Working Group
CCGS	City Center Guideway and Stations	FTA	Federal Transit Administration
CCO	Contract Change Order	FTE	Full-Time Equivalent
CCTV	Closed Circuit Television	FWS	Fish and Wildlife Service
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
CSSC	Construction Specification Conformance Checklists	HCDA	Hawai'i Community Development Authority
CSL	Cross Hole Sonic Logging	HCSO	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	HIE	Hawaii Independent Energy
DBOM	Design-Build-Operate-Maintain	HP	Historic Preservation
DCAB	Disability and Communication Access Board	HPC	Historic Preservation Committee
DCN	Design Change Notice	HPCA	Historic Preservation Certification Application
DDC	Department of Design and Construction	HPD	Honolulu Police Department
DES	Department of Environmental Services	HPF	Historic Preservation Fund
DFIM	Design Furnish Install Maintain	HRHP	Hawai'i Register of Historic Places
DHHL	Department of Hawaiian Homelands	H RTP	Honolulu Rail Transit Project
DHR	Department of Human Resources	HTI	Hawaiian Telcom
DIT	Department of Information Technology	HTL	Hazard Tracking Log
DKSG	Dillingham and Kaka'ako Station Group	IAMR	Interstate Access Modification Report
DLIR	Hawai'i Department of Labor and Industrial Relations	ICCS	Interface Communications Control System
DLNR	Department of Land and Natural Resources	ICD	Interface Control Documents
DOE	Department of Education	ICE	Independent Cost Estimate
DOH	Department of Health	ICM	Interface Control Manual
DOL	Department of Labor	INMS	Integrated Network Management System
DPM	Deputy Project Managers	ITP	Inspection and Test Plan
DPP	Department of Planning and Permitting	ITS	Intelligent Transportation Systems
DPR	Department of Parks and Recreation	JTMS	Joint Traffic Management System
DPS	Department of Public Safety	JU&O	Joint Use & Occupancy
DS	Downstream	JUOA	Joint Use and Occupancy Agreement

KCDD	Kaka'ako Community Development District	RE	Resident Engineer
KHG	Kamehameha Highway Guideway	READ	Real Estate Acquisition Database
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	UFCRA	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

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**\*HIGHLIGHT OF THE MONTH: DOWNTOWN STATION**  
 Serving the Downtown Honolulu, Aloha Tower, Capitol District, and Outlying Residential and Business Areas



- Station Features:**
- ADA Pedestrian Access
  - Bicycle Parking
  - Elevators, Escalators and Stairs
  - Public pedestrian bridge over Nimitz Highway
  - TheBus – Local and express services to Kaneohe, Kailua and Waimanalo. Local services to Nu‘uanu, Pauoa Valley, Kaka‘ako and Makiki.
  - TheHandi-Van Pick-up/Drop-off
  - Platform Type: Side
  - Planned # of Entrances: 2

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

# 1 EXECUTIVE SUMMARY

## KEY ACTIVITIES THIS MONTH

### Project Overview

More than 160 columns now stretch from the eastern edge of the town of Kapolei and into Waipahu east of Fort Weaver Road as construction work progresses.

This summer, the rail guideway – which is now nearly three miles long – will be built over the Fort Weaver Road/Kunia Road overpass.

Balanced cantilever construction over the H-1 Freeway is also well underway. Between the support columns, several concrete segments have been erected, which will eventually form a bridge for the rail to travel from the Leeward Community College station in Waipahu to the Pearl Highlands station in Pearl City.

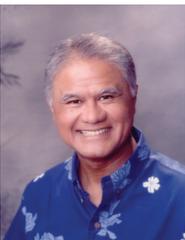


Work on the construction Maintenance and Storage Facility (MSF) site in Waipahu is on target to be substantially completed by next year. Crews at the 43-acre site between Waipahu High School and Leeward Community College are busy constructing the four main buildings where the fleet of 80 rail cars will be maintained and from which the rail system will be operated and monitored.

### HART Board

Carrie Okinaga and Robert “Bobby” Bunda will be leaving the HART board of directors.

Okinaga will step down from the board of directors in June, when she will become University of Hawai‘i Vice President for Legal Affairs and General Counsel. Okinaga most recently served as the General Counsel of First Hawaiian Bank, and was former chief-in-house legal counsel for the City and County of Honolulu as its Corporation Counsel. In July 2011, Okinaga began a five-year term on the HART board of directors. Mayor Kirk Caldwell will appoint her replacement on the board.



Bunda will be resigning from the agency’s board of directors to spend more time with his family. He will step down on June 30. Bunda was first appointed as the tenth board member in 2011, and was re-appointed to serve a second term in July 2013. His term was set to expire on June 30, 2018.

According to the City Charter, the tenth HART board member is selected by the other HART board members through a public process. The HART board will issue a call for nominations from the public in July and begin the public hearing and selection process shortly thereafter.

### Downtown TOD Plan Moving Ahead

The Downtown Neighborhood Transit-Oriented Development Plan is being finalized for review by the Honolulu City Council. In May, the Department of Planning and Permitting held a community meeting to discuss the Downtown Neighborhood TOD Plan.

The plan for public improvements around the Iwilei, Chinatown and Downtown rail stations includes recommendations for enhancements and preservation in Chinatown, an urban mixed-use district in Iwilei with a range of housing choices and expanded hours of activity in Downtown Honolulu.



For more information on the city’s TOD plans, please visit [www.todhonolulu.org](http://www.todhonolulu.org)

### Cost:

Project Costs Summary Through April 24, 2015		
	Current Budget (\$M)	Incurred To Date (\$M)
Project Budget	\$4,438.2	\$1,490
Project Contingency	\$510.4	\$0.4
Finance Charges*	\$173.1	\$0.0
<b>TOTAL</b>	<b>\$5,121.7</b>	<b>\$1,490.4</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 April 24, 2015				
	Actual		Early Plan	Late Plan
Overall Project Progress	34.3%		56.8%	47.8%
Overall Construction Progress	26.0%		49.5%	40.0%
Overall Design Progress	84.7%		97.8%	94.5%
Overall Utilities Progress	23.0%		57.8%	38.6%

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

The CSC contractor is continuing to progress through Interim Design into Final Design. Qualification and design verification tests are ongoing. Major Pre-Shipping tests are taking place in May and June for Communication Systems and Train Control subsystems. Construction interface and mobilization is ongoing in preparation for the initial work schedule to begin at the MSF. CSC continues to coordinate mobilization plans with the MSF team. CSC has mobilized trailers on-site at the MSF and continues preparation to start work on the Yard Control Bungalow in June (pending approval of design documents). Passenger vehicle manufacturing, key system manufacturing, design verification and qualification testing activities are ongoing. Carshell assembly continues to progress at the Reggio Calabria, Italy facility. AnsaldoBreda is ramping up the production facilities in Pittsburg, CA. (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 protest has been denied. The contract award will proceed once a formal ruling has been written by the ruling agency. Contract award is expected to be mid-June 2015. (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

Stem walls commenced for the Train Wash Facility as well as cable trough installation north of the storage tracks. Work on utilities and track is progressing in the yard with the completion of the storage track turnout installation. Work in the OSB, MOW and WTB is ongoing with roofing, siding and interior partitions and utility service rough-ins. Work on mechanical, electrical and plumbing installations continues to progress. Overall, this contract is progressing per plan with expected completion in April 2016. (See Section 4.2.D for details)

Kamehameha Highway Guideway (KHG) Contract

Construction of the drilled shafts will be moving to the balanced cantilever area in order to maintain progress while HECO clearance issues are resolved. Discussions with HECO are being held at an elevated level to resolve concerns about horizontal/vertical clearances and schedule certainty. Elevated discussions are also ongoing to clarify the scope and funding source of the HDOT betterments. The KHG team continues to explore mitigation measures to a reduced construction work window that would balance MOT and noise impacts to the community. The contract is seven months behind schedule. (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 where access has yet to be secured. (See Section 4.4.B for details)

Airport Seven Piers Construction Contract

The Airport Seven Piers construction work, including final paving and concrete curbs, was completed on April 17. Project Substantial Completion inspection was performed on April 22, 2015; two days ahead of the Contract Substantial Completion. Hawaiian Dredging Construction Company/Condon-Johnson & Associates (HDCC/CJA) completed all punch list items on May 2, 2015 and have demobilized from the work site. Contract Closeout is currently in progress. (See Section 4.4.C for details)

**Board Meeting Q&A:**

Listed below are questions raised by community members at the May 21 HART Board meeting:

- **Question:** Are there estimates for operating and maintenance costs?  
**Answer:** Yes. HART's Financial Plan includes projected operating and maintenance costs for rail, for the bus system and for HandiVan through fiscal year 2030. Details of each year's operating and maintenance costs can be found in Chapter 3 of the project's Financial Plan, which is posted on the project's website at <http://www.honolulutransit.org/media/112797/20120628v1-hrtp-ffga-financial-plan-final.pdf>.
- **Question:** Will 5307 funds be removed from budget by June?  
**Answer:** Yes. HART will remove 5307 funds from its budget. That change should be reflected in the updated Financial Plan that will be released this summer, provided an alternative revenue source is secured.
- **Question:** Does HART's budget include the cost to test rail (vehicles)?  
**Answer:** Yes, the cost of testing is included in the Core System's contract.
- **Question:** Will HART have to move if the state purchases Alii Place?  
**Answer:** We do not know at this time.
- **Question:** Who will provide security for rail?  
**Answer:** HART will have a security plan in place prior to operations. HART is working closely with all first responders, including police, fire, and other law enforcement agencies, as well as federal entities, such as the Transportation Security Administration (TSA) and the Department of Homeland Security.
- **Question:** How many seats will the rail cars have for people with disabilities?  
**Answer:** There are 8 wheelchair spaces on each four-car train, with an additional 68 flip-up seats that would be priority seating made available for people with disabilities.
- **Question:** In the April Monthly Progress report on page 51, for the utility relocation contract of \$28 million, why is the cost to date zero?  
**Answer:** The incurred cost is reported as "0" for the April report because the contractor's first invoice was not submitted until April 20<sup>th</sup> and therefore was not processed at the time the April report was compiled. The May report shows \$1,279,386 for this contract.

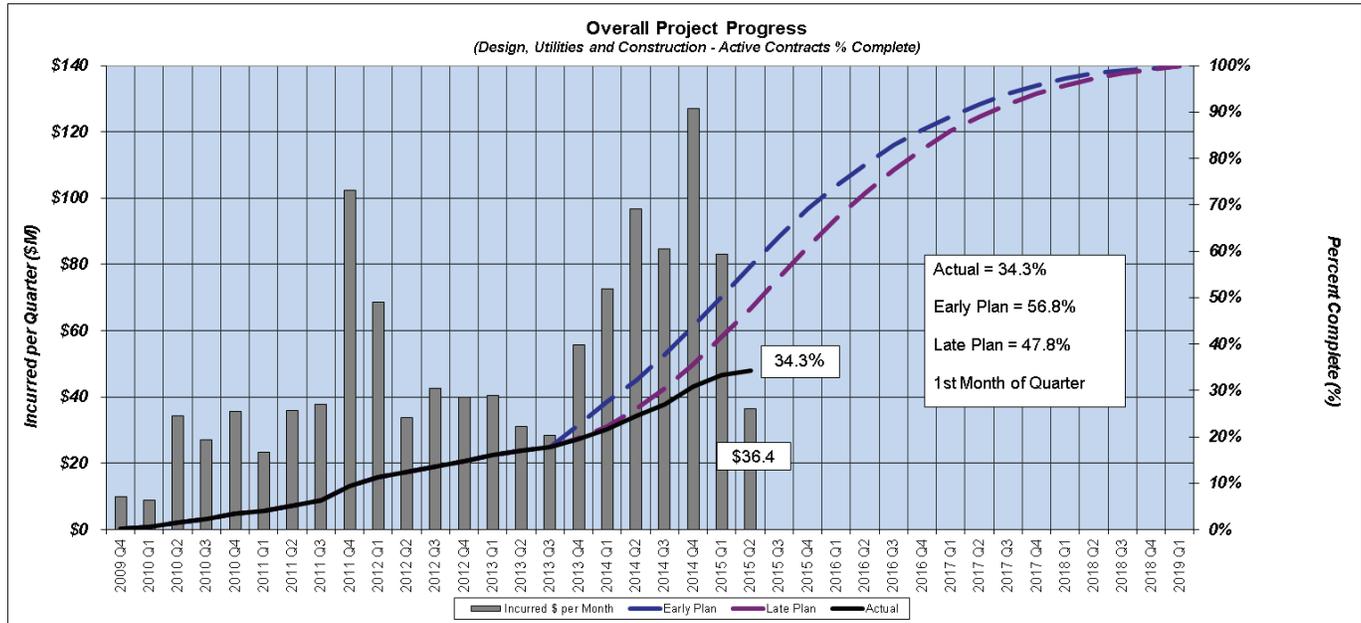
## 2 OVERALL PROJECT PROGRESS AND FINANCIALS

### 2.1 Project Progress (data as of April 24, 2015)

Progress charts reflect early program expectations regarding the award and execution of western stations and eastern guideway work. Both contracts have been rescheduled to later dates and once the overall schedule is rebaselined, the cost curves will be revised.

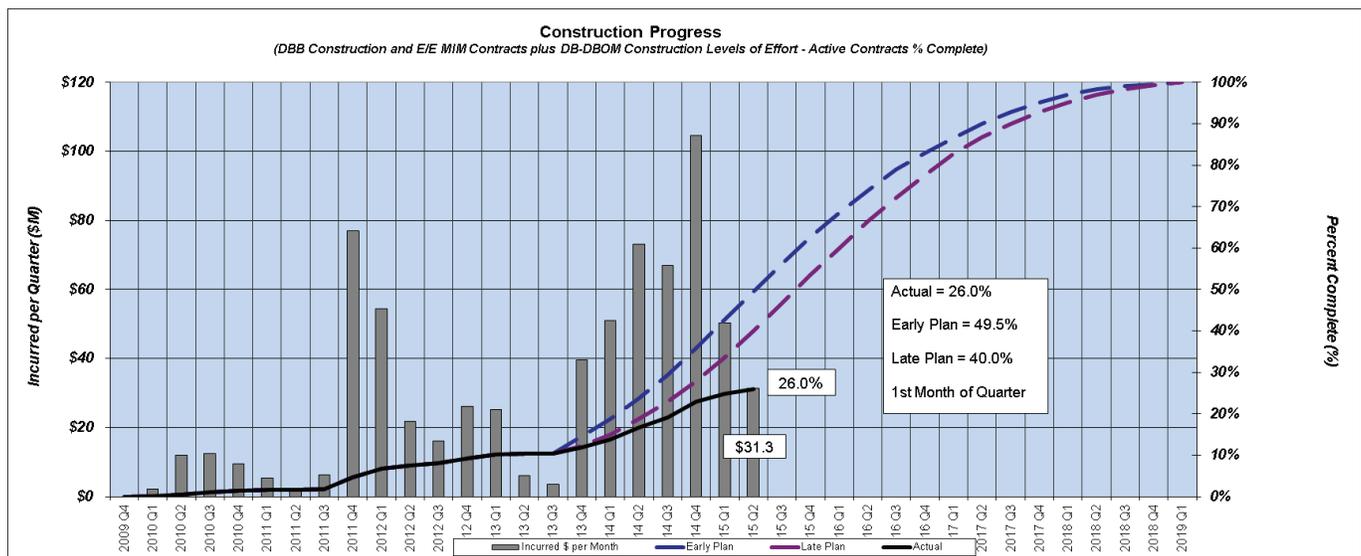
- Note:
- Actual = Actual cost of work performed, based on invoiced-to-date amount.
  - Early Plan = Earliest dates activities can begin and finish, based on logic and durations used in the schedule.
  - Late Plan = Latest dates activities can begin and finish and not have an impact on completion date,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

Figure 1. Overall Project Progress (% Complete)



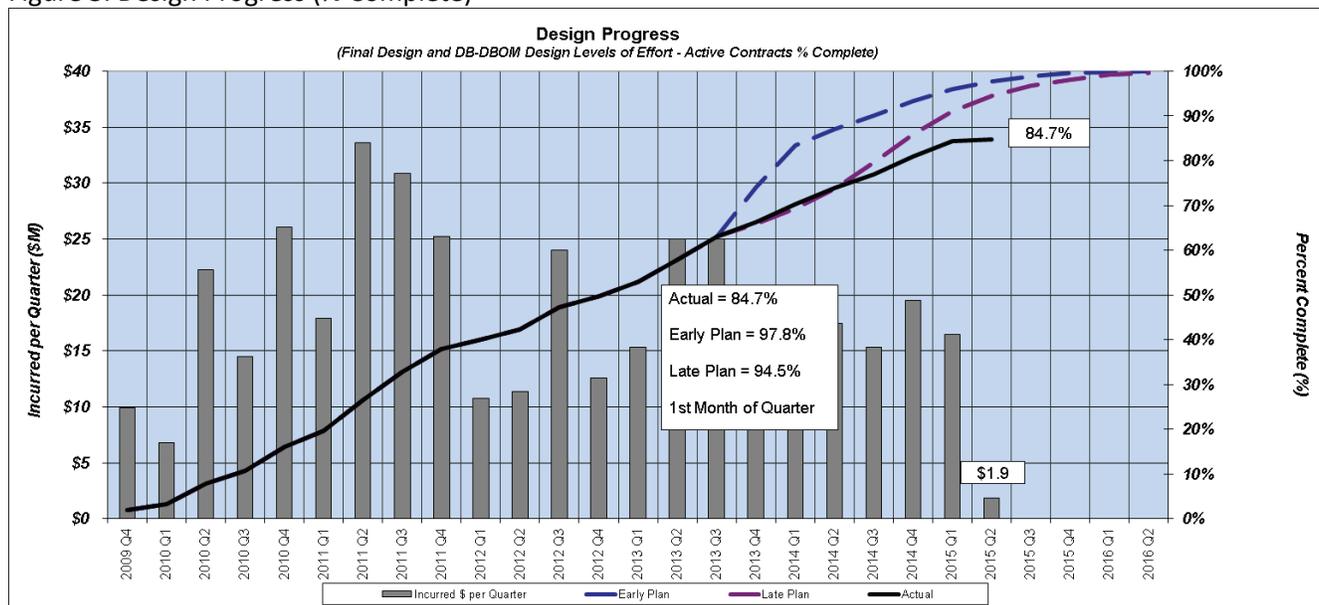
At present “overall” project progress is based on the weighted value progress of the individual construction and design contracts (Design-Build [DB], Design-Bid-Build [DBB], Design-Build-Operate-Maintain [DBOM], Elevator/ Escalator Manufacture-Install-Test-Maintain [MIM], Final Design [FD] and DB-DBOM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



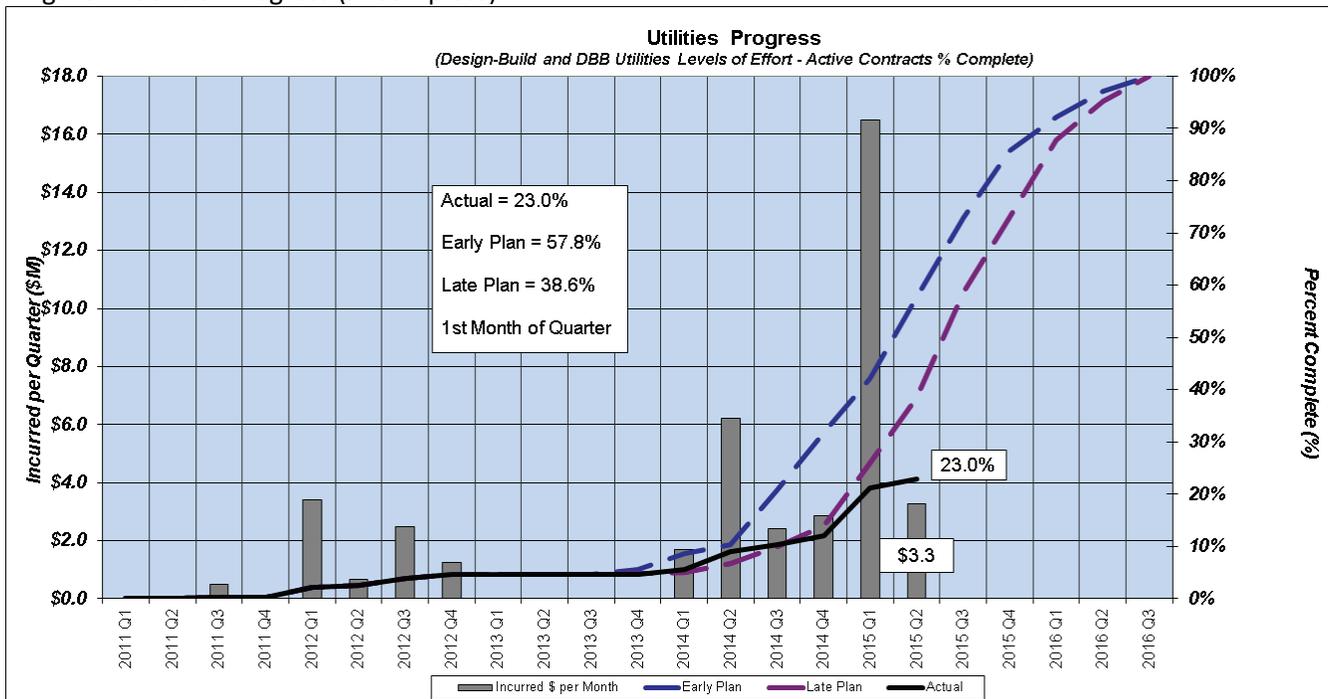
Overall construction progress is based on the weighted average progress of the individual DBB and E/E MIM construction contracts and the DB-DBOM construction levels of effort, not including consultant construction engineering and inspection (CE&I) services.

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 April 24, 2015)**

- FFGA Project Budget = **\$5,121.7M**
  - Current Project Budget - \$4,438.2M
  - Current Project Contingency - \$510.4M
  - Project Finance Charges - \$173.1M
  
- Total Incurred Cost = **\$1,490.4M** (33.6% of current project budget)
  - April 2015 Incurred Cost = \$45.2M

*Total Incurred Cost = \$1,490.4M  
(previous report = \$1,445.2M)*

**2.3 Project Contingency (data as of April 24, 2015)**

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

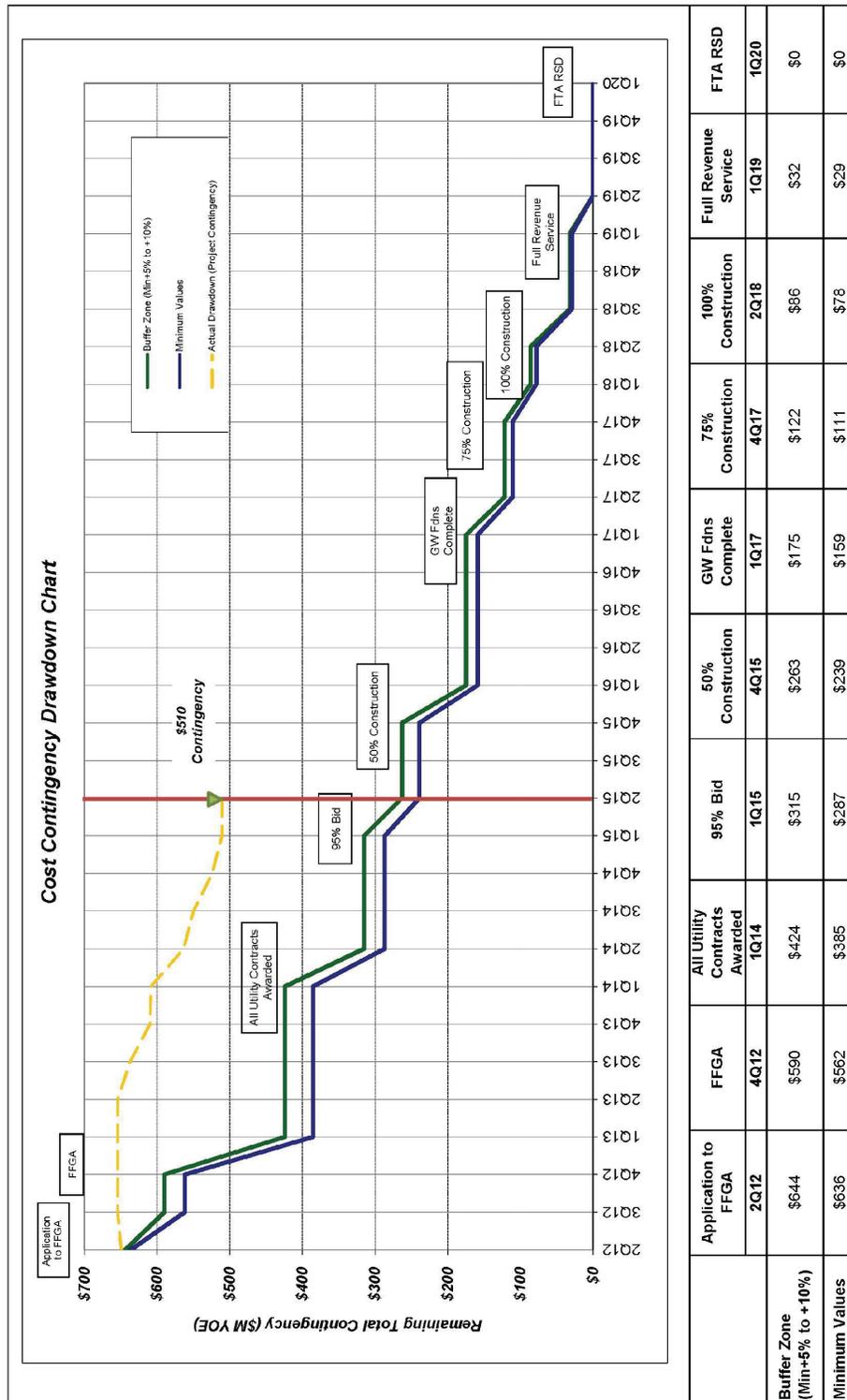
- Current Project Contingency Balance = **\$510.4M**
  - Contingency drawdown to date - \$133.2M (20.7% of baseline project contingency budget)
  - \$0.2M contingency drawdown during April 2015. Please see Appendix B for more details.

*Current Contingency Balance = \$510.4M  
(previous report = \$510.6M)*

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 February 2015 Report	90.01 - 90.03	(\$123.8)
Contingency drawdown March 2015 Report	90.01 - 90.03	(\$4.2)
Contingency drawdown April 2015 Report	90.01 - 90.03	(\$5)
Contingency drawdown May 2015 Report	90.01 - 90.03	(\$0.2)
Contingency drawdown to date	90.01 - 90.03	(\$133.2)
<b>Current FFGA Project Contingency</b>	<b>90.01 - 90.03</b>	<b>\$510.4</b>

Figure 6. Draft Cost Contingency Drawdown Chart



Data as of 4/24/15 - April '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 April 24, 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</sup>	0	1,550	376	376
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	1091	1,469
<b>Total</b>	<b>385</b>	<b>5,356</b>	<b>1,771</b>	<b>2,156</b>

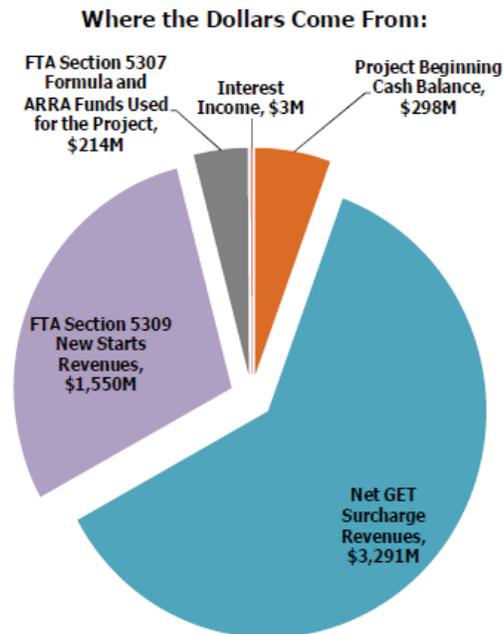
<sup>1</sup> GET and Interest Income received during Pre-Preliminary Engineering (pre-PE) phase prior to entry into PE

<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, investment and miscellaneous income minus pre-PE expenditures.

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

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



Source: FFGA Financial Plan, p. 2-1

- General Excise Tax (GET) Surcharge (data as of April 24, 2015)
  - \$1,091M = amount received since the Project’s entry into FTA’s Preliminary Engineering phase of project development.
    - \$1,122M = Projected Net GET Surcharge Revenue for FYs 2010-4Q 2015, as stated in FFGA Financial Plan (Table A-1 *Capital Plan Cash Flows*)
    - GET receipts are currently running 3% short of projections to date, or \$31M behind.
    - \$31M shortfall is approximately 0.9% of the total GET surcharge projections per the FFGA Financial Plan of \$3.291B.
  - \$65M = GET surcharge received in April 2015.
- Full Funding Grant Agreement (FFGA)
  - \$6.8M = New Starts drawdown processed in April 2015.
- The §5307 funds for the Project, per the Financial Plan, are \$210M.

*Total Cash Received Since PE = \$1,771M*  
 (previous report = \$1,692M)

*GET Received Since PE = \$1,091M*  
 (previous report = \$1,026M)

*GET Received Since 2007 = \$1,469M*  
 (previous report = \$1,404M)

Figure 9. New Starts Drawdown by Federal Fiscal Year (data date as of April 24, 2015, per the FTA TEAM website)

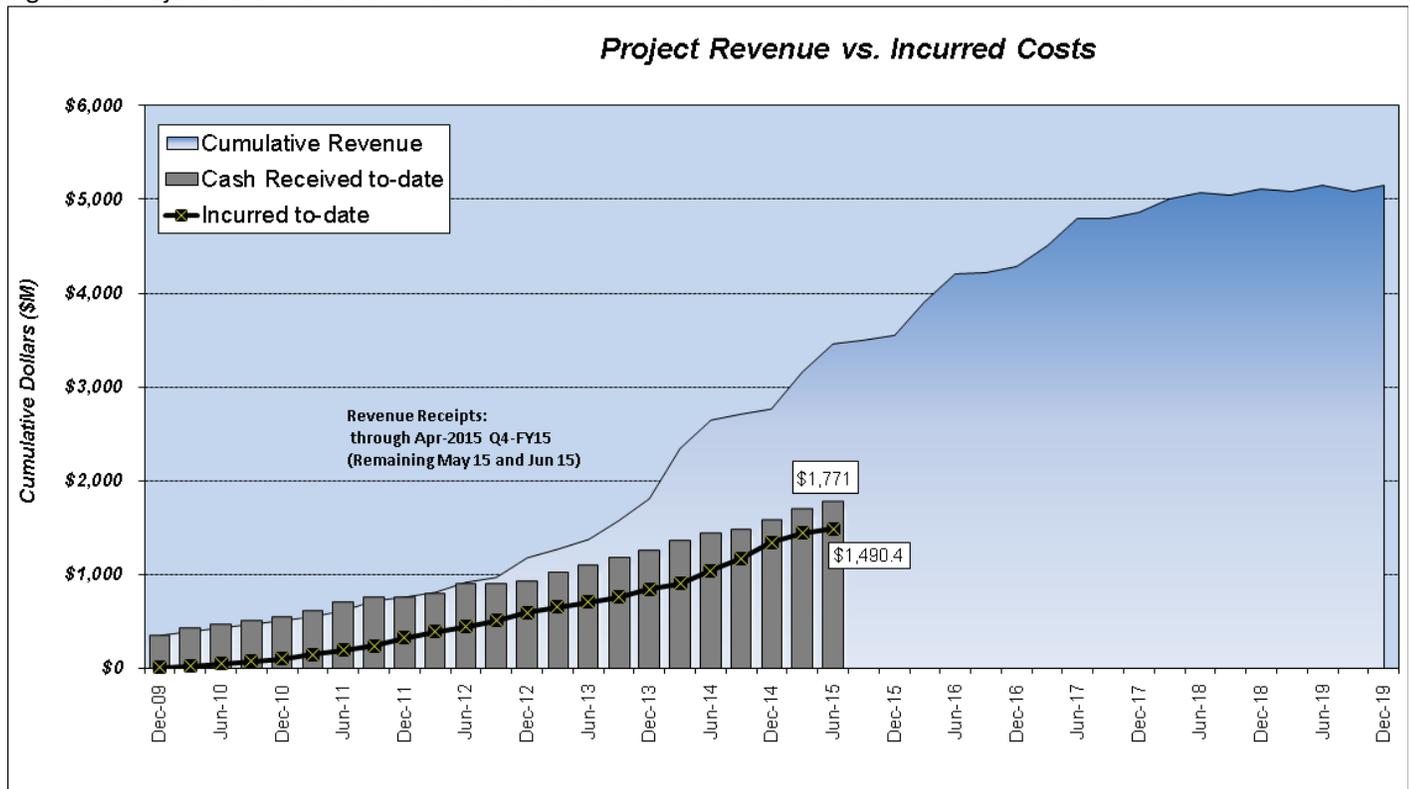
New Starts Grant Information by Federal Fiscal Year				
Federal Fiscal Year Allocation	Obligated Amounts	Actual Drawdown Amounts to Date	Available Balance	FFGA Base Case Cash flow
2008	\$15,190,000	\$15,190,000	\$0	
2009	\$19,800,000	\$19,800,000	\$0	
2010	\$30,000,000	\$30,000,000	\$0	
2011	\$55,000,000	\$55,000,000	\$0	\$20,607,242
2012	\$200,000,000	\$200,000,000	\$0	\$99,382,758
2013	\$236,277,358	\$55,936,510	\$180,340,848	\$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>\$375,926,510</b>	<b>\$1,174,073,490</b>	<b>\$1,550,000,000</b>

2.5 Project Revenue and Costs

(data as of April 24, 2015)

*Ending Cash Balance 4/30/15 = \$337.6M*  
*(previous report = \$345.8M)*

Figure 10. Project Revenue versus Incurred Costs



Planned Funding levels as per the June 2012 FFGA Finance Plan  
Data date for Revenue & Incurred Cost = April 24, 2015

Figure 11. Cash Balance Summary

APRIL 30, 2015 CASH BALANCE SUMMARY		
	APRIL	YTD Cumulative
<b>Beginning Cash Balance</b>	345,832,228	441,011,319
Expenditures:		
Operating Expenditures	(1,749,968)	(13,030,681)
Capital Expenditures	(85,818,349)	(431,608,162)
<b>Expenditures Total:</b>	<b>(87,568,317)</b>	<b>(444,638,843)</b>
Receipts:		
GET Surcharge	65,019,431	220,793,293
FTA Drawdown*	14,300,660	119,966,484
Interest	19,127	199,104
Other (rental, refunds, copy fees, etc.)	23,587	295,359
<b>Receipts Total:</b>	<b>79,362,805</b>	<b>341,254,240</b>
<b>Ending Cash Balance 04/30/15</b>	<b>337,626,716</b>	<b>337,626,716</b>

\*March FTA Drawdown of \$7.5M was recorded in April 2015.

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

### 3 SCHEDULE

(data as of April 24, 2015)

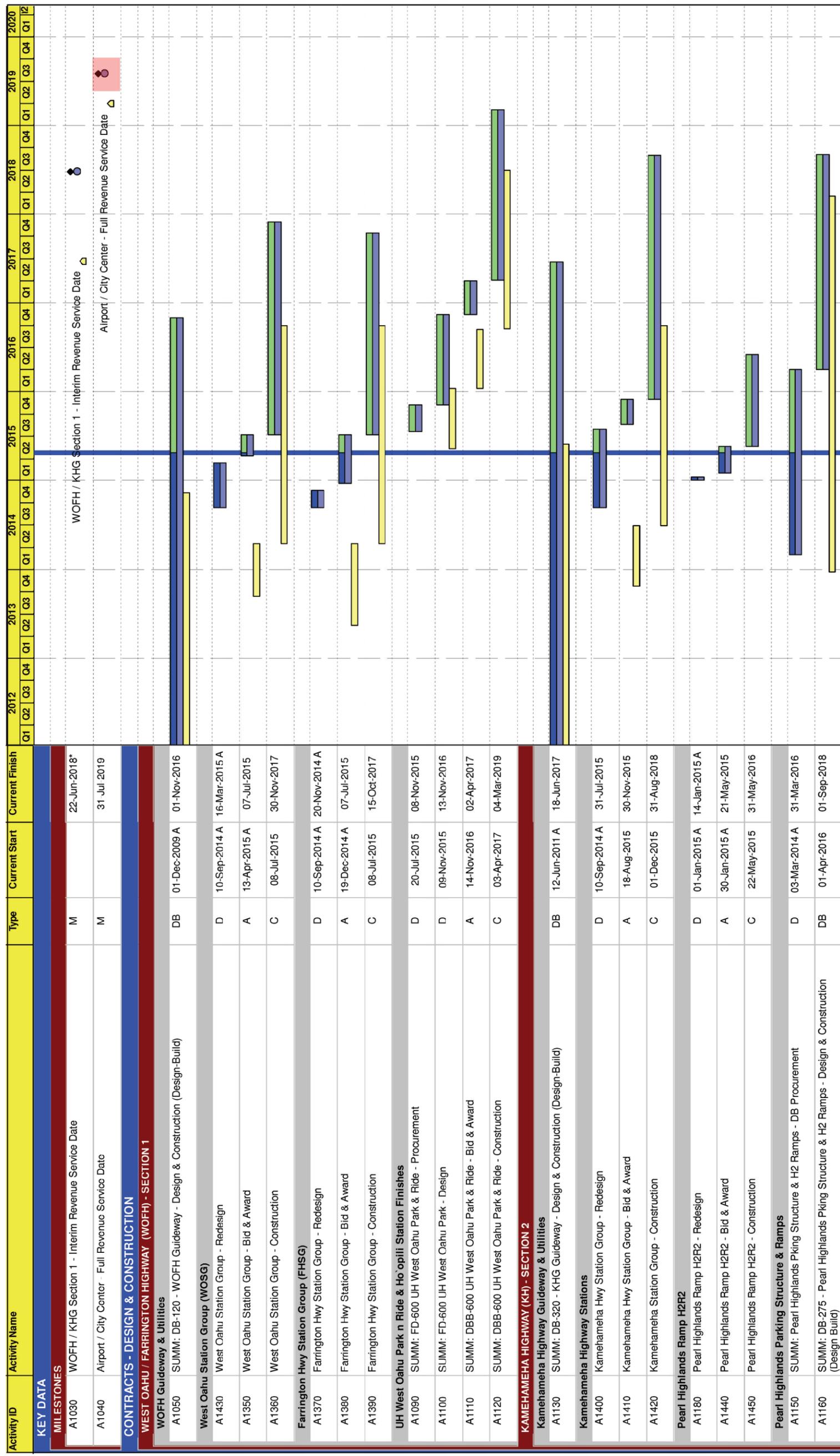
#### OVERVIEW

- The FHSG DBB construction package was issued for bid in December 2014. Bids were opened on March 3, 2015, and the solicitation was protested by Nan, Inc. (Nan) against the apparent low bidder, Hawaiian Dredging Construction Company, Inc. (HDCC). HART denied the appeal, and Nan appealed HART's denial of protest to the State of Hawai'i Department of Commerce and Consumer Affairs (DCCA), Office of Administrative Hearing. A hearing on the motions was held on May 20, 2015 and HART received a favorable oral ruling dismissing the protest. HART expects the formal DCCA hearing officer decision to be issued by June 4, 2015.
- As a result of the protest period, HART has lost three (3) months in the construction time period of the three stations required for the interim opening. That delay will therefore postpone the Interim Opening Date from the currently contemplated June 2018 date to September 2018. As the Master Project Schedule Summary on page 20 reflects data as of April 2014, this change will not be included until the June 2015 Monthly Report which will be showing the May 2015 data.
- 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 Full Revenue Service will be shown for reference.
- H2R2 Ramp (DBB-385) and FHSG (DBB-271) contractor schedules will be added to this report as soon as baseline schedules are accepted by HART.
- HART continues to closely monitor, review and manage all active construction packages. Previously reported delays continue to be addressed by the project teams. See contract pages for further details.

#### KEY ISSUES

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

Figure 12. H RTP Master Project Schedule Summary (MPSS)  
The MPSS is statused against the FFGA Baseline MPS. The baseline and actual/planned durations of each contract are displayed for comparison.



■ FFGA Baseline  
■ Mar 2014 Updt Milestone  
■ Remaining Work  
■ Actual Work  
■ FFGA Baseline Milestone

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**Honolulu Rail Transit Project**  
**April 2015 Update**  
 As of: 24-Apr-2015

Page 1 of 2  
**MPS Summary**  
**Design & Construction Contracts**

Activity ID	Activity Name	Type	Current Start	Current Finish	2012				2013				2014				2015				2016				2017				2018				2019				2020											
					Q1	Q2	Q3	Q4																																								
<b>AIRPORT - SECTION 3</b>																																																
<b>Airport Utility Relocation</b>																																																
A1190	SUMM: FD-430 - Airport Utilities - Design	D	05-Jan-2012 A	16-Dec-2013 A	[Bar]				[Bar]				[Bar]																																			
A1200	SUMM: Airport Utilities - Bid & Award	A	17-Dec-2013 A	30-Jun-2014 A	[Bar]				[Bar]				[Bar]																																			
A1210	DBB-505 - Airport Utilities - Construction	C	26-Sep-2014 A	24-Jun-2016	[Bar]				[Bar]				[Bar]																																			
<b>Airport Guideway 7 Pier Construction</b>																																																
A1460	Airport Guideway 7-Pier - Bid & Award	A	09-Jul-2014 A	18-Sep-2014 A	[Bar]				[Bar]				[Bar]																																			
A1470	Airport Guideway 7-Pier - Construction	C	26-Jan-2015 A	22-Apr-2015 A	[Bar]				[Bar]				[Bar]																																			
<b>Airport Guideway &amp; Stations</b>																																																
A1480	Airport Guideway & Stations - Design Build Procurement Part 1	A	07-Apr-2015 A	17-Aug-2015	[Bar]				[Bar]				[Bar]																																			
A1490	Airport Guideway & Stations - Design Build Procurement Part 2	A	16-Aug-2015	13-Mar-2016	[Bar]				[Bar]				[Bar]																																			
A1500	Airport Guideway & Stations - Design & Construction	DB	14-Mar-2016	19-Jul-2019	[Bar]				[Bar]				[Bar]																																			
<b>CITY CENTER (CC) - SECTION 4</b>																																																
<b>City Center Utility Relocations</b>																																																
A1510	City Center Utilities & Civil Work - Bid & Award	A	08-Sep-2015	09-Dec-2015	[Bar]				[Bar]				[Bar]																																			
A1520	City Center Utilities & Civil Work - Construction	C	10-Dec-2015	31-Mar-2017	[Bar]				[Bar]				[Bar]																																			
<b>City Center Guideway &amp; Stations</b>																																																
A1530	City Center Guideway & Stations - Design Build Procurement Part 1	A	04-Aug-2015	01-Nov-2015	[Bar]				[Bar]				[Bar]																																			
A1540	City Center Guideway & Stations - Design Build Procurement Part 2	A	02-Nov-2015	31-May-2016	[Bar]				[Bar]				[Bar]																																			
A1550	City Center Guideway & Stations - Construction	DB	01-Jun-2016	30-Jun-2019	[Bar]				[Bar]				[Bar]																																			
<b>PROJECT WIDE - ALL SECTIONS</b>																																																
<b>Maintenance &amp; Storage Facility (MSF)</b>																																																
A1320	SUMM: DB-200 - MSF - Design & Construction (Design-Build)	DB	25-Jul-2011 A	21-Apr-2016	[Bar]				[Bar]				[Bar]				[Bar]																															
<b>Core Systems</b>																																																
A1330	SUMM: DBOM-920 - Core Systems - Design & Construction	DB	13-Jan-2012 A	31-Jul-2019	[Bar]				[Bar]				[Bar]				[Bar]																															
<b>Elevators &amp; Escalators</b>																																																
A1340	SUMM: MI-930 - Elevators and Escalators - Design, Manufacture, Install, & Test	DB	02-Aug-2013 A	05-Jul-2018	[Bar]				[Bar]				[Bar]				[Bar]																															

Program Critical Path



- FFCA Baseline
- Mar 2014 Updt Milestone
- Milestone
- Remaining Work
- Actual Work
- FFCA Baseline Milestone

Honolulu Rail Transit Project  
 April 2015 Update  
 As of: 24-Apr-2015

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.
- CSC delivered trailers to the MSF site.

#### 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: either by shielding the guideway or relocating the existing AM antenna to a new location. HART has identified a location to relocate the AM antenna that appears to be acceptable to all parties.
- HART has provided two notices of revised access to the stations and guideway; HART and AHJV continue to evaluate the cost and schedule impacts associated with both delays. This issue is being addressed in RFCR # 18.

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

#### OVERVIEW

- COR continues to review HART's request to exempt the Fare System Technical Consultant RFQ from the three bid requirement.
- Fare Collection System RFP draft continues to be under review by COR and City procurement.
- A new MOU and cooperative agreement is now required.
- A revised RFP with cooperative procurement terms is being drafted.

#### KEY ISSUES

- Confirming the cooperative procurement terms with COR and City procurement in a manner that still appropriately transfers integration risk to the vendor.
- Releasing the RFP as soon as possible.

### 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 in their new location, and old trailers are removed, work can begin at the LCC Station area.
- Balanced Cantilever System (BCS) Form Advancement – BCS construction is progressing. Pier tables and segments for Piers 253 through 256 are in various levels of completion and segment casting and stressing is proceeding in both eastward and westward directions from Piers 253 and 254.
- Civil Structure Progress for At-Grade Track Section – The MSE Block Wall by Pier 251 continues to progress, forming the foundation for the beginning of the at-grade section of the project. Cast-in-place Wall F by the base of the H-1 onramp has been casted. Backfilling within the wing walls and casting of approach slabs by the North Access Road Underpass has been completed.

#### KEY ISSUES

- Span 17 and Span 105 Damage and Repair (for additional detail, see 4.2.A Key Quality Issues)
- Drilled Shaft Repairs (for additional detail, see 4.2.A Key Quality Issues)
- Precast Segment Quality (for additional detail, see 4.2.A Key Quality Issues)

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

#### OVERVIEW

- Stem walls for the Train Wash Facility commenced. Track work is progressing in the rail yard; setting of rail turnouts for the storage tracks is complete. 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 continues 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.
- Mobilization of 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 will be moving to the balanced cantilever area in order to maintain progress while HECO clearance issues are resolved. Discussions with HECO are being held at an elevated level to resolve concerns about horizontal/vertical clearances and schedule certainty.
- Elevated discussions are also ongoing to clarify the scope and funding source of the HDOT betterments.
- HART continues to explore mitigation measures that would balance MOT and noise impacts to the community. The HART KHG team continues to respond to complaints and document contractor compliance.

KEY ISSUES

- Utility relocations continue to impact the construction schedule for the project, though the effects have been partially mitigated by resequencing the work.
- 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.
- Mitigation measures for noise and traffic impacts continue to be explored, but mitigation for one tends to adversely impact the other. HART will continue to work with the community to try to minimize impacts.

**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. Conduit installation for lighting relocation has started at Keehi Lagoon Park.

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

- All seven (7) shafts were completed including back fill of CMPs and installation of steel cover plates.
- Concrete curbs and paving was completed at Piers 552R, 551R and 550.
- Asphalt paving at Piers 547 and 546 was installed.
- Project Substantial Completion inspection was performed on April 22.
- Contract Substantial Completion was declared on April 22, 2015.
- Demobilized M-888 Mobile Crane and other equipment from the site prior to April 24, 2015.
- Punch list items were complete by May 2, 2015.
- Contract Closeout is currently in progress.

KEY ISSUES

- HART is processing cost estimates submitted by HDCC/CJA JV for:
  - Change proposal for temporary fill at Piers 551R and 550.
  - Double handling of drilled spoils.
  - Additional concrete core samples at Pier 551R.
- HDCC/CJA JV is to submit the following additional costs RFC:
  - Force Account Sheets for Pier 548 and 550 regarding utility conflicts.

- Cost Proposal for extra surface work (concrete curbs and paving) at Piers 546, 547, 550, 551R and 552R due to lowering of CMP casings as instructed by RFI 016 response.
- HDCC/CJA JV has the following items to submit for Contract Closeout:
  - Red line of As-Built Drawings.
  - Complete Certified Payrolls data to LCP Tracker.
  - Submit HDCC/CJA JV daily reports into CMS.
  - Provide Release of Liens.
  - Submit final DBE forms.
  - Submit document submittals to closeout BMP and Environmental requirements.
  - Submit final invoice.

## Contracts in Procurement

### OVERVIEW

- Active Procurements:
  - The West O'ahu Stations Group (WOSG) construction contract was advertised for bids in April 2015. A public bid opening is scheduled for June 16, 2015.
  - Bids for the Farrington Highway Stations Group (FHSG) construction contract were opened in March 2015. The solicitation was protested by Nan, Inc. (Nan) against the apparent low bidder. HART denied the appeal, and Nan appealed HART's denial of protest to the State of Hawai'i Department of Commerce and Consumer Affairs (DCCA), Office of Administrative Hearing. A hearing on the motions was held on May 20, 2015 and HART received a favorable oral ruling dismissing the protest. HART expects the formal DCCA hearing officer decision to be issued by June 4, 2015.
  - The H2R2 Ramp contract was awarded on May 18, 2015 to Royal Contracting.
  - The Airport Guideway and Stations (AGS) Design-Build contract is in active procurement. Qualifications proposals are due on July 21, 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.
  - The scope for a potential City Center Utilities Design-Bid-Build (DBB) package is being determined.

### 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 ongoing. Major Pre-Shipping tests are to take place in May and June for Communication Systems and Train Control subsystems (see the Look Ahead section for additional details). Construction interface and mobilization is ongoing in preparation for the initial work schedule to begin at the MSF. CSC continues to coordinate mobilization plans with the MSF team. CSC has mobilized trailers on-site at the MSF and continues preparation to start work on the Yard Control Bungalow in June (pending approval of design documents). Passenger vehicle manufacturing, key system manufacturing, design verification and qualification testing activities are ongoing. Carshell assembly continues to progress at the Reggio Calabria, Italy facility. AnsaldoBreda is ramping up the production facilities in Pittsburg, CA.

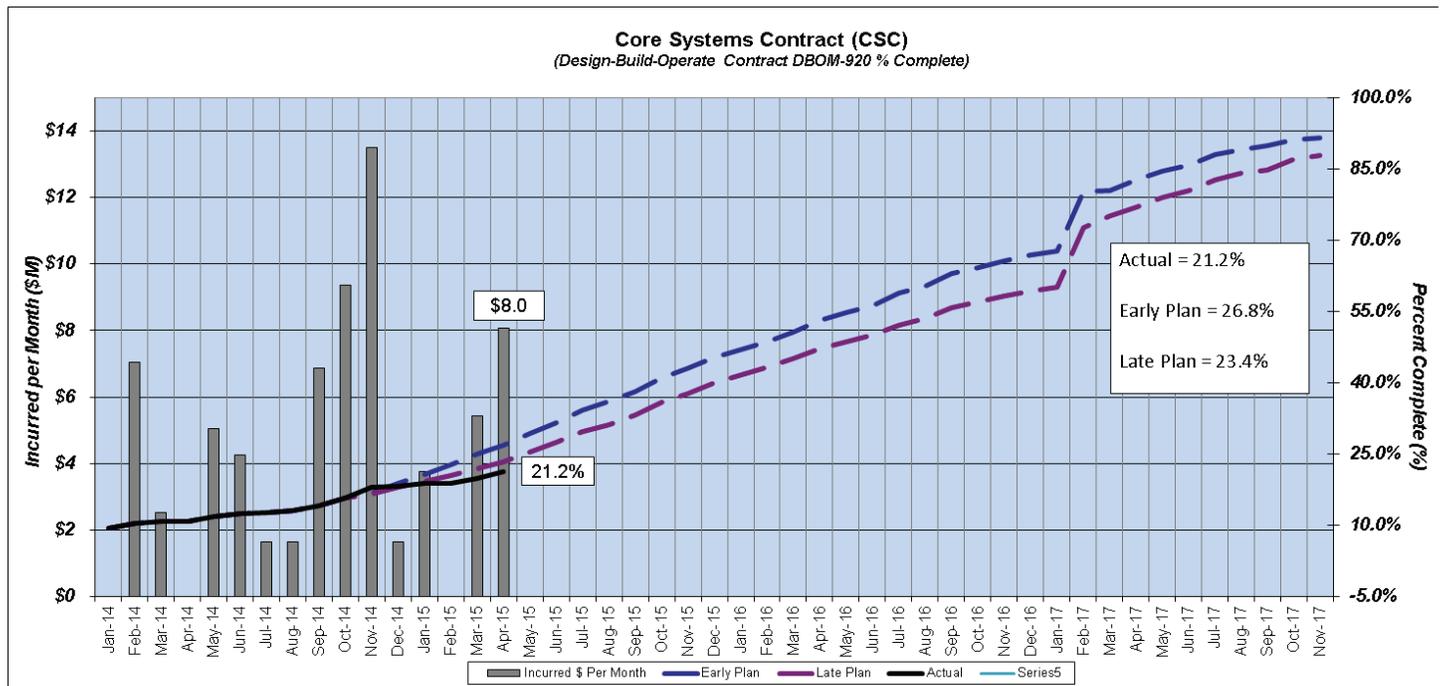
COST INFORMATION:

Original Contract:	\$573,782,793	Incurred-to-Date:	\$126,214,247
Current Contract Value <sup>1</sup> :	\$595,025,837	Incurred in April:	\$8,058,068

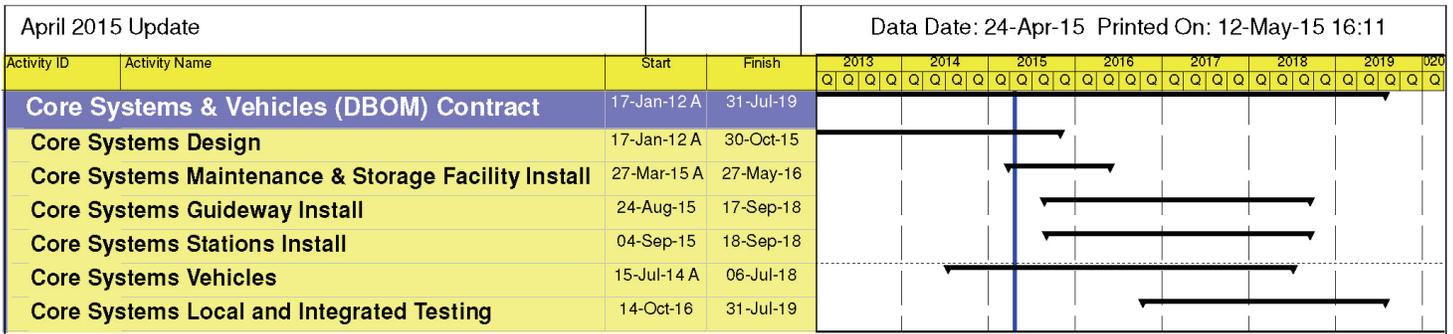
<sup>1</sup>Current Contract Value = Original contract value (excluding contingency and \$823.6M O&M budget) + executed Change Orders

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

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$21,243,044</b>



**SCHEDULE:**



	Interim Design Submitted Documents	Final Design Submitted Documents	Target Completion Date
Passenger Vehicles	93%	5%	4 <sup>th</sup> Q 2015
Communications	100%	30%	4 <sup>th</sup> Q 2015
ATC/SCADA	88% <sup>1</sup>	82%	4 <sup>th</sup> Q 2015
TES	100%	96%	4 <sup>th</sup> Q 2015
Fire Detection	100%	55%	4 <sup>th</sup> Q 2015
PSG, UPS, MPV	N/A	72%	4 <sup>th</sup> Q 2015

**CRITICAL PATH SUMMARY:**

- Continue to coordinate construction activities with the MSF contractor, CSC installer and On-Call Contractor.
- Work is moving forward on the assembly of the first carshell. Crews continue to complete welding activities. First Article Inspection and Pre-Shipment Inspection of the complete carshell is planned for June 2015. HART is closely monitoring preparations at the final assembly facility and current progress in Italy.
- Due to the modified access dates, the equipment installation at Pearl Highlands and Pearlridge stations is now driving the critical path.

**WORK PROGRESS:**

Activities this Month:

- Project-Wide Percent Complete: 22%
- Passenger Vehicle Percent Complete: 25%

**Design:**

- ATC/SCADA – Documents Received: 10, Documents Reviewed: 9.
- Communications – Documents Received: 13, Documents Reviewed: 13.
- Traction Power – Documents Received: 10, Documents Reviewed: 40.
- Fire Detection – Documents Received: 1, Documents Reviewed: 3.
- Platform Screen Gates – Documents Received: 2, Reviewed: 11.
- Passenger Vehicles – Documents Received: 22, Documents Reviewed: 10.

Look Ahead:

**Design:**

- Acceptance of Passenger Vehicle Carshell final design (June 2015) – Only one document left to accept.
- Completion of ATC/SCADA Final Design for Segment 1 (June/July 2015) - Only seven documents are left to be accepted.
- Completion of TES Final Design for Segment 1 (July 2015).
- Approval of the Yard Control Bungalow design documents (June 2015).

**Manufacturing:**

- Passenger Vehicle Manufacturing – Continue carshell assembly of vehicle #1 and vehicle # 2 in Reggio Calabria, Italy (ongoing). Continuation of work on vehicles 1 and 2. First vehicles expected to move to final cleaning, painting and calibration.

**Testing:**

- Factory Acceptance Tests for MSF TPSS Equipment - Fontana, CA (Tests ongoing, to be completed by June 5, 2015).
- Factory Acceptance Tests for TPSS Temperature Rise - Fontana, CA (June 3, 2015).
- Pre-Shipping Inspection Test for Wireless Communication System – Plano, TX (June 2015). Pre-Shipping Inspection Test Maintenance Management Information System (MMIS) – Plano, TX. (June 2, 2015).

<sup>1</sup> One additional ATC/SCADA Interim Design document is expected, hence the decrease in percent completion.

Activities this Month (continued):

**Manufacturing:**

- Performed manufacturing oversight at the AnsaldoBreda factory in Reggio Calabria, Italy. Work Completed this month: Manufactured center floor machining for vehicle # 2, and finished center floor machining of vehicle # 1, finished roof assembly of vehicle # 1, started center floor assembly of vehicle # 3. (For additional details, please see the Vehicle Carshell Progress Tracker in Appendix E.)
- Vehicle # 1 has moved from the General Assembly fixture to the Final Assembly fixture (next step in production).
- Conducted pre-production inspections of the DRS factory in West Plains, Missouri for the fabrication of steel truck frames.
- Conducted pre-production inspection of the AnsaldoBreda facility in Pittsburg, CA – this facility will be used for the vehicle assembly.

**Testing:**

- Testing resumed for the AFO-IIC components – Issues with testing equipment have hindered progress. Testing is ongoing.
- Continued Factory Acceptance Tests for TES Equipment - Blue Light Stations – testing in progress.

**MSF:**

- Coordinating work in the yard by KKJV, and coordinating follow up work by AHJV and On-Call Contractor.
- Work on installation of yard conduits. Conduits and back boxes for the first floor, mezzanine 1 and mezzanine 2 are almost complete. Installation to be finalized once access is coordinated with KKJV. Installation On-Call Contractor is currently installing conduit at the OSB levels 1, mezzanine levels 1 and 2.
- The CSC mobilized office trailers to the MSF site.
- Conduits at the MOW building started in late May 2015.

Look Ahead (continued):

- Pre-Shipping Inspection Test for Vehicle ATC System Cab racks – Batesburg, SC (TBD).
- Design Verification OSB System - Italy (July 2015).
- Pre-Shipping Inspection Test for On-Board Systems – Plano, TX (July 2015). Pre-Shipping Inspection Test for Fiber Optics – Plano, TX (July 2015).
- Pre-Shipping Inspection Test for Closed Circuit Television (CCTV) – Honolulu, HI (July 2015).
- Pre-Shipping Inspection Test for Intrusion Detection – Honolulu, HI (July 2015).
- Pre-Shipping Inspection Test for Passenger Information System – Plano, TX (August 2015).
- Pre-Shipping Inspection Test for MSF SCADA Hardware – Batesburg, SC (July 15, 2015).
- Pre-Shipping Inspection Test for LCC Station SCADA Hardware – Batesburg, SC (July 27, 2015).
- Pre-Shipping Inspection Test for Waipahu Station SCADA Hardware – Batesburg, SC (July 27, 2015).
- Pre-Shipping Inspection Test for West Loch Station SCADA Hardware – Batesburg, SC (July 27, 2015).
- Pre-Shipping Inspection Test for MSF TCCR Equipment – Batesburg, SC (June 15, 2015).
- Pre-Shipping Inspection Test for LCC Station TCCR Equipment – Batesburg, SC (August 2015).
- Pre-Shipping Inspection Test for ATS/SCADA software – Pittsburg PA (July 2015).
- UPS Prototype tests for Electromagnetic Compatibility (EMC), compliance with Underwriters Laboratories (UL) Standards, and Seismic Tests – China (June 8, 2015).
- UPS Design Verification Tests – China (June 8, 2015).
- Pre-Shipping Inspection Test for Rail Car Mover – Granite Falls, MN (June 2015).
- Pre-Shipping Inspection Test for Rail Grinder – Granite Falls, MN (June 2015).
- Pre-Shipping Inspection Test for High Reach Lift Truck– Granite Falls, MN (June 2015).
- Design Verifications for Platform Screen Gates – Farmington, CT (August 2015).
- Pre-Shipping Inspection Test for Fire Detection Systems – Honolulu, HI (June 2015).

**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 two notices of revised access to the stations and guideway. HART and AHJV continue to evaluate the cost and schedule impacts associated with both delays. This issue is being addressed in RFCR # 18.
- 4-Car Train – Negotiations are still in progress.
- 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	Retests of Vehicle Train Control Environmental and EMI Tests	Ongoing
TES	Factory Acceptance Tests for TES Equipment - Blue Light Stations	Ongoing

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	Ongoing
Pittsburg, CA	Vehicle Final Assembly	Not Started

CSC NCR Log			
	TOTAL	CLOSED	OPEN
AHJV	15	15	0
ASTS	2	2	0
AB	94	73	21
<b>TOTAL</b>	<b>111</b>	<b>90</b>	<b>21</b>

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

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

**Contract No.:** MI-930  
**Contractor:** Schindler Elevator Corporation  
**Contract Start Date:** August 2013  
**Contract Substantial Completion:** May 2018  
**Projected Substantial Completion:** The May 2018 completion date will change to a later date predicated on the award of the DB contracts for the east portion of the guideway. The Airport 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 will be scheduled once a contract award has been made and an approved construction schedule with the successful contractor has been completed. The West O’ahu Station Group contract has been advertised with bids being due June 16, 2015 and Notice to Proceed being issued mid-July. The Kamehameha Station Group will be advertised in August 2015 with an anticipated NTP being issued in December 2015.

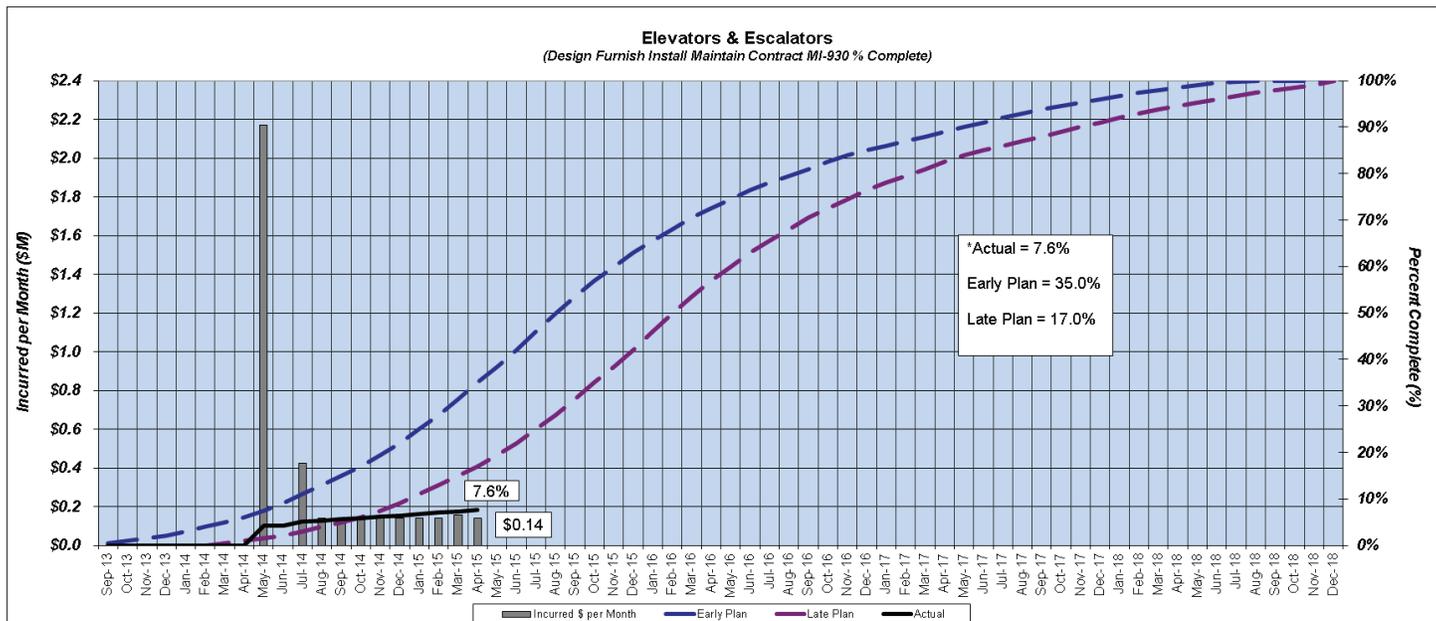
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$50,982,714</u>	<u>Incurred-to-Date:</u>	<u>\$3,879,298</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$50,982,714</u>	<u>Incurred in April:</u>	<u>\$140,825</u>

<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%

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



\*After a review of the payments, the Actual percentage has been adjusted.

**SCHEDULE:**

April 2015 Update			Data Date: 24-Apr-15, Printed On: 13-May-15															
Activity Name	Start	Finish	2015				2016				2017				2018		2019	
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	16-Jun-16	18-Apr-17																
<b>W. Oahu Station Group</b>	16-Jun-16	18-Apr-17																
Construction - W. Oahu Station Group	16-Jun-16	18-Apr-17																
East Kapolei Station	04-Jan-17	18-Apr-17																
UH West Oahu Station	26-Sep-16	10-Jan-17																
Ho'opili Station	16-Jun-16	04-Oct-16																
<b>Farrington Highway Station Group</b>	12-Sep-16	27-Dec-16																
Construction - Farrington Highway Station Group	12-Sep-16	27-Dec-16																
West Loch Station	12-Sep-16	27-Dec-16																
Waipahu Transit Station	12-Sep-16	03-Nov-16																
<b>Kamehameha Highway (KH) - Section 2</b>	14-Dec-16	10-Nov-17																
<b>Kamehameha Highway Station Group</b>	14-Dec-16	10-Nov-17																
Construction - Kamehameha Highway Station Group	14-Dec-16	10-Nov-17																
Pearl Highlands Station	22-Jun-17	10-Nov-17																
Pearl Ridge Station	14-Jul-17	01-Nov-17																
Aloha Stadium Station	14-Dec-16	03-Apr-17																
<b>Airport - Section 3</b>	30-Nov-16	18-Dec-17																
<b>Airport Station Group</b>	30-Nov-16	18-Dec-17																
Construction - Airport Station Group	30-Nov-16	18-Dec-17																
Pearl Harbor Station	30-Nov-16	17-Mar-17																
HNL Airport Station	19-Jun-17	03-Oct-17																
Lagoon Drive Station	01-Dec-16	20-Mar-17																
Middle Street Station	31-Aug-17	18-Dec-17																
<b>City Center (CC) - Section 4</b>	15-Dec-16	12-Apr-18																
<b>Dillingham Station Group</b>	15-Dec-16	06-Dec-17																
Construction - Dillingham Station Group	15-Dec-16	06-Dec-17																
Kalihi Station	15-Dec-16	04-Apr-17																
Kapalama Station	18-Apr-17	02-Aug-17																
Iwilei Station	09-Mar-17	26-Jun-17																
Chinatown Station	21-Aug-17	06-Dec-17																
<b>Kaka'ako Station Group</b>	06-Jun-17	12-Apr-18																
Construction - Kaka'ako Station Group	06-Jun-17	12-Apr-18																
Downtown Station	06-Jun-17	21-Sep-17																
Civic Center Station	18-Jul-17	31-Oct-17																
Kaka'ako Station	15-Aug-17	01-Dec-17																
Ala Moana Center Station	21-Dec-17	12-Apr-18																

**CRITICAL PATH ISSUES:**

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

**WORK PROGRESS:**

Activities this Month:

Earned Value: 7.6 %; Planned Value: 20%

- Design is 20% complete.
- All draft equipment drawings for the 21 stations have been submitted for review and acceptance and are in review.
- Design is complete on the three WOSG stations.
- The release to begin manufacturing of the FHSG equipment will be released pending the award of the Farrington Highway Station Group.

**Look Ahead:**

- Design is continuing for the three KHSG stations.
- Elevator & Escalator team will continue meeting with final designers for the Kamehameha Highway Station Group to finalize the respective designs for elevators and escalators
- Release for manufacturing for the Farrington Highway Station group elevators and escalators will be scheduled after contract award and NTP have occurred.

**KEY ISSUES:**

- The release to allow manufacturing for WOSG and KHSG will be dependent on the successful bid and award of these stations later this year (2015).

**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 80% complete. Schedule delays continue at this time due to last minute changes by COR and City procurement. A new MOU with DTS, BFS and DIT is being drafted. Anticipated new release date for the RFP is before the end of June 2015. An MOU with DTS and DIT for future operations and maintenance is still required and will be negotiated in fall 2015.

**COST INFORMATION:** TBD

**SCHEDULE:**

- Anticipated RFP release in June 2015 with RFP award anticipated for November 2015. System design anticipated for spring 2016.
- Manufacture in fall 2016.
- System testing for the back office functions and the bus anticipated in spring 2017.
- Anticipated system pilot launch on TheBus in 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:**

- Confirming cooperative procurement terms with the City.

**WORK PROGRESS:**

Activities this Month:

- Negotiating and drafting new RFP terms to incorporate the City’s requirement for cooperative procurement.
- 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.

**KEY ISSUES:**

- Confirming the cooperative procurement terms with COR and City procurement in a manner that still appropriately transfers integration risk to the vendor.
- Releasing the RFP as soon as possible.

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 May 2015 Report, progress for utilities, shaft, column, segment casting, and span stressing have been updated. Single Track guideway has begun to be erected in the vicinity of East Kapolei Station. A major column repair at Pier 151 was completed. The 401/404/CZM Permits have been obtained for drill shaft operations to begin in the Pearl Highlands Station area. The Project’s Key Quality Issues continue to focus on drilled shafts and segment repairs, in addition to the repairs of Span 17 and Span 105.

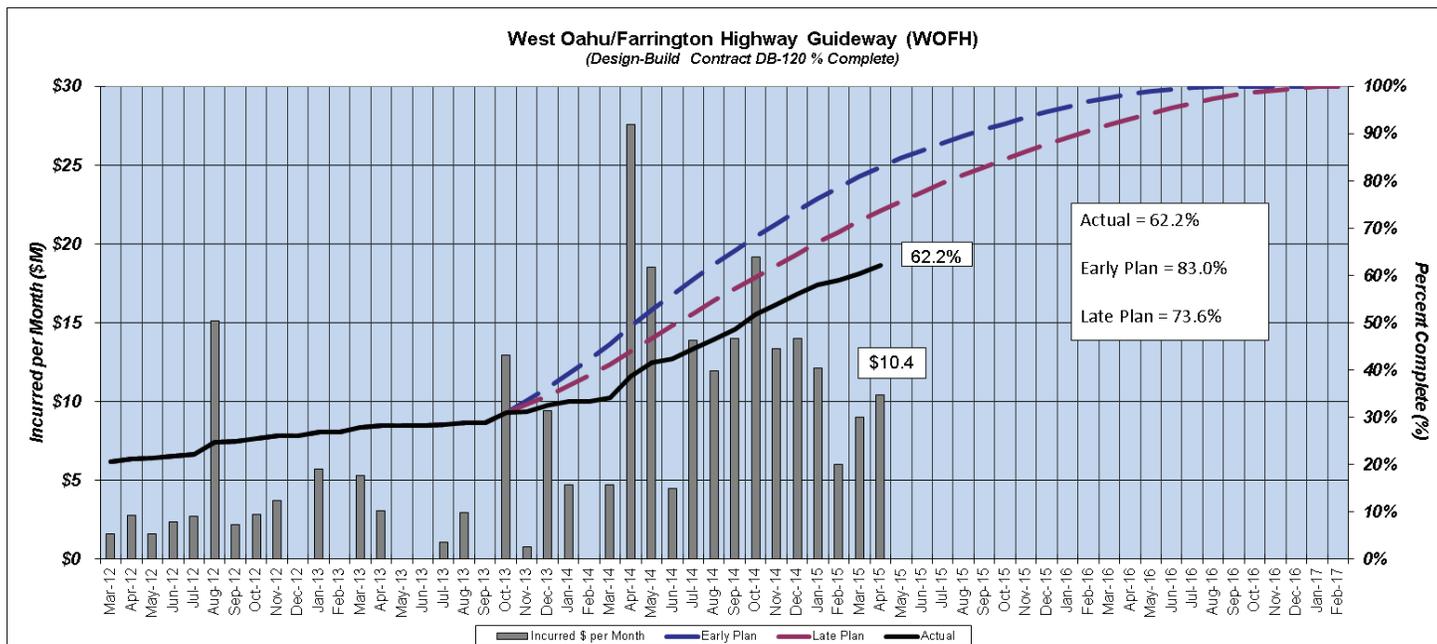
**COST INFORMATION:**

Original Contract:	\$482,924,000	Incurred-to-Date:	\$387,588,591
Current Contract Value <sup>1</sup> :	\$623,606,472	Incurred in April:	\$10,413,382

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

DBE Participation	
Actual DBE Participation:	\$5,339,330
DBE % Attained:	1.11%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$140,682,472</b>



In April, KIWC submitted Pay Application #64 for March 2015, but the Payment was rejected since retention was not applied. KIWC resubmitted Pay Application #64 at the end of April and the payment has been in review by HART during the month of May. In May, KIWC also submitted Pay Application #65 for April 2015, but the payment was rejected since retention was not applied. KIWC resubmitted Pay Application #65 and the payment is in review.

**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, at no cost to HART, in order to mitigate potential schedule impacts.

April 2015 Update		Data Date: 24-Apr-15, Printed On: 12-May-15 19:42												
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	Forecast Dates - Dates Not Approved											
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	08-Mar-12 A	31-Oct-16												
<b>W. Oahu/Farrington Highway Guideway</b>	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	20-Jan-16												
Drilled Shafts	23-Apr-12 A	09-Nov-15												
Columns	21-May-12 A	20-Jan-16												
At Grade	08-Mar-12 A	08-Jul-15												
<b>Guideway</b>	29-Jan-14 A	24-Oct-16												
Precast Segment Erection	29-Jan-14 A	24-Oct-16												
Balanced Cantilever Segments	10-Sep-14 A	30-Dec-15												
<b>Trackwork</b>	09-Jun-15	31-Oct-16												
Direct Fixation Trackwork	09-Jun-15	30-Sep-16												
Third Rail	07-Jan-16	31-Oct-16												

**CRITICAL PATH ISSUES:**

- 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.
- 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 5/15/15									
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	211	201	266	79.3%	
Sewer Line	550	570	96.5%	Columns	164	147	266	61.7%	
Fuel Line	340	340	100%	Segment Casting	2,783	3,163	3,163	88.0%	
Gas line	1,498	1,591	94.2%	Spans Stressed	117	118	266	44.0%	
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	15,379	21,374	72.0%						
Street Lights	5,975	8,357	71.5%						
Traffic Sig/ITS Duct bank	8,009	10,802	74.1%						
System Sites	-	7,046	0%						
ITS Systems Devices	821	4,121	19.9%						

Activities this Month:

**Earned Value: 64.0%** [(Total Achieved to April 2015 (\$387 million) + Projected May 2015 Period (\$12 million))/Total Contract Including Executed Change Orders (\$623 million)]. Planned Value: 75.7%

**Shaft/Column**

- Performed drilled shaft construction, drilling, and placing of concrete for a total of 5 drill shafts. Set rebar and placed concrete for 11 columns.

**Guideway Segment Erection**

- Eastbound heading segments were erected from Span 122 through Span 130. Westbound heading segments were erected from Span 14 through 12R.

**Utility Relocation**

- Addressed utility conflicts along the alignment, relocating traffic signals, streetlights, and existing water/sewer lines. HECO relocating power lines.

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. Shaft work is also proceeding at the Pearl Highlands Station area.

**Guideway Segment Erection**

- Segment span erection will continue from Span 11R westbound towards East Kapolei Station and from Span 131 eastbound along Farrington Highway towards West Loch Station.

Activities this Month (continued):

Third-party companies relocating overhead fiber-optic lines. Work is staying ahead of drilled shaft production.

**Balanced Cantilever Structure**

- Casted 5 segments downstream and 4 segments upstream from Pier 253. Casted 2 segments downstream and 3 segments upstream from Pier 254. Pier Table 255 has been completed. Column work is complete at Pier 256 and falsework is being setup for Pier Table construction.

**Track Construction**

- Completed welding operations on the westside of Ho’opili Station. Rail was stockpiled on the guideway after completion. Track setting and concrete placing for plinths continued east of the double crossover by Ho’opili Station.

**Precast Yard**

- Precast Yard performed daily segment and sound wall casting at a reduced pace, averaging 7 segments per day or 35 segments per week. This reduced pace is to accommodate the storage available at the yard.

**KIWC/Third-Party Coordination**

- HECO and KIWC continue to resolve conflicts with utility relocations.
- Horizontal offset requirements with utility companies may become an issue. At current time, design is held-off until resolved.

**Civil Structures**

- The MSE Block Wall by Pier 251 continued to progress where Retaining Wall A remains the main focus for May. Casting and waterproofing of cast-in-place Wall F was completed. Backfilling of wing walls and casting of approach slabs by the North Access Road Underpass has been completed.

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 upstream and downstream segments for the balanced cantilever at Piers 253 and 254. The traveler at Pier 253 upstream will be transferred for assembly at Pier Table 255. Work will continue on the Pier Table at Pier 256.

**Track Construction**

- Welding operations will return in October 2015 east of West Loch Station. Rail will be stockpiled on the guideway when complete. Plinth work east of Ho’opili Station will continue until June 2015.

**Precast Yard**

- Production of segment casting and sound walls will continue at a rate of 7 segments per day. At this rate, completion of all project segments is expected to be complete by August 2015.

**KIWC/Third-Party Coordination**

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

**Civil Structures**

- Retaining Wall A will continue to progress.

**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-May, 110 of 130 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. KIWC is developing their grading plans which will be submitted to the Honolulu Department of Planning and Permitting (DPP) in June. Full construction ROE will be granted by the University of Hawai’i after the grading plans are approved.
- **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. KIWC has presented a list of contract work versus betterments. HART had reviewed these items and agreed to the final scope of work. In May, both HART and KIWC continued to develop pricing for the agreed upon scope.
- **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 CZM Permit was signed on April 27, 2015, the 401 Permit was signed on April 29, 2015, and the 404 Permit was signed on May 11, 2015, by the respective agencies. Phase 1 (diversion of stormwater pipes into Waiawa Stream) work was completed this month. This is no longer a key issue.
- **Community Noise Variance Permit** – This noise variance had expired on April 12, 2015. Due to the expiration, night work was temporarily suspended affecting progress on the balanced cantilever, utilities, and span by span erection. A revised WOFH Community Noise Variance from HDOH was signed and placed into effect on April 21, 2015. During this period, critical path work was not affected. This is no longer a key issue.

**KEY QUALITY ISSUES:**

- **Span 17 Damage and Repair** - During the erection process of Span 17, segments 17-1, 17-2, 17-11, and 17-12 were damaged due to unbalanced support from the temporary bearings. NCR 00314 was opened to address this issue. KIWC continues to evaluate the extent of the damage. A root cause analysis and repair procedure alternatives will be submitted to HART for review. Repair at Span 17 is not on the critical path and KIWC continues to proceed with Span by Span operations westbound.
- **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 while damage to Spans 104, 105, and 106 are being evaluated. KIWC is still in the process of determining how to best set Span 105 onto the bearing pads and into its final alignment. Due to this incident, final span alignment operations were temporarily suspended to re-evaluate the procedures. KIWC has since restarted the rough setting of spans and final alignment operations are expected to begin again.
- **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 to address this issue and in May, KIWC completed the appropriate repair work. After this issue, KIWC reevaluated their quality procedures and Quality Assurance was designated a higher degree authority of oversight and control for concrete pours to prevent these issues from occurring in the future. This is no longer a key issue.

- **Drill Shaft Quality** – HART received seven additional drill shaft Crosshole Sonic Logging (CSL) Reports in May 2015. Six 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 242 drilled shafts that have been tested to date, HART has requested that KIWC provide additional testing and/or modifications to 62 shafts to ensure that the shafts meet Project 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 62 drill shafts that are being reviewed in detail, six 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. 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 35 segments per week and is currently more than 85% complete with segment production for the overall project. 2,783 segments have been cast to date. Although 113 of the total 364 NCRs (31.0%) 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 24 NCRs have been closed since last month. Of the 24, 12 were related to pre-cast segment issues, eight were related to drill shaft issues, one post-tensioning issue, and three out of tolerance rebar issues.
- **Flash Butt Track Welding & Track Construction Operations** – KIWC has moved to the area west of Ho’opili Station where another 476 welds have been completed. These welds cover track between 392+00 to 500+00. KIWC continues to also complete the concrete plinth trackwork heading eastward past the double crossover at Ho’opili Station.
- **Balanced Cantilever System (BCS) Form Advancement** – KIWC has made great strides in the Balanced Cantilever construction. KIWC is already forming, casting, and stressing segments both upstream and downstream segments from Pier 253 and Pier 254. On average, three segments are cast and stressed per week. As of mid-May, 15 of 84 BCS segments have been stressed (17.9%). Third party work is moving away from the vicinity of the BCS construction. Lane closures to redirect traffic on the H-1 should no longer be a major issue moving forward. As an additional safety precaution, nets have been added underneath travelers to catch any excess concrete laitance that may develop as the travelers progress.
- **Base Grouting** – Base grouting work at the base of select drill shafts began. The grout ties the drilled shaft to the rock socket which allows for a more stable structural support system. 20 of 62 shafts (32.3%) have been grouted to date. Base grouting reports continue to be submitted to HART in a timely manner.

WOFH NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
364	277	87

PROJECT PICTURES:



Segment erection at Span 12R Single Track, westbound.



Segment erection at Span 129, eastbound.



BCS segments 253-4U and 254-3D, Work Area 6.



North Access Road Underpass backfilling completed, WA 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 (in active procurement)

**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.

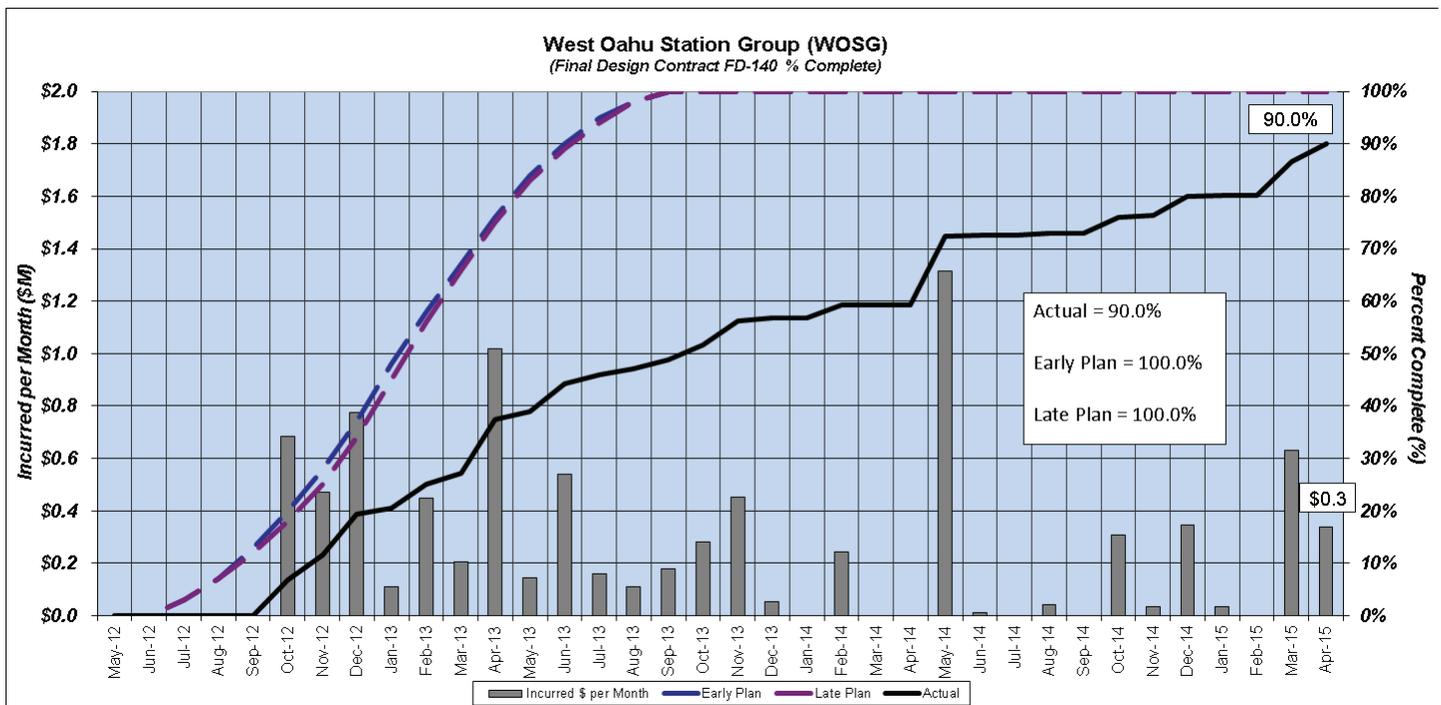
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$7,789,000</u>	<u>Incurred-to-Date:</u>	<u>\$8,923,882</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$10,014,305</u>	<u>Incurred in April:</u>	<u>\$366,555</u>

<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%

April Change Orders/Amendment		
Change No./Amend	Description	Amount (\$)
00014	Ho’opili Grading / Redesign of E. Kapolei Escalators	\$241,000
00015	Redesign of TPSS Trench at SS3 / CSC Cabinets at E. Kapolei	\$28,000
<b>Cumulative to Date</b>		<b>\$2,645,305</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:**

April 2015 Update			Data Date: 24-Apr-15, Printed On: 12-May-15														
Activity Name	Start	Finish	2015				2016				2017						
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>W. Oahu/Farrington Highway (WOFH) - Section 1</b>	14-Jan-10 A	03-Oct-17															
<b>W. Oahu Station Group</b>	14-Jan-10 A	03-Oct-17															
Design - W. Oahu Station Group	14-Jan-10 A	30-Jun-16															
Construction - W. Oahu Station Group	15-Jul-15	03-Oct-17															
East Kapolei Station	15-Jan-16	03-Oct-17															
UH West Oahu Station	01-Oct-15	31-Jul-17															
Ho'opili Station	15-Jul-15	28-Feb-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 93%.
- Interfacing design with CSC, WOFH and EE contracts.
- Coordinating with private developer, utility companies and third party agencies to establish utility services for UH West O’ahu and Ho’opili Stations.

Look Ahead:

- Document design interface agreements with CSC, WOFH and EE contracts.
- Finalize third-party agreements and approvals.

**KEY ISSUES:**

- Coordinating with HDOT to resolve significant policy level design review comments.

**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)

**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 in March 2015. The solicitation was protested by Nan, Inc. (Nan) against the apparent low bidder. HART denied the appeal, and Nan appealed HART’s denial of protest to the State of Hawai’i Department of Commerce and Consumer Affairs (DCCA), Office of Administrative Hearing. A hearing on the motions was held on May 20, 2015 and HART received a favorable oral ruling dismissing the protest. HART expects the formal DCCA hearing officer decision to be issued by June 4, 2015.



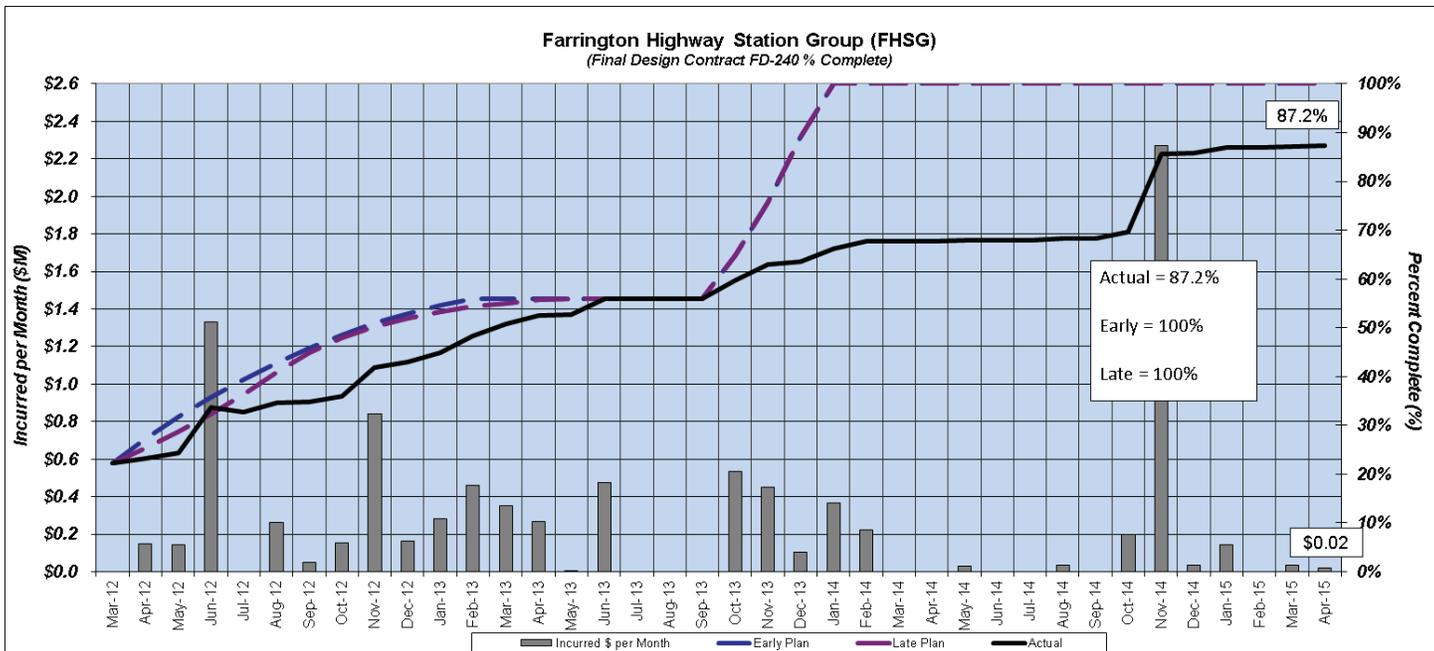
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$9,300,696</u>	<u>Incurred-to-Date:</u>	<u>\$12,387,564</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$14,198,045</u>	<u>Incurred in April:</u>	<u>\$21,160</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%

April 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:**

April 2015 Update		Data Date: 24-Apr-15, Printed On: 12-May-15															
Activity Name	Start	Finish	2015				2016				2017						
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>W. Oahu/Farrington Highway (WOFH) - S</b>	02-Oct-09 A	31-Jul-17															
<b>Farrington Highway Station Group</b>	02-Oct-09 A	31-Jul-17															
Design - Farrington Highway Station Group	02-Oct-09 A	14-Nov-16															
Construction - Farrington Highway Station Group	01-Jul-15	31-Jul-17															
West Loch Station	01-Jul-15	31-Mar-17															
Waipahu Transit Station	03-Aug-15	31-Jul-17															
Leeward Community College Station	01-Dec-15	30-Jun-17															

**CRITICAL PATH ISSUES:**

- HART is proactively facilitating the finalization and documentation of interface agreements between the FHSG, CSC, WOFH and EE contracts.
- HART is coordinating and forecasting construction access milestones between interfacing contracts.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 82%. 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.
- Finalizing approvals from third parties.

Look Ahead:

- Obtain remaining HART-provided construction permits and rights of entry.
- Document design agreements with interfacing partners.
- Resolve construction procurement protest.
- Award construction contract.

**KEY ISSUES:**

- Tracking completion of designs that interface with FHSG prior to construction.
- Tracking construction access handoff dates with WOFH contractor.

**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-MSF has negotiated a no cost change order for the six calendar days.

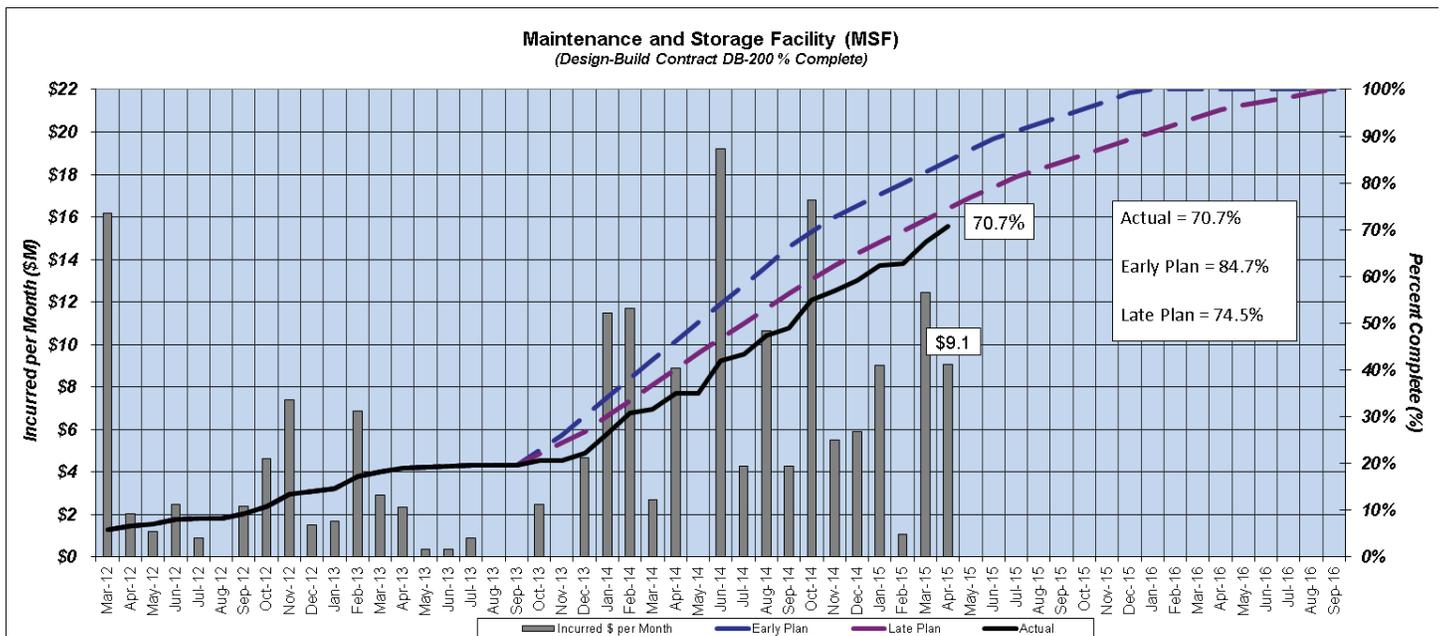
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$195,258,000</u>	<u>Incurred-to-Date:</u>	<u>\$194,183,226</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$274,808,008</u>	<u>Incurred in April:</u>	<u>\$9,059,483</u>

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

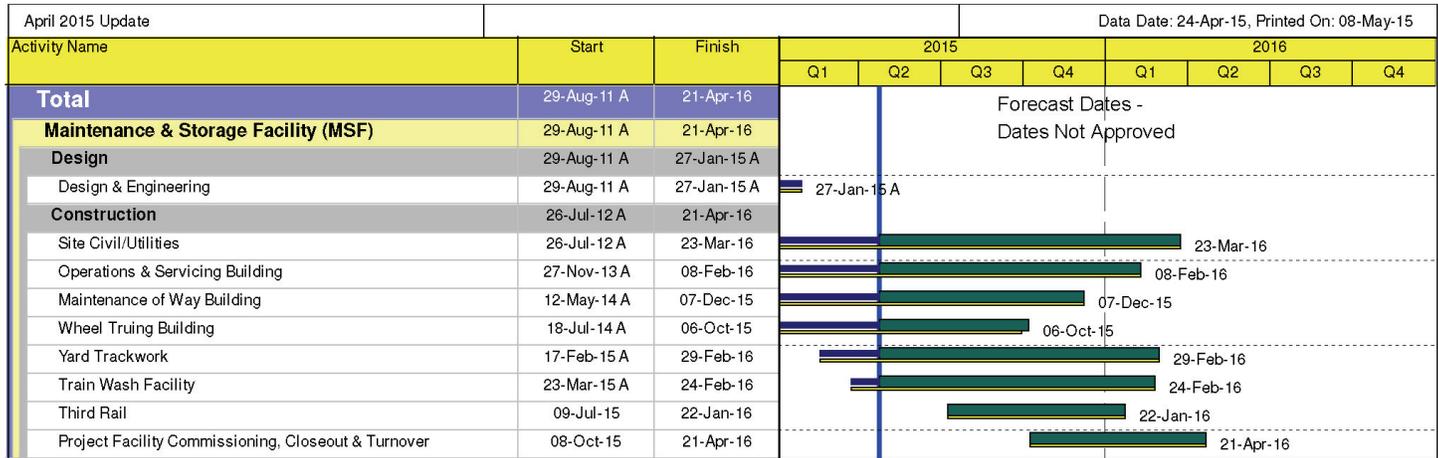
DBE Participation	
Actual DBE Participation:	\$145,819
DBE % Attained:	0.08%

April Change Orders		
Change No.	Description	Amount (\$)
None	---	---
<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).



**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-MSF negotiated a no cost 6 calendar day time extension. A change order is being processed.
- 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 5/31/15	
Element	% Complete
OSB	62%
MOW Building	57%
WTB	78%
Rail Procurement	96%

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 71%** [(Total Achieved to March 2015 (\$184.8 million) + Projected April 2015 Period (\$9.06 million))/Total Contract Including Executed Change Orders (\$274.3 million)]. Planned Value: 74%

**Yard/Utilities**

- Completed installing/testing site electrical, water, sewer and drainage systems.
- Installing conduit for systems, communications, train control, traction power, site electrical and exterior lighting.
- Completed installation of rail turnouts in the yard for the service and maintenance track.
- Installing track subdrain and subballast, and ballast material at east side of S1-7 track and west side of maintenance track.
- Installation of contact rail at storage tracks commenced.

**Operations and Servicing Building (OSB)**

- Completed installation of metal framing.
- Completed roof installation.
- Completed placing concrete for OSB elevated slabs.
- Installation of rail car lifts caissons and enclosures.
- Installing mechanical/electrical/plumbing.
- Received and installed power distribution switchgear.

Look Ahead:

- MOW Turnout.
- Drop ceiling installation at OSB and MOW.
- Installation of car lifts.
- Interior and exterior doors.
- MOW outdoor switchgear delivery and installation.

Activities this Month (continued):

**Maintenance of Way (MOW)**

- Installing drywall.
- Installing membrane and standing seam metal roofing.
- Installing mechanical/electrical/plumbing.
- Installed permanent access stairs.

**Wheel Truing Building (WTB)**

- Installing mechanical/electrical/plumbing.
- Completed installation of light fixtures, stairs, guardrails and fire protection.

**TPSS**

- Completed TPSS vault concrete. TPSS slab placement is in progress.

**Rail Procurement and Installation**

- Receiving materials and installing turnouts is ongoing.
- Distributing rail materials to WOFH is ongoing.
- Installation of pre-curved rail is ongoing.

**Administration**

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

**KEY ISSUES:**

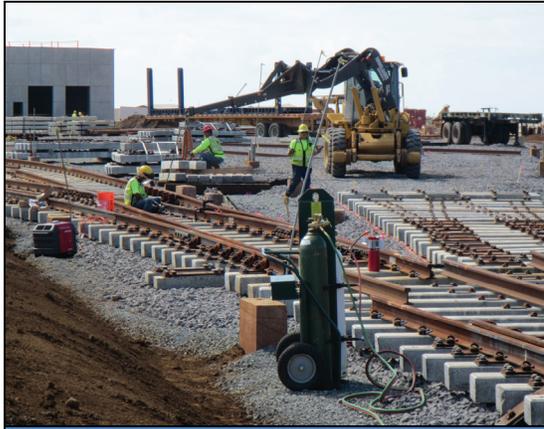
- **Interface Management with Core Systems Contractor** – predominant areas of concern include a general revision to the location of rail control system insulated joints and track devices; building internal requirements for access control, intrusion detection and fire detection and alarm system device 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 Core Systems contractors** including establishment of shared access between these prime contracts.

**KEY QUALITY ISSUES:**

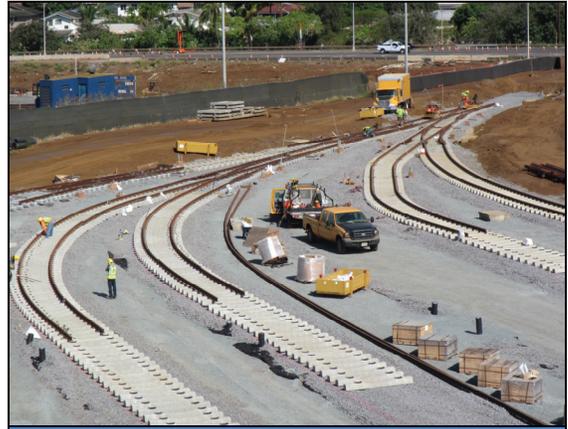
- NCR 26 was issued to Swanson Steel for wedge anchors not fully embedded for Stairway No. 4.

MSF NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
26	25	1

**PROJECT PICTURES:**



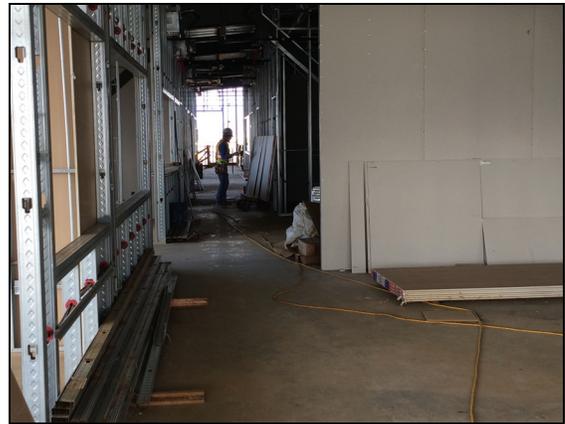
Assembling turnouts.



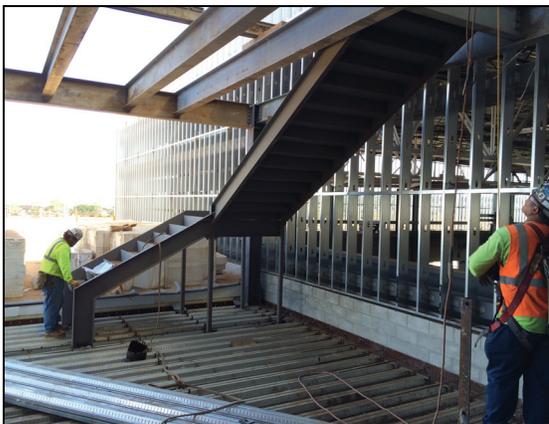
Pre-curved rail installation.



TWF stem wall.



MOW drywall installation.



OSB stair installation.



Stripping the interior trench TPSS concrete walls.

### 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: May 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 will be moving to the balanced cantilever area in order to maintain progress while HECO clearance issues are resolved. Discussions with HECO are being held at an elevated level to resolve concerns about horizontal/vertical clearances and schedule certainty. Elevated discussions are also ongoing to clarify the scope and funding source of the HDOT betterments. The KHG team continues to explore mitigation measures that would balance MOT and noise impacts to the community.

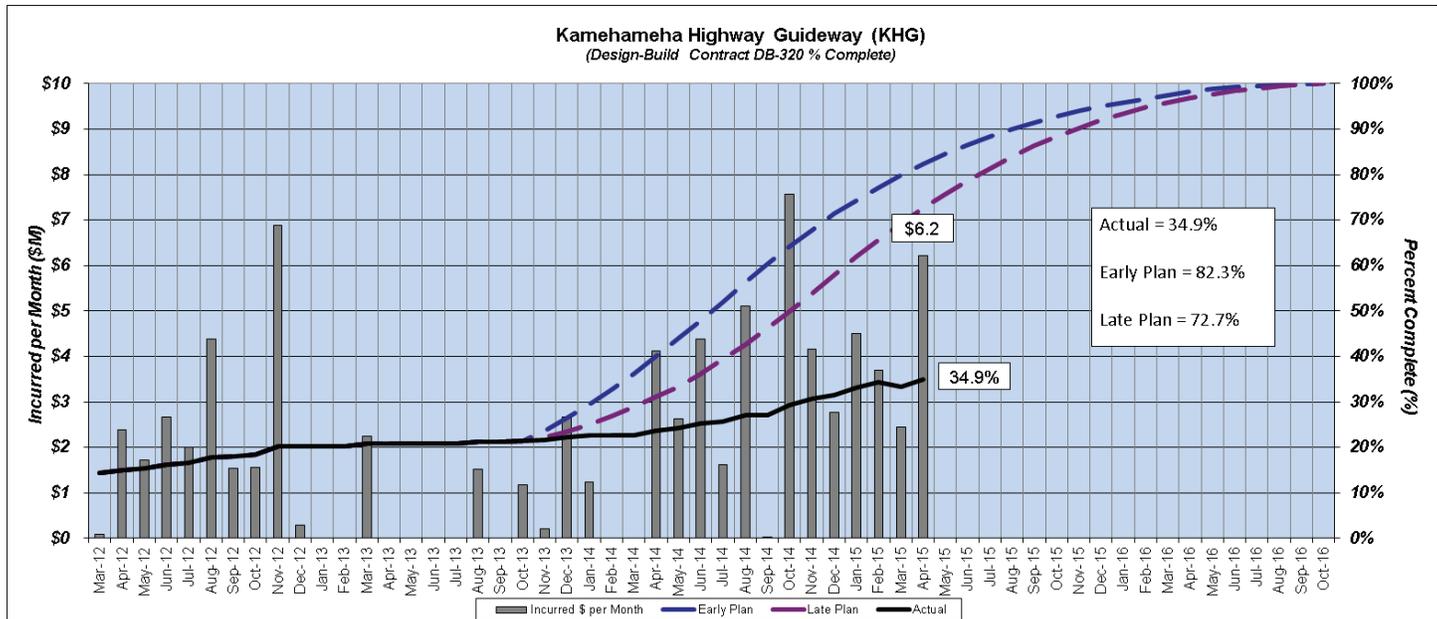
#### COST INFORMATION:

Original Contract:	\$372,150,000	Incurred-to-Date:	\$139,117,289
Current Contract Value <sup>1</sup> :	\$388,515,363	Incurred in April:	\$6,224,999

<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%

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



- Progress payment 44 (March) has been submitted for review.

**SCHEDULE:**

- The accepted re-baselined schedule dated Oct. 28, 2013 is no longer valid, and KIWC submitted a schedule revision on Dec. 5, 2014 with a data date of October 2014. This schedule showed a revised Substantial Completion date of April 4, 2017, and HART has requested re-submittal via the change order process.
- Schedule has continued to slip due to lack of Design-Builder’s coordination and construction of utility relocation work.

April 2015 Update				Data Date: 24-Apr-15, Printed On: 12-May-15 19:43										
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	[Gantt bar: Q1 2015 to Q3 2016]										
Columns		05-Feb-15 A	30-Nov-16	[Gantt bar: Q1 2015 to Q4 2016]										
<b>Guideway</b>		06-Apr-15 A	23-Jan-17											
Precast Segment Erection		06-Apr-15 A	23-Jan-17	[Gantt bar: Q1 2015 to Q4 2016]										
Cast BC Segments		06-Jul-15	23-Aug-16	[Gantt bar: Q2 2015 to Q3 2016]										
<b>Trackwork</b>		30-Sep-15	15-Mar-17											
Direct Fixation Trackwork		30-Sep-15	01-Mar-17	[Gantt bar: Q3 2015 to Q1 2017]										
Third Rail		15-Oct-15	15-Mar-17	[Gantt bar: Q3 2015 to Q1 2017]										
<b>KHG Project Finish Work, Demob, Punchlist</b>		08-Apr-16	28-Jun-17	[Gantt bar: Q2 2016 to Q3 2017]										

**CRITICAL PATH ISSUES:**

- HART and KIWC continue to coordinate on the finalization of easement acquisitions. 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 design, coordination and construction of utility relocations, drilling of shafts will need to be re-sequenced to mitigate the impact.

**WORK PROGRESS:**

KHG Construction Status as of 5/15/15								
Utility Status	Qty to Date	Final Qty	% Complete	Structure Element	Total to Date	Planned to Date*	Total Qty**	% Complete
Water Line	3,926	4,362	90%	Shafts	40	16	186	22%
Gas Line	10,900	12,641	86%	Columns	0	0	169	0%
Sewer Line	388	492	79%	Segment Casting	0	123	2,075	0%
Drainage	545	2,081	26%	Segment Erection	0	0	2,075	0%
Elec/Telecom	10,423	19,455	54%	Spans Stressed	0	0	156	0%
Signals/ITS/Lights	10,310	18,486	56%	* 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: 37.0%** [(Total achieved to February 2015 (\$129.6 million) + March 2015 (submitted), April 2015, and May 2015 projections (\$14.4 million))/Total contract including executed Change Orders (\$389 million)]. Planned Value: 75.8%

**Shaft/Column**

- 40 of 186 shafts have been installed.

**Utility Relocation Progress**

- Water line relocation is ongoing in Phase 6.

Look Ahead:

**Design Progress**

- HART and KIWC are working together to complete final design. To date, 35 of 46 drawing packages have been issued for construction.

**Utility Relocation**

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

Activities this Month (continued):

- The relocation of HECO electrical lines and Hawaiian Telcom, Oceanic Time Warner and Intelligent Transportation Systems (ITS) duct banks is occurring in Phases 5, 8, 10 and 12.
- Sewer line relocation is occurring in Phase 11.
- Gas line relocation is occurring in Phase 12.

**Traffic Signals**

- Traffic signal installation is ongoing at the intersections of Acacia, Waimano Home Road, Kaonohi and Honomanu.
- Installation of license plate readers continues.

**Roadway Widening**

- Roadway widening activities are ongoing in Phases 6 and 10.

Look Ahead (continued):

**Guideway Structure**

- Construction of shafts will begin for the balanced cantilever, starting on the west side of H-1 moving eastward.
- Column construction is expected to start in June from the west end proceeding eastward.

**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:**

- Utility relocations continue to impact the construction schedule for the project, though the effects have been partially mitigated by resequencing the work.
- 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.
- Mitigation measures for noise and traffic impacts continue to be explored, but mitigation for one tends to adversely impact the other. HART will continue to work with the community to try to minimize impacts.

**KEY QUALITY ISSUES:**

- **Project specifications** – Current shaft construction is proceeding with only minor quality issues. Methodology for the process of implementing design changes after plans have been issued for construction is being discussed at a programmatic level.

KHG NCR Log		
Total NCRs Issued To Date	CLOSED	OPEN
65	40	25

PROJECT PICTURES:



Standing shaft reinforcing cage, Phase 1.



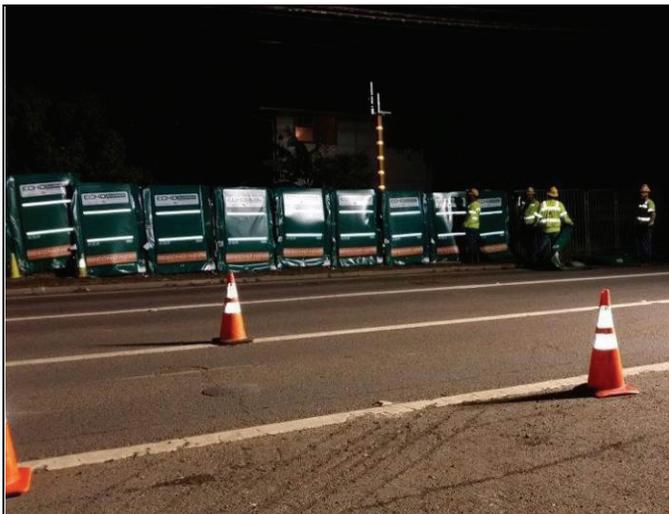
Placing concrete in Shaft 280, Phase 1.



Gas line tie in, Phase 5.



Widening demo, Phase 10.



Installation of noise barriers, Phase 11.



Kohomua Yard, Phase 13.

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

**Contract No.:** FD-340

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

**Contract Start Date:** November 2012

**Construction Docs Bid-Ready:**

H2R2 Highway Ramp: January 2015 (in construction)

Kamehameha Highway Stations: August 2015

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

**Project Overview:** The KHSG design 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 contract.

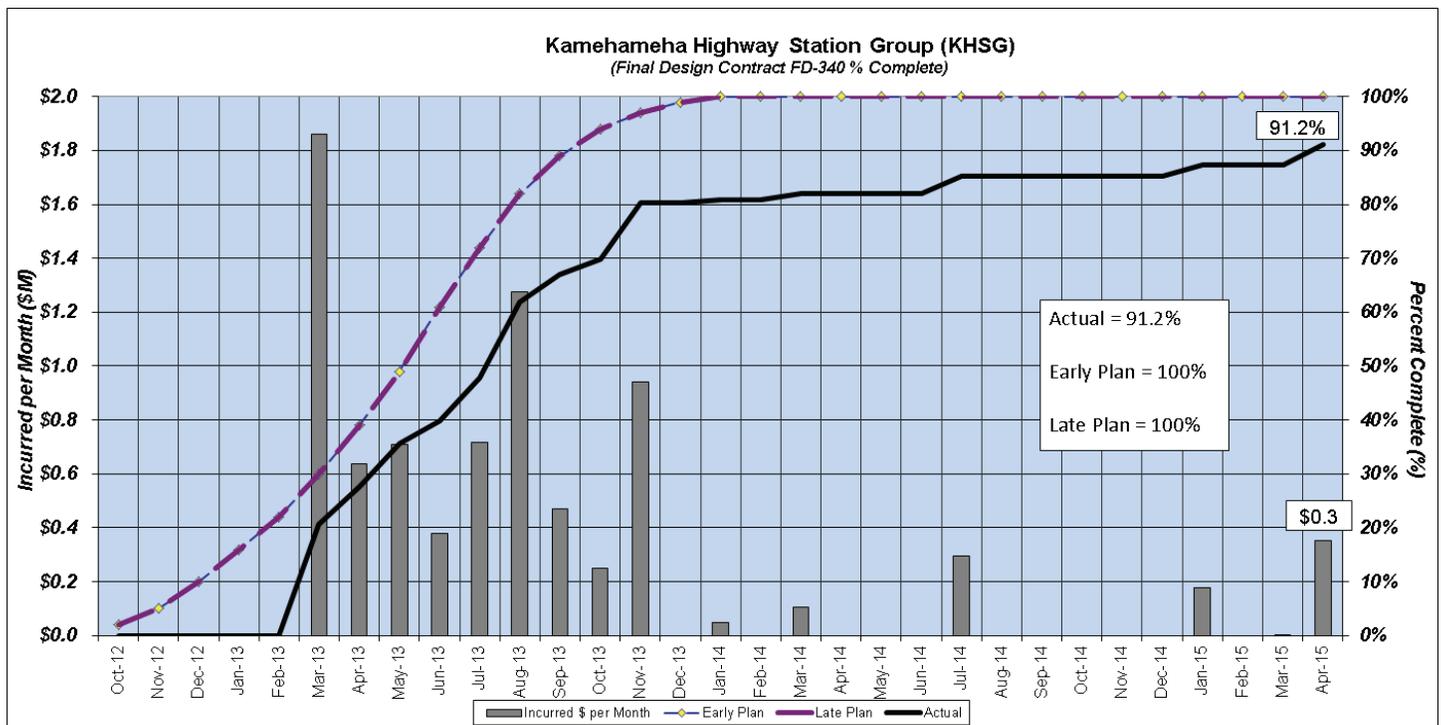
**COST INFORMATION:**

Original Contract:	\$8,702,592	Incurred-to-Date:	\$8,219,319
Current Contract Value <sup>1</sup> :	\$9,011,768	Incurred in April:	\$352,176
<sup>1</sup> Current Contract Value = Original contract value (not including contingency) with Design Allowance + executed			



DBE Participation	
Actual DBE Participation:	\$3,303,778
DBE % Attained:	37.96%

April Change Orders/Amendments		
Change No./Amend	Description	Amount (\$)
None	---	---
<b>Cumulative to Date</b>		<b>\$352,176</b>



The closeout of the KHSG 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 KHSG package from its previous inclusion in the canceled West Side Stations Group solicitation. The schedule for the KHSG design has been extended to accommodate these additional efforts, which are now nearly complete.

**SCHEDULE:**

April 2015 Update		Data Date: 24-Apr-15, Printed On: 12-May-15																
Activity Name	Start	Finish	2015				2016				2017				2018			
			Q1	Q2	Q3	Q4												
<b>Kamehameha Highway (KH) - Section 2</b>	28-Jun-11 A	29-Jun-18																
<b>Kamehameha Highway Station Group</b>	28-Jun-11 A	29-Jun-18																
Design - Kamehameha Highway Station Group	28-Jun-11 A	31-Oct-16																
Construction - Kamehameha Highway Station Group	01-Dec-15	29-Jun-18																
Pearl Highlands - Station	04-Apr-16	29-Jun-18																
Pearl Ridge Station	01-Jul-16	29-Jun-18																
Aloha Stadium Station	01-Dec-15	29-Sep-17																

**CRITICAL PATH ISSUES:**

- HART is 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 95%.
- Interfaced design with the CSC, WOFH, KHG and EE contracts.
- Concluded pre-final review of draft station construction documents.
- Resolved third-party comments.
- Awarded H2R2 construction contract to Royal Contracting.
- Received 401/404 permit from Hawai’i Department of Health Clean Water Branch.

Look Ahead:

- Document remaining design interface agreements.
- Obtain third-party approvals on remaining construction documents.
- Prepare construction bid package for August 2015 advertisement.

**KEY ISSUES:**

- Finalizing design prior to construction advertisement.

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

#### A. Airport Section Guideway and Utilities

Contract No.: FD-430

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

Contract Start Date: January 2012

Construction Docs Bid-Ready:

- Guideway, Stations and Utilities (DB)
  - RFP Part 1 for DB (Qualifications): Issued April 2015
  - RFP Part 2 for DB (Proposals): To be issued August 2015

Currently in Construction:

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

Construction Completed:

- Airport 7-Piers (DBB-525 – Hawaiian Dredging):
  - Project Completion date May 2015



**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.

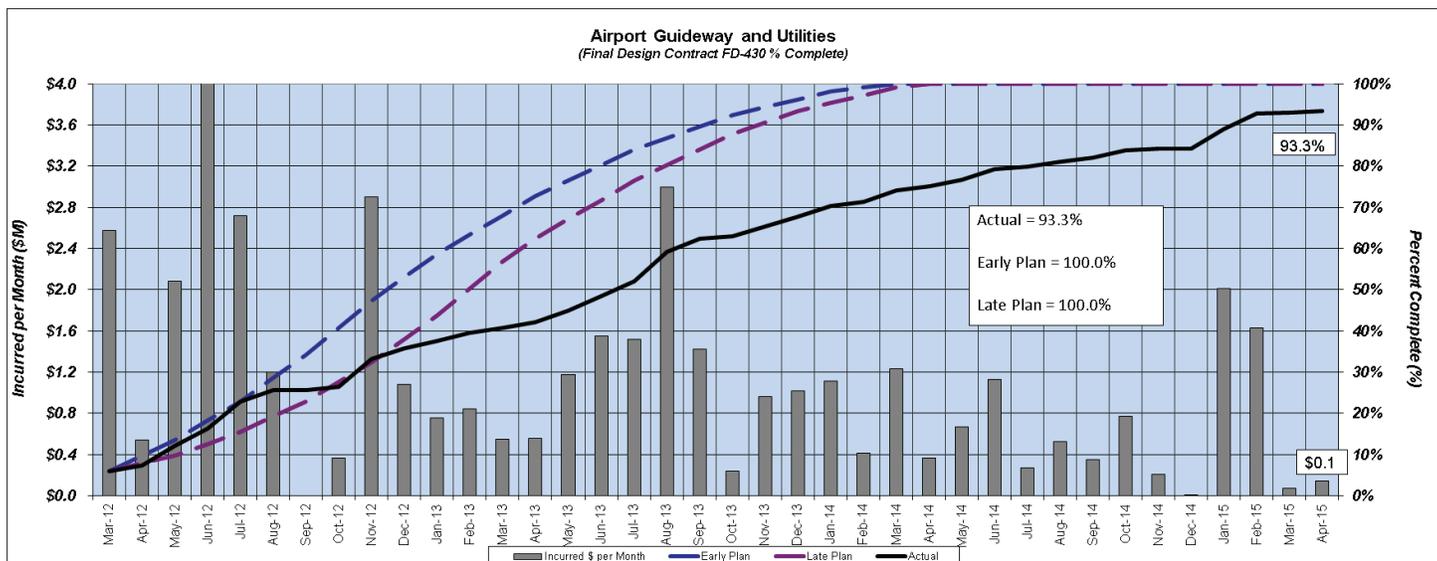
**COST INFORMATION:**

Original Contract:	\$38,840,960	Incurred-to-Date:	\$39,771,629
Current Contract Value <sup>1</sup> :	\$42,610,832	Incurred in April:	\$145,184

<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%

April 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.

**SCHEDULE:**

April 2015 Update															Data Date: 24-Apr-15, Printed On: 13-May-15 16:46														
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	Q4				
<b>Total</b>	09-Nov-11 A	31-May-19																											
<b>Airport Programmatic</b>	01-May-12 A	04-Feb-14 A																											
<b>Airport Permits</b>	09-Nov-11 A	09-May-16																											
<b>Design - Airport Guideway &amp; Utilities</b>	05-Jan-12 A	27-Mar-15																											
<b>Construction - Airport Guideway</b>	01-Feb-16	31-May-19																											

**CRITICAL PATH ISSUES:**

- HART is preparing RFP Part 2 documents to solicit technical and price proposals.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 97%.
- Coordinating general design with HDOT (Highway and Airport Divisions), utility companies, U.S. Navy, HECO and other stakeholders.
- Coordinating guideway and station design with right-of-way acquisitions.
- Preparing technical DB requirements for pre-advertisement review.
- Issued addendum to allow more time for offerors to prepare qualifications proposals.

Look Ahead:

- Coordinate utility relocations in advance of DB package.
- Obtain third-party approvals.
- HART quality review of draft bid documents.
- Preparing exhibits for the Navy for approval of construction agreement.

**KEY ISSUES:**

- Assessing potential right-of-way impacts due to HECO requirement for additional transformers.
- Acquiring rights-of-way and critical temporary construction easements.
- Coordinating with the U.S. Navy for right of entry and construction agreements.

**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 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.

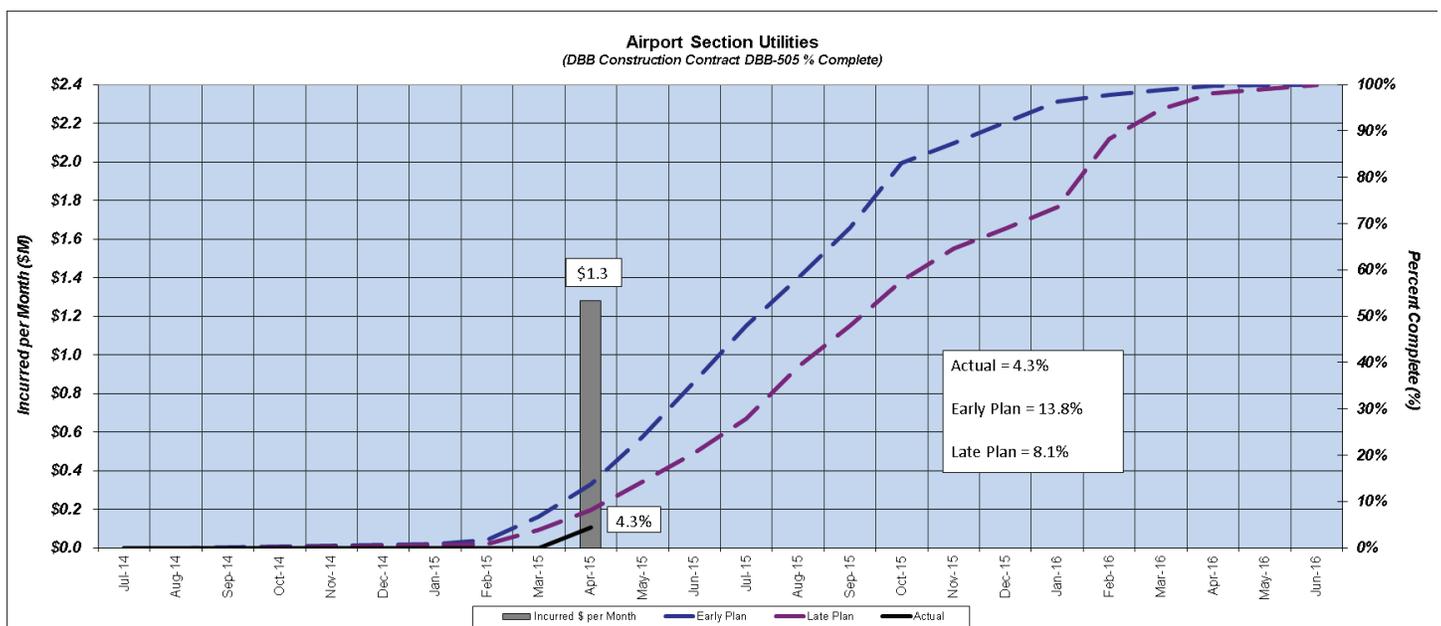
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$28,413,974</u>	<u>Incurred-to-Date:</u>	<u>\$1,279,386</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$28,413,974</u>	<u>Incurred in April:</u>	<u>\$1,279,386</u>

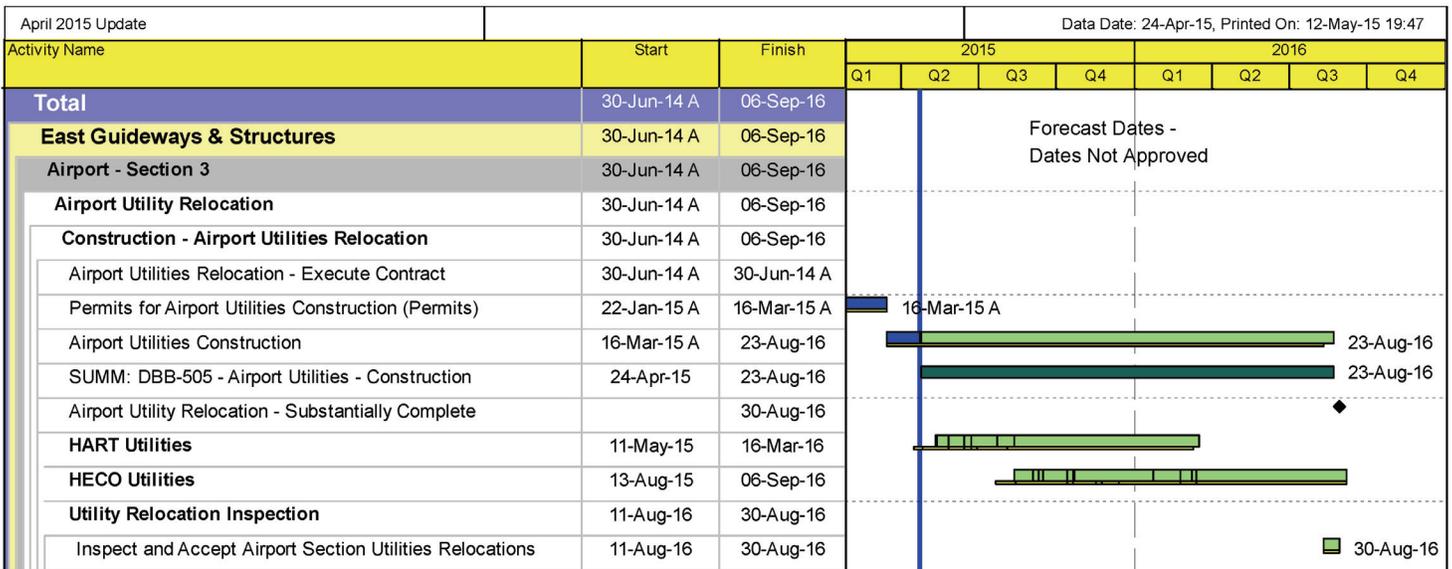
<sup>1</sup>Current Contract Value = Original contract value (not including contingency) + executed Change Orders

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

April 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: 8.82%**; 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 have been issued.
- Inspection and Testing Plan (ITP) has been submitted by Nan and returned by HART with comments.
- 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.
- Nan, Inc. has commenced lighting relocation conduit work at Keehi Lagoon Park.

Look Ahead:

- Continue working on Kamehameha Highway utility work that is not impacted by Navy ROE.
- Nan has applied for permission to do utility relocation work along Aolele Street within the HDOT-Airport’s jurisdiction.
- Evaluate other areas that Nan’s work can be redirected if Navy access is not provided.

**KEY ISSUES:**

- Access to Navy right of entry to perform work could result in potential construction delay claims.
  - Ongoing coordination with HART ROW regarding obtaining access to Navy property for construction related work.
- Nan, Inc. is presently behind schedule; lack of access to Navy facilities could further impact the schedule.
- Noise variance to perform night work is pending DOH approval.

**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
5	1	4

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

**Contract No.:** DBB-525

**Contractor:** HDCC/CJA JV

**Contract Start Date:** September 2014

**Contract Substantial Completion:** April 24, 2015

**Declared Substantial Completion:** April 22, 2015

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



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

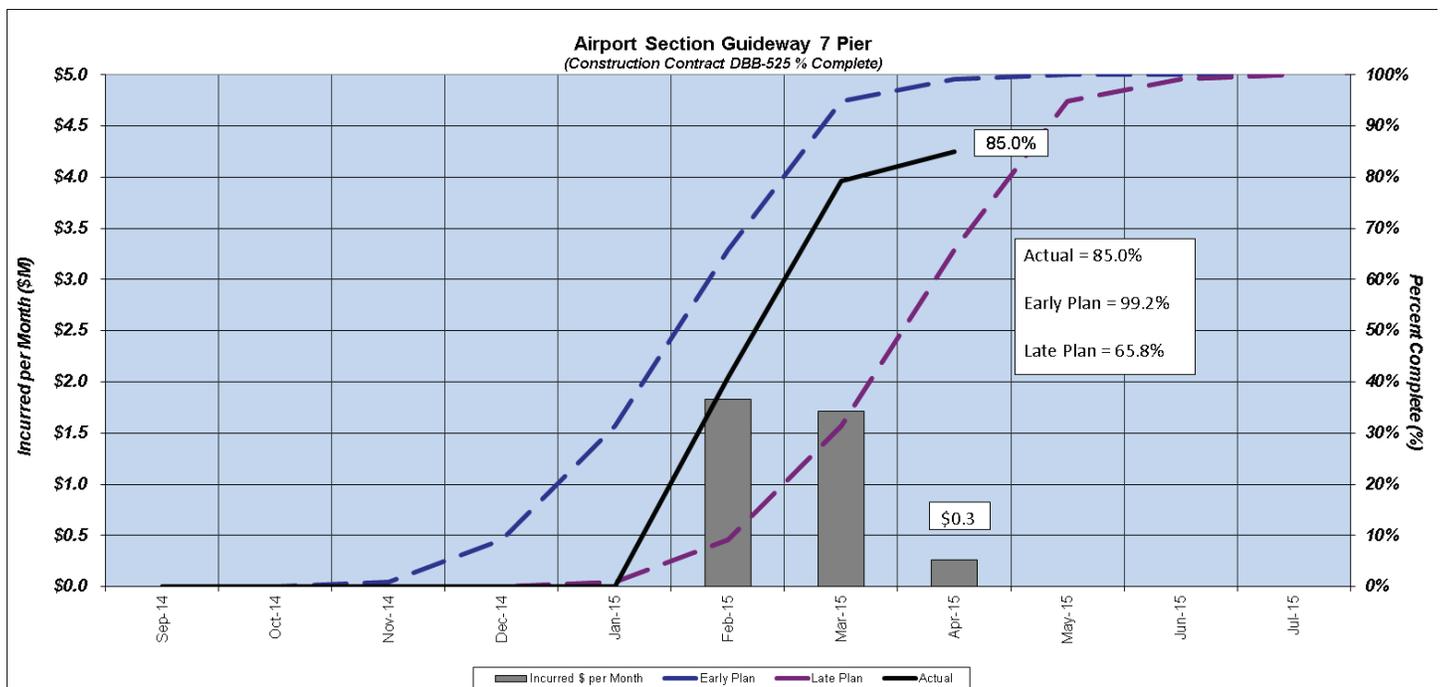
**COST INFORMATION:**

Original Contract:	\$3,973,000	Incurred-to-Date:	\$3,796,241
Current Contract Value <sup>1</sup> :	\$4,481,241	Incurred in April:	\$260,089

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

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

April Change Orders		
Change No.	Description	Amount (\$)
00002	Contractor to Perform CSL Testing	\$17,378
<b>Cumulative to Date</b>		<b>\$17,378</b>



**SCHEDULE:**

April 2015 Update		Data Date: 24-Apr-2015, Printed On: 13-May-2015 15:34								
Activity Name	Start	Finish	2015				2016			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Total</b>	18-Sep-2014 A	30-Apr-2015								
NTP	18-Sep-2014 A									
Mobilization	19-Sep-2014 A	28-Jan-2015 A								
Drilled Shafts	26-Jan-2015 A	20-Apr-2015 A								
Transition Zone Rebar Cages	09-Feb-2015 A	30-Apr-2015								
Pour Foundation Piers	11-Feb-2015 A	24-Apr-2015								

**CRITICAL PATH ISSUES:**

- None - All work has been completed.

**WORK PROGRESS:**

Activities this Month:

**Earned Value: 100%;** Planned Value: 84%

- Completed CMP casing work at all seven (7) piers.
- Concrete curbs and paving completed at Piers 550, 551R and 552R.
- Completed asphalt paving 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, followed by Final Site Cleaning.
- Submitted Substantial Completion Inspection Report.

Look Ahead:

- Final CMS processing of open RFI's.
- HART is processing HDCC/CJA JV submitted cost estimates for:
  - Change proposal for Temporary Fill at Piers 551R and 550.
  - Double Handling of Drilling Spoils.
  - Additional core sample test to confirm Pier 551R concrete.
- HDCC/CJA JV is to submit the following additional costs RFCCs:
  - Force Account Sheets for Pier 550 Utility conflicts.
  - Force Account Sheets for Pier 548 Utility conflicts.
  - Cost Proposal for extra surface work (concrete curbs and paving) at Piers 552R, 551R, 550, 547 and 546 due to lowering of CMP casings as required by response to RFI 016.
- HDCC/CJA JV has the following items to submit for Contract Closeout:
  - Red line As-Built Drawings.
  - Complete entering Certified Payrolls to LCP Tracker.
  - Complete entry of HDCC/CJA JV daily report into CMS.
  - Provide Release of Liens.
  - Submit final DBE forms.
  - Submit a number of documents to closeout BMP and Environmental issues.
  - Submit final invoice.

**KEY ISSUES:**

- HDCC/CJA JV to submit Red Line As-Built Drawings; to be included in the Airport Guideway and Stations DB contract.

**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): August 2015



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

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

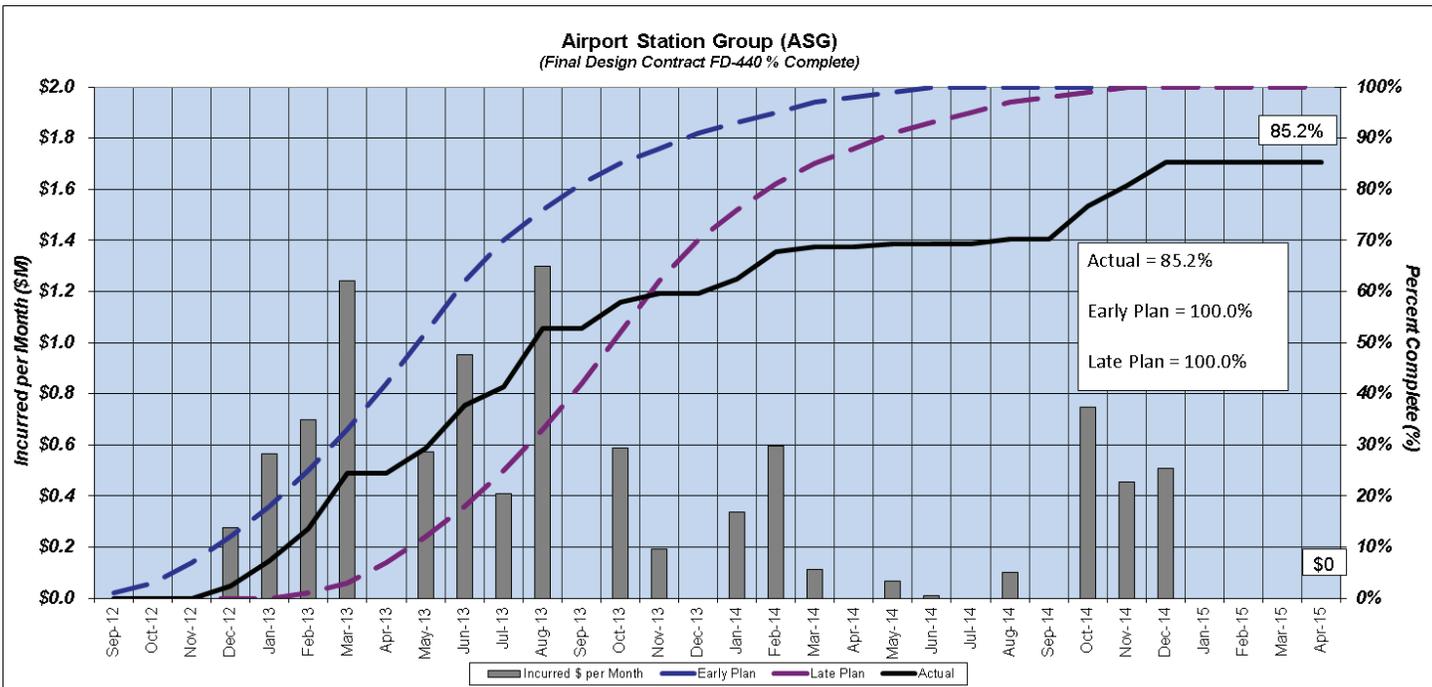
**COST INFORMATION:**

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

April Change Orders		
Change No.	Description	Amount (\$)
00004	HIA Obstruction Investigation	\$20,000
<b>Cumulative to Date</b>		<b>\$1,244,840</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:**

April 2015 Update			Data Date: 24-Apr-15, Printed On: 13-May-15																		
Activity Name	Start	Finish	2015				2016				2017				2018				2019		
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	
<b>Airport - Section 3</b>	02-May-11 A	05-Nov-18																			
<b>Airport Station Group</b>	02-May-11 A	05-Nov-18																			
Design - Airport Station Group	02-May-11 A	01-Feb-16	█	█	█	█	█														
Construction - Airport Station Group	02-Mar-16	05-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	05-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%.
- Combined stations and guideway documents into a single bid package.
- Prepared draft RFP Part 2 documents for DB package.
- Issued addendum to allow more time for offerors to prepare qualifications proposals.

Look Ahead:

- Finalize and issue RFP Part 2 package for technical and price proposals.

**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. Concurrently, other mitigation options are being explored, such as alternative locations for the antenna.
- Acquiring parcel for the Pearl Harbor Station site through close coordination with the 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:**

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



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

**Project Overview:** This section of the guideway 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.

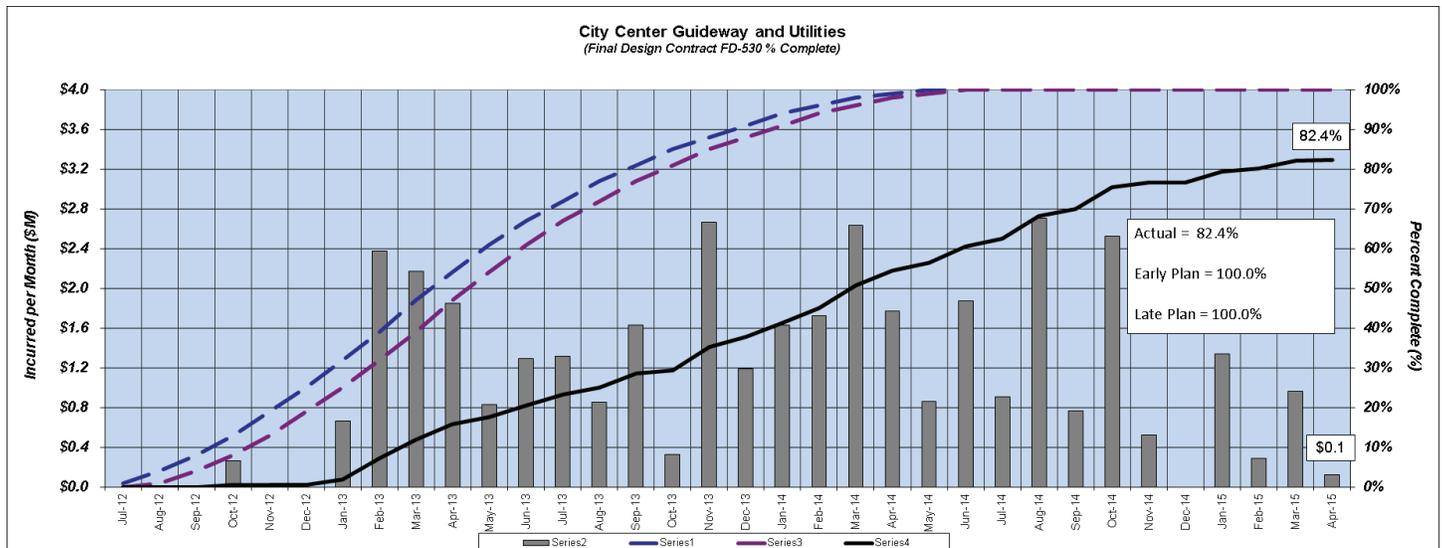
#### COST INFORMATION:

Original Contract:	\$43,948,220	Incurred-to-Date:	\$38,057,052
Current Contract Value <sup>1</sup> :	\$46,183,523	Incurred in April:	\$122,843

<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%

April 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 a potential 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 impacts of these changes.

**SCHEDULE:**

April 2015 Update			Data Date: 24-Apr-2015, Printed On: 13-May-15 16:37																				
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			
<b>Total</b>	19-Aug-11 A	30-Jun-19																					
<b>City Center Programmatic</b>	01-Nov-11 A	05-Oct-15																					
<b>City Center Permits</b>	19-Aug-11 A	08-Dec-15																					
<b>Design - City Center Guideway &amp; Utilities</b>	01-Jul-12 A	03-May-15																					
<b>Construction - City Center Guideway &amp; Utilities</b>	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 89%.
- Coordinating with HDOT, HECO and other stakeholders.
- Pursuing rights-of-way and rights of entry.

Look Ahead:

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

**KEY ISSUES:**

- 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 appropriate 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

**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.

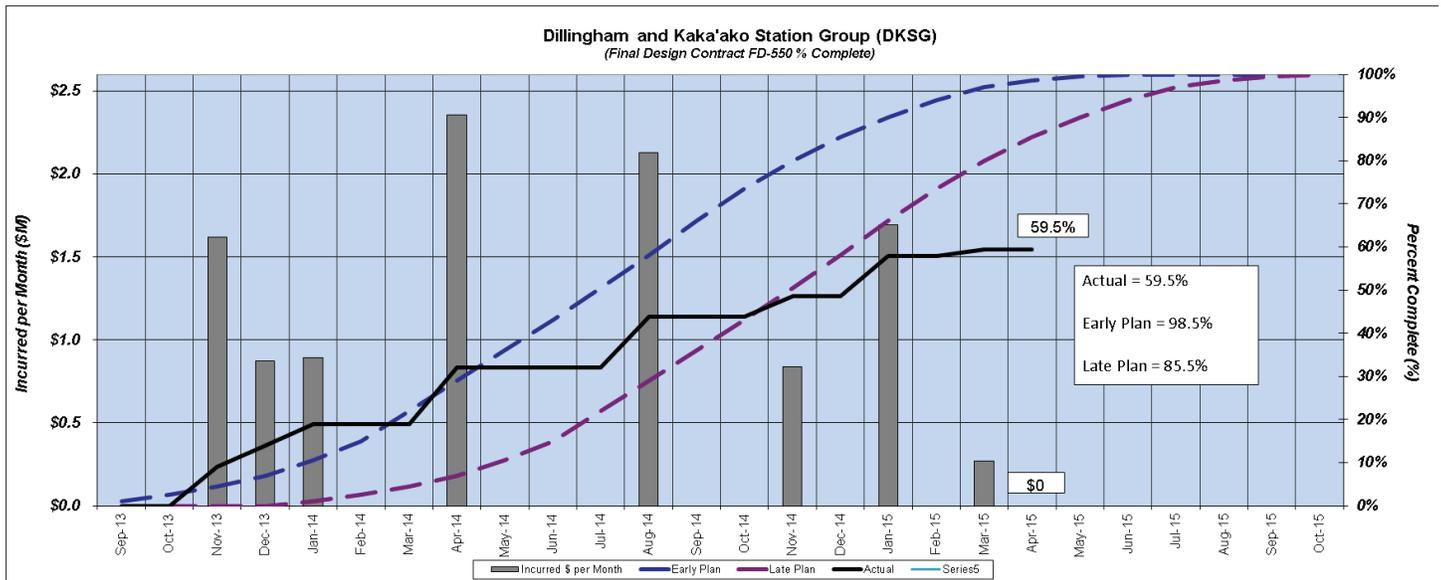
**COST INFORMATION:**

<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 April:</u> \$0

<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%

April 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.

**SCHEDULE:**

April 2015 Update			Data Date: 24-Apr-15, Printed On: 12-May-15																				
Activity Name	Start	Finish	2015				2016				2017				2018				2019				
			Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>City Center (CC) - Section 4</b>	15-Oct-12 A	05-Dec-18																					
<b>Dillingham Station Group</b>	15-Oct-12 A	08-Mar-18																					
Design - Dillingham Station Group	15-Oct-12 A	08-Dec-15																					
Construction - Dillingham Station Group	25-Jan-16	08-Mar-18																					
Kalihi Station	25-Jan-16	20-Jul-17																					
Kapalama Station	07-Mar-16	27-Sep-17																					
Iwilei Station	27-Jan-16	08-Mar-18																					
Chinatown Station	11-Jul-16	21-Feb-18																					
<b>Kaka'ako Station Group</b>	15-Oct-12 A	05-Dec-18																					
Design - Kaka'ako Station Group	15-Oct-12 A	08-Dec-15																					
Construction - Kaka'ako Station Group	26-Apr-16	05-Dec-18																					
Downtown Station	26-Apr-16	21-Feb-18																					
Civic Center Station	06-Jun-16	28-Dec-17																					
Kaka'ako Station	01-Aug-16	02-Apr-18																					
Ala Moana Center Station	16-Sep-16	05-Dec-18																					

**CRITICAL PATH ISSUES:**

- HART is aggressively pursuing property rights and coordinating station designs with surrounding developments.
- HART is coordinating with the final design consultant to establish requirements and format for the DB bid package.
- HART is evaluating cost reduction alternatives that affect this station group.

**WORK PROGRESS:**

Activities this Month:

- Current earned value is approximately 65%.
- Ongoing coordination with private developers and other project stakeholders.

Look Ahead:

- Assess cost reduction alternatives for incorporation into the DB requirements.
- Prepare zoning impact and conditions for waiver for the City to review.
- Support ROW acquisition efforts with design input.
- Prepare DB bid package.
- Support preparation of independent cost estimate.

**KEY ISSUES:**

- Evaluating additional cost reduction alternatives for incorporation into DB solicitation package.
- Acquiring rights-of-way and obtaining stakeholder agreements.

### 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

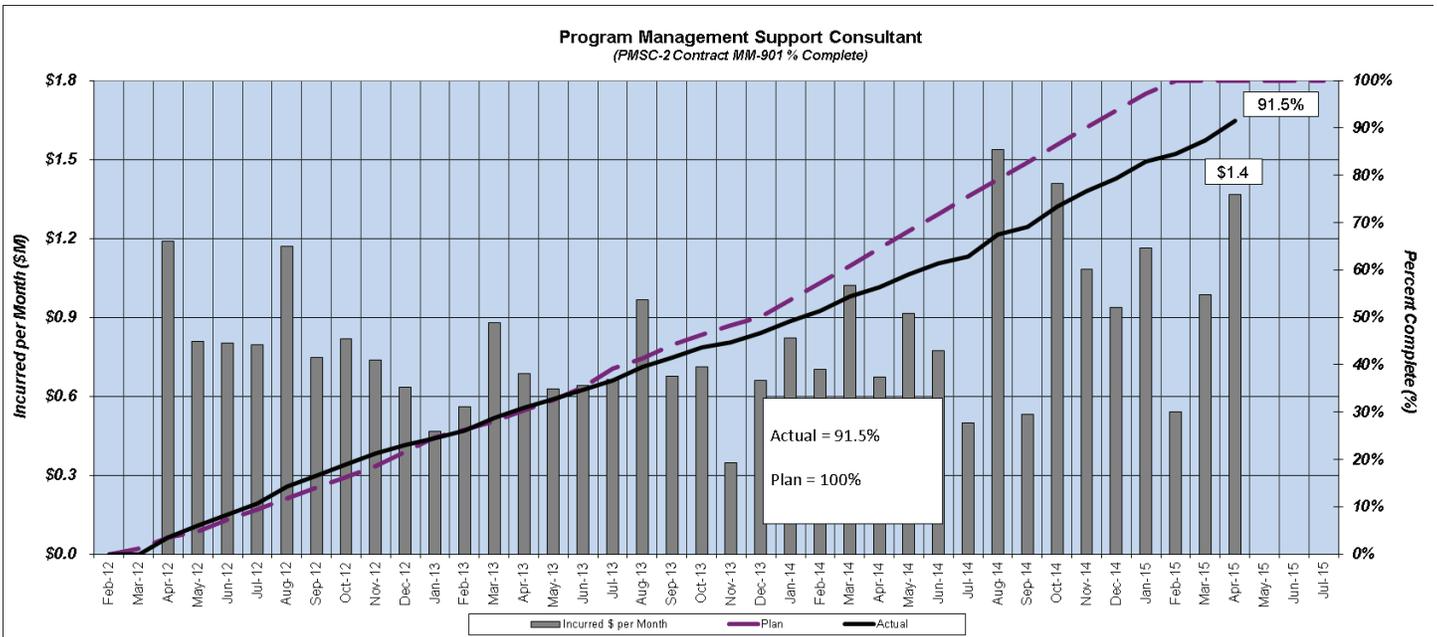
**Project Description:** Provide program management support services in the areas of elevated guideway engineering, rail station design, construction management, project management, environmental planning, federal programmatic requirements, and other services for the Honolulu Rail Transit Project.

#### COST INFORMATION:

Original Contract: \$33,376,897	Incurred-to-Date: \$30,548,966
Current Contract Value <sup>1</sup> : \$33,376,897	Incurred in April: \$1,366,785
<sup>1</sup> Current Contract Value = Original contract value (not including contingency) + executed Change Orders	

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

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



#### KEY ISSUES:

- No Issues.

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

**Contract No.:** MM-913

**Contractor:** CH2M HILL

**Contract Start Date:** December 2013

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

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

**Project Overview:** The GEC III is supporting HART with procurement packages with design review, review of independent cost estimates, evaluation of east segment schedules, and preparation of stream crossing permits, tree relocations, and fulfillment of cultural and historic commitments from the environmental process.

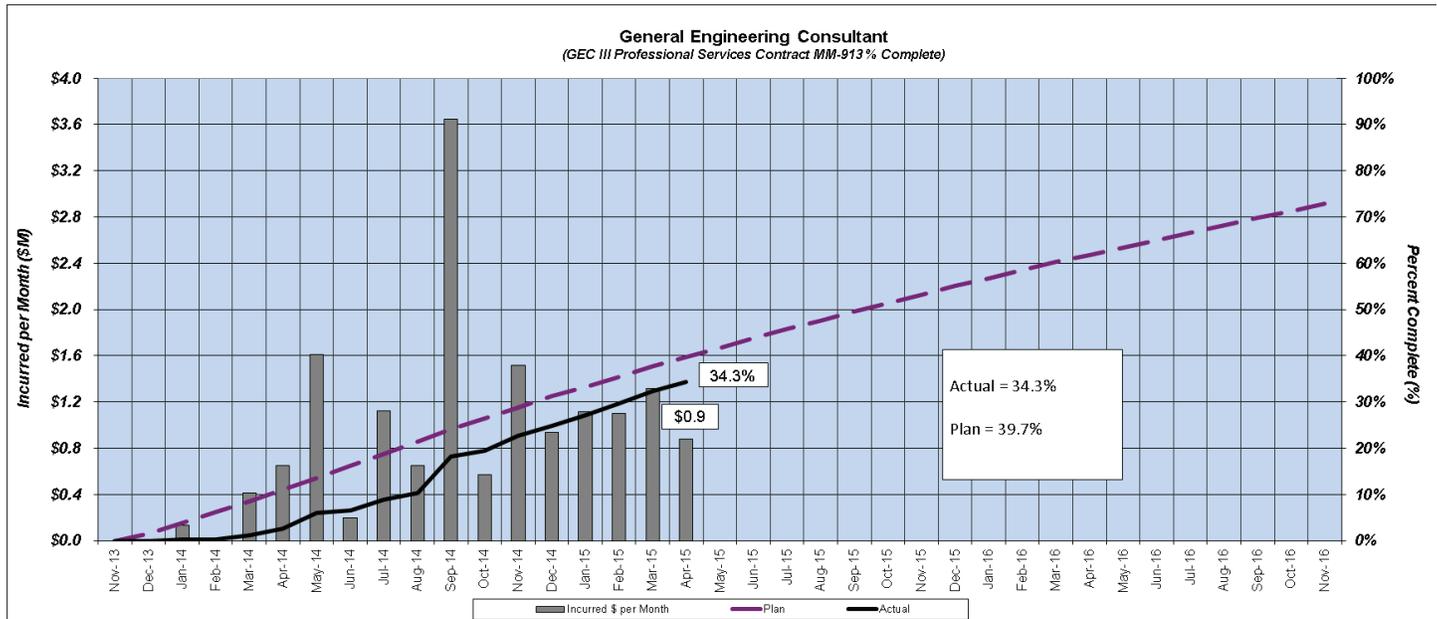
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$46,143,277</u>	<u>Incurred-to-Date:</u>	<u>\$15,848,848</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$46,143,277</u>	<u>Incurred in April:</u>	<u>\$876,621</u>

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

DBE Participation	
Actual DBE Participation:	\$1,098,766
DBE % Attained:	2.38%

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



**KEY ISSUES:**

- Continue to evaluate results of the schedule analysis of the draft schedule for FFGA schedule and “Optimal” schedule for east sections by estimating work sequencing, crew sizing and productivity rates.
- Continue to seek close out of Interface Coordination agreements between contractors.
- Preparing support documentation for stream crossing permits to HART and provide ongoing documentation for cultural and historic properties.
- 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.

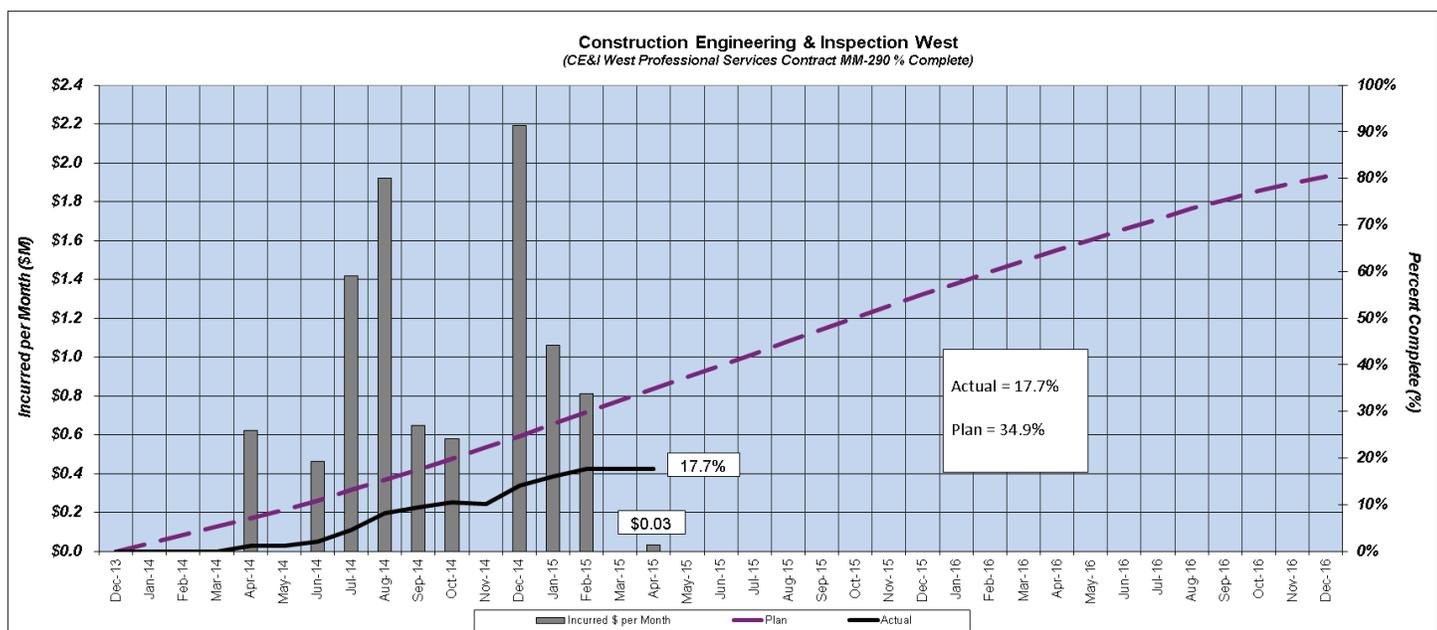
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$54,232,480</u>	<u>Incurred-to-Date:</u>	<u>\$9,577,079</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$54,232,480</u>	<u>Incurred in April:</u>	<u>\$32,741</u>

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

DBE Participation	
Actual DBE Participation:	\$578,733
DBE % Attained:	1.07%

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



**KEY ISSUES:**

- Evaluating staffing and field office 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 August 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.

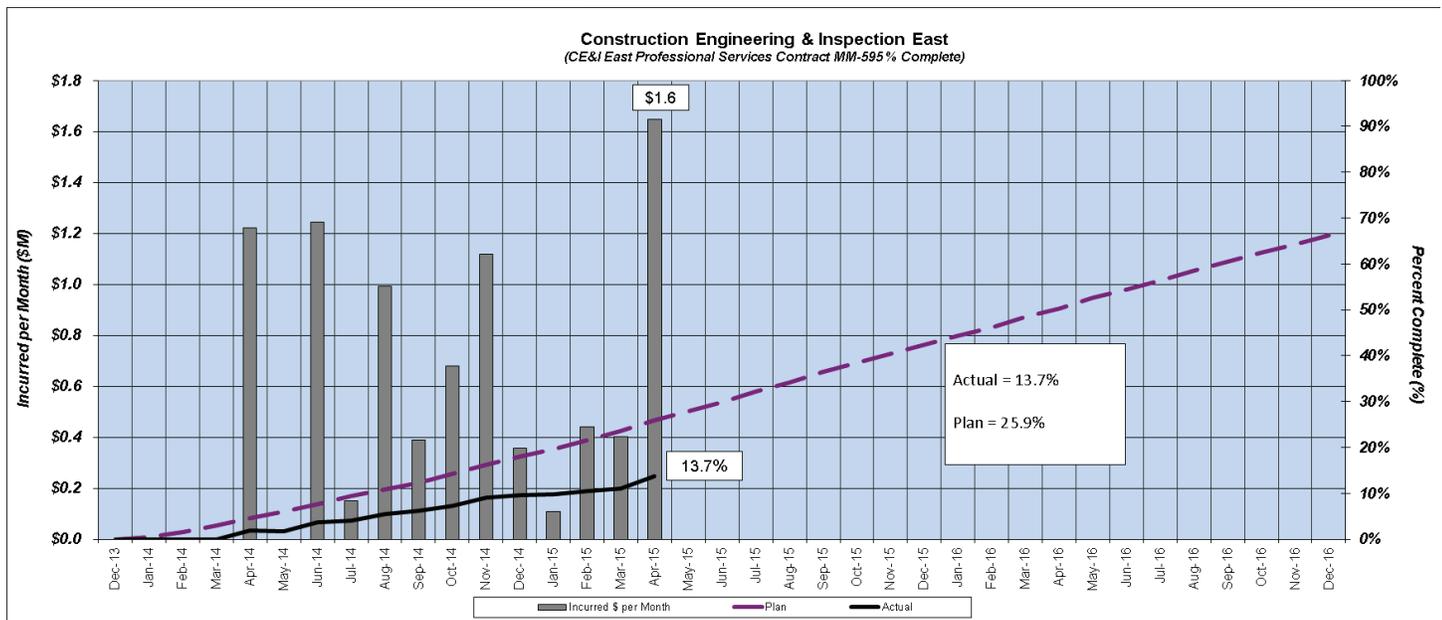
The URS team is providing services from the preconstruction phase through construction closeout. CE&I services include: constructability review, resident engineering, construction observation, project controls, scheduling, change management, cost control, document controls, contract administration, estimating, 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:**

<b>Original Contract:</b> \$63,083,417	<b>Incurred-to-Date:</b> \$8,658,069
<b>Current Contract Value<sup>1</sup>:</b> \$63,083,417	<b>Incurred in April:</b> \$1,647,963
<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%

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



**KEY ISSUES:**

- The CONRAC A7 shafts project closeout will continue into June 2015 while the final costs and change orders are finalized and processed through CMS. The project was a success both with HDOT and HART, and was completed on schedule/budget.
- The unresolved ROE and ROW on the Navy property within the east section corridor may cause a delay for the Airport Section Utilities project, however, a potential resolution with the Navy has been initially agreed upon that would allow for resolution by August 2015.
- The Independent Cost Estimate (ICE) has been completed for the Airport and City Center DB packages along with the potential ATC’s. HART has evaluated the documents, and is completing an internal review/processing of the information.

**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.

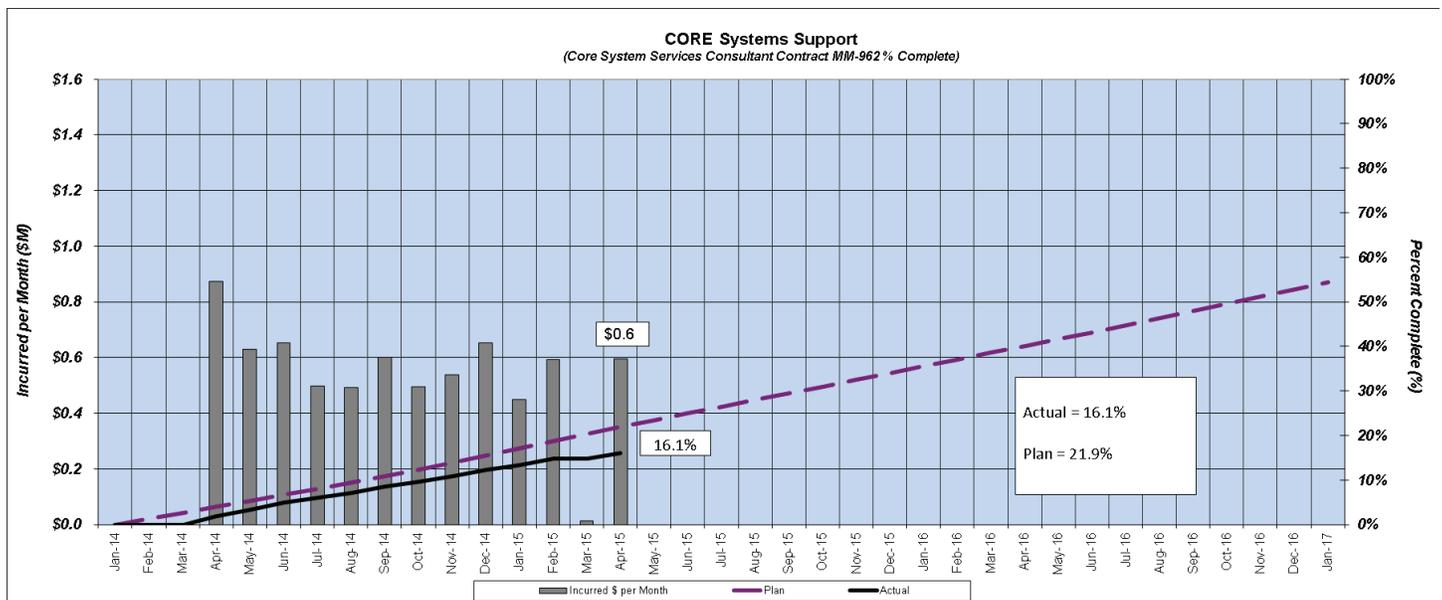
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$43,988,989</u>	<u>Incurred-to-Date:</u>	<u>\$7,081,934</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$43,988,989</u>	<u>Incurred in April:</u>	<u>\$594,718</u>

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

DBE Participation	
Actual DBE Participation:	\$190,609
DBE % Attained:	0.43%

April 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.

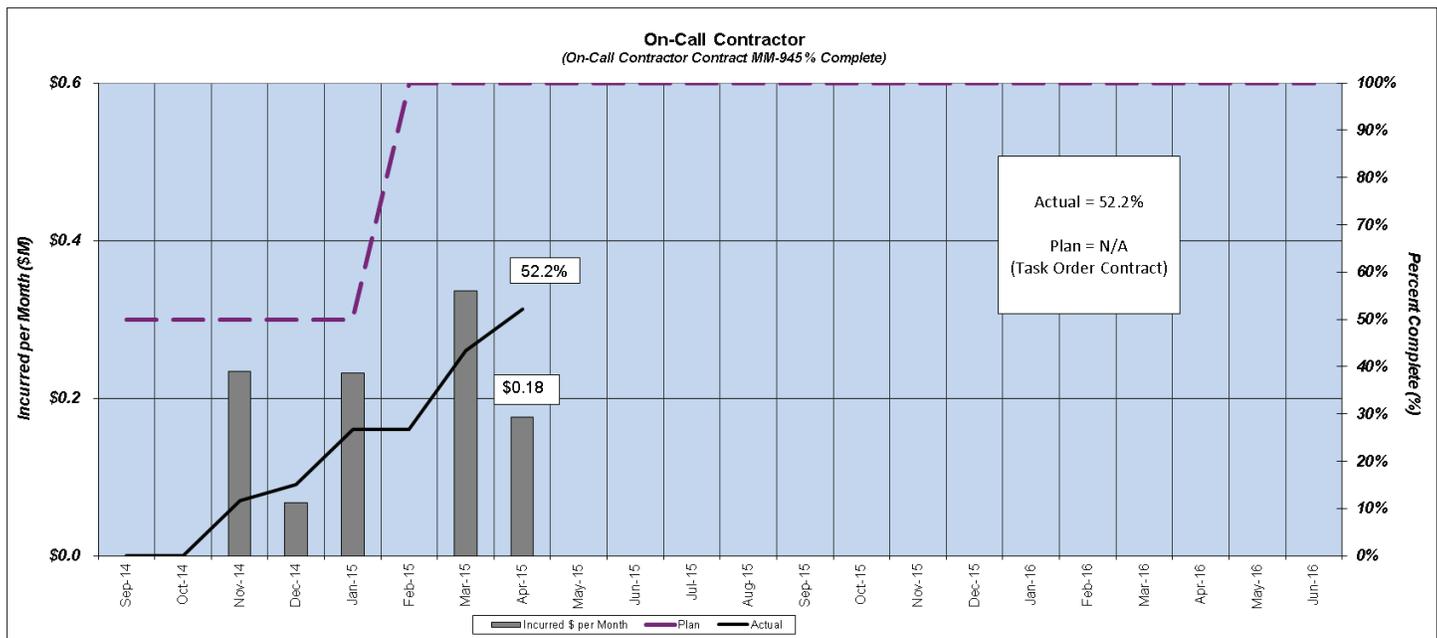
**COST INFORMATION:**

<u>Original Contract:</u>	<u>\$1,000,000</u>	<u>Incurred-to-Date:</u>	<u>\$1,044,886</u>
<u>Current Contract Value<sup>1</sup>:</u>	<u>\$1,999,951</u>	<u>Incurred in April:</u>	<u>\$175,455</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%

April Change Orders		
Change No.	Description	Amount (\$)
Amendment	Task Order 7	(\$49)
<b>Cumulative to Date</b>		<b>(\$49)</b>



**KEY ISSUES:**

- The On-Call Contractor has successfully:
  - demolished fourteen buildings located in the WOFH, KHG and City Center right-of-way
  - relocated/removed more than 40 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. The On-Call has demolished seven structures during this period due to health and safety reasons.

## 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 is incorporating additional noise monitoring and mitigation into the Airport Community Noise Variance application and is working with the Hawai'i Department of Health (HDOH) to address ongoing construction noise issues.
- HART is working with the Navy and HDOH on monitoring and mitigation of known contaminated sites along project construction areas.

### Utility Agreements (Section 5.3)

#### OVERVIEW

- HTI Airport UCA was executed on May 28, 2015.
- Execution of an amendment to HIE KHG UCA.
- Hawai'iGAS City Center UCA has been executed.

#### KEY ISSUES

- HART continues to address multiple issues with HECO that may affect the design and construction of planned work. HART is continuing to meet with HECO on a weekly basis to resolve the issues. Executive meetings are now being conducted to include HART's Executive Director and CEO, and HECO's President.

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

#### OVERVIEW

- Right-of-Way acquisitions are under budget by \$10.4M, as of May 14, 2015.
- The WOFH section acquisitions are nearing completion.
- Nearly all private property site access for guideway is complete for KHG. ROW is continuing to work with KIWC to obtain remaining easements for utility relocation.
- ROW is working with the Design department regarding right-of-way requirements for the City Center construction work.

#### KEY ISSUES

- HART is continuing to work closely with the U.S. Navy to secure easements, licenses and fee acquisitions needed for construction in the Airport Section.
- Working to resolve third-party agreements with UH, the Navy and Post Office in order to allow construction to proceed without delay.

## 5.1 Permits

- **Permits Submitted and In-Progress**

- HART submitted a revised Airport Community Noise Variance to HDOH.
- The Commission on Water Resource Management is reviewing Stream Channel Alteration Permits at Halawa, Moanalua and Kalihi Streams.
- HART submitted Aloha Stadium Waiver to DPP.
- HART submitted follow-up response to HCDA regarding station consultation presentation.

- **Permits and Approvals Granted**

- HART received an Individual Section 404 permit from the U.S. Army Corps of Engineers (USACE) for construction at the Waiawa Stream, as well as the corresponding Section 401 Water Quality Certification and the Coastal Zone Management Consistency Determination from HDOH.

- **Look Ahead**

- Upcoming significant permit activity:
  - HART will submit the Clean Water Act Section 404 permit application for Kapalama and Kalihi Streams to the USACE.
  - HART will submit the Clean Water Act Section 401 permit application for Kapalama and Kalihi Streams to HDOH.
  - HART will submit a request for Jurisdictional Determination to the USACE for Aolele Ditch.
  - HART will submit a letter requesting determination of permit required to the USACE for Nuuanu 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.

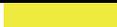
- **Look Ahead**

- 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	5/18/12		Draft sent back to AT&T for review (will include KHG & City Center)	Agreement Executed		
	NTP	5/12/11	12/21/11						
Chevron	Executed	12/4/09		11/4/11					
	NTP	12/22/09		11/15/11					
Hawaiian Telcom	Executed	5/20/10	11/17/14	5/10/12	Executed 12/31/14	5/28/15	HTI agreement executed 9/27/13		
	NTP	6/14/10							
HECO	Executed	By Agreement with PB	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								
		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	12/21/11	1/9/12	6/2/14	Executed 12/19/14	4/4/2013		Draft sent to Oceanic
	NTP	12/22/09							
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	6/1/12	4/14/14	8/20/14	9/27/13		5/8/15
	NTP	12/22/09	7/12/11						
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  
 UFCRA = 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.

CITY CENTER

- All engineering utility agreements for the City Center section have been executed.
- HART reviewed AT&T comments and the revised draft Construction Agreement was sent back to AT&T for review.
- HART has submitted the Utility Construction Agreement for City Center to OTWC for review/comments.
- HART has 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.

**5.4 Right-of-Way (data as of May 14, 2015)**

**BUDGET**

- The ROW budget continues to show a favorable trend. \$71.2M was spent to acquire 36 properties. The budgeted amount for the 36 parcels was \$81.6M, resulting in a budget underrun of \$10.4M 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	16	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	14	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>38</b>	<b>28</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	12	47	39	6			1		2
<b>TOTAL</b>	<b>127</b>	<b>93</b>	<b>12</b>	<b>55</b>	<b>47</b>	<b>9</b>	<b>1</b>	<b>4</b>	<b>5</b>		<b>8</b>
<b>Easement</b>											
W.Oahu\Farrington	18	16	5	1	1			10	8		8
Kamehameha	6	6	1					9	5		5
Airport	44	28		7	5			16	16		16
City Center	45	35	15	8	2			1	1		1
<b>TOTAL</b>	<b>113</b>	<b>85</b>	<b>21</b>	<b>16</b>	<b>8</b>			<b>36</b>	<b>30</b>		<b>30</b>
<b>GRAND TOTAL</b>	<b>287</b>	<b>224</b>	<b>34</b>	<b>112</b>	<b>97</b>	<b>47</b>	<b>2</b>	<b>44</b>	<b>73</b>	<b>28</b>	<b>71</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 to work with Leeward Community College and the UH West O'ahu campus to secure construction right of entry for the WOFH guideway.

**KAMEHAMEHA**

- Issue:
  - All private property site access for guideway is complete for Kamehameha. ROW is expediting the right-of-entries for the relocated utility easements.

**AIRPORT**

- Issues:
  - HART is working on easements pending from the U.S. Navy needed for the Airport Utility contractor. HART is working closely with the U.S. Navy personnel to complete the documentation as quickly as possible and meeting regularly with the Navy.

- The mapping process for the Airport Station must be finalized.
- HART made an offer to the Post Office which is currently under negotiation.
- Look Ahead:
  - Complete Post Office acquisition, as well as Airport and Navy agreements.
  - HART is expecting more appraisal reports. This will allow offers to move forward on remaining airport parcels in anticipation of construction.
  - A request is being considered by the HART Board for eminent domain for some of the parcels. Other parcels may be presented to the HART Board in July for eminent domain to ensure that the construction schedule is maintained.

**CITY CENTER**

- Issues:
  - HART continues efforts to acquire 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 continues to track parcels for potential eminent domain processing.
- Look Ahead:
  - Continue to track the acquisitions in relation to construction schedules for City Center.

**RELOCATIONS**

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

Section	Residential Relocations (a)	Business Relocations (b)	Not-For-Profit Relocations (c)	Total Relocations (a+b+c)	Relocation Assessment Completed	90-Day Notice Sent	30-Day Notice Sent	Relocations Completed for Occupants
W.Oahu\Farrington	18	6	1	25	11	12	8	25
Kamehameha		4		4	4	3	3	4
Airport		13		13	5	9		7
City Center	16	67		83	31	45	23	48
<b>Grand Total:</b>	<b>34</b>	<b>90</b>	<b>1</b>	<b>125</b>	<b>51</b>	<b>69</b>	<b>34</b>	<b>84</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:
  - Continue to complete relocations for remaining 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 ongoing. Will secure Right of Construction as not to delay the project.
UH -West O'ahu (UHWO) Pre-Construction Right of Entry	Executed		WOFH	
UH - West O'ahu (UHWO) Construction Right of Entry	Pending	June 2015	WOFH	In negotiations. Concerted effort is being made to finalize.
Leeward Community College (LCC) Pre-Construction Right of Entry	Executed		WOFH	
Leeward Community College (LCC) Construction Right of Entry	Pending	June 2015	WOFH	In negotiations. Concerted effort is being made to finalize.
UH Urban Garden Pre-Construction Right of Entry	Executed		KHG	
UH Urban Garden Construction Right of Entry	Executed		KHG	Consent to construct in place.
UH Urban Garden Kiewit Construction Right of Entry	Executed		KHG	
D.R. Horton Agreement for Construction	Executed		WOFH	Allows for construction to proceed.
D.R. Horton Final Easement Agreement	Pending	December 2015	WOFH	Document in process 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. Concerted effort is being made to finalize.
Department of Land and Natural Resources (DLNR) Right of Entry (Kapolei)	Executed		WOFH	Consent to construct in place.
Department of Land and Natural Resources (DLNR) Easement (Kapolei)	Pending	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	July 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	July 2015	City Center	Finalizing requirements.
HI Community Development Agreement (HCDA)	Pending	July 2015	City Center	Coordination is on-going.
Department of Accounting & General Services (DAGS)/HHFDC Right of Entry	Pending	July 2015	City Center	Processing.
Department of Accounting & General Services (DAGS)/HHFDC Easement	Pending	July 2015	City Center	Process Easement Agreement.
City Dept. of Transportation Services (DTS) (Middle St.)	Pending	July 2015	Airport	Joint Use MOU in process. Pending design.
U.S. Navy (17 Easements)	Pending	July 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	July 2015	Airport	Offer tendered to the Post Master General. HART is reviewing appraisal from the Post Office.
City Dept. of Transportation Services (DTS) (Middle St.)	Pending	July 2015	Airport	Joint Use MOU in process.
City Dept. of Facility Maintenance (DFM) (Kamehameha Hwy/Makalapa Manor)	Executed		Airport	
City Dept. of Facility Maintenance (DFM) (N. Nimitz & Awa St.)	Pending	July 2015	City Center	Joint Use MOU in process.
City Dept. of Facility Maintenance (DFM) (Kohou St.)	Pending	July 2015	City Center	Joint Use MOU in process.
Federal Court House/GSA	Pending	August 2015	City Center	Draft agreement is under review and discussions on-going.

## 6 MANAGEMENT AND ADMINISTRATIVE UPDATES

### Safety and Security (Section 6.1)

#### OVERVIEW

- S&S Certification Program
  - The S&S Design Criteria (DC) Conformance Checklists design verification percentages for all contracts under construction are in the upper 90% level. Efforts are underway with the designers to resolve all open items to reach the 100% design verification level as soon as possible.
  - The S&S civil construction specification conformance verification percentages continue to increase for the KHG, WOFH, MSF and Airport 7 piers contracts. HART SSRC is scheduled to review for approval WOSG, KHSG, FHSG and Airport Utilities Relocation base Specification Conformance Checklists in June 2015.
  - The systems specification/testing conformance checklists development is in the preliminary planning stages to capture all general and specific testing requirements for Integration Testing, ATC, TES, Communications, FDAS, SCADA, PSGS, MOW Vehicles, and YCB.
  - Vehicle certification is in the preliminary planning stages utilizing FTA guidelines, where three (3) specification/testing conformance checklists are under development for:
    - 1) General requirements that applies to all vehicles
    - 2) Interim Certification for Dynamic Testing and
    - 3) Certification for Pre-Revenue Service
  - The PHAs that cover the MSF, Alignment, and Track are in Final DRAFT form to reflect actual mitigations designed into the project with final hazard ratings and undergoing internal reviews.
  - DRAFT Procedures are in place to address and close the S&S Certification Open Items and to define the review process thru the FLSWG, SSCWG, and SSRC meetings for final resolution.
  - The Hazard Tracking Log (HTL) is being incorporated into a database and has been revised to be able to review by contract to track all potential hazards identified by design changes and/or construction change orders. DRAFT Procedures are under development to address and close identified hazards with Project Managers, to define the committee review process, and how these hazards are integrated into the overall Project PHAs.
  - The Interim Certification Sub-Committee has outlined Interim Certification requirements to support the first vehicle delivery date. This includes an Interim Certification Schedule, an Action Item Log, and a HART Safety and Security Interim Certification Guidance Document that outlines all the preliminary certification requirements for the civil, systems, vehicle, and support vehicles contracts.
  - Key S&S Certification related meetings held in May 2015:
    - Safety and Security Certification Working Group (SSCWG) Meeting, May 5, 2015
    - PMOC monthly review meeting, May 12-13, 2015
    - Interim Certification Sub-Committee meeting, May 19, 2015
    - Fire Life Safety Working Group (FLSWG) meeting, May 17, 2015
    - Safety and Security Review Committee (SSRC) meeting, May 27, 2015
    - Bi-weekly and/or monthly project coordination meetings with Core Systems, MSF, WOFH, and KHG
    - HART Safety and Security weekly meeting with HDOT
- Site access control at MSF has been developed to assure contractors are aware of work schedule and work areas for contractors.

#### KEY ISSUES

- 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.
- There are four (4) major NCRs on the DB Guideway Contracts (WOFH and KHG) that need to be addressed and corrected to prevent recurrence and mitigate impact on the overall progress of the project. These NCRs are discussed in more detail on the Key Issues of Section 6.2.
- Performed QA surveillance of the pre-pour and concrete pouring of Balanced Cantilever Segment S254-3U (Mauka of H-1), during the night of May 13, 2015.
- Performed QA audit of CH2M HILL (GEC-3) on May 20-21, 2015.

### KEY ISSUES

- QA audit of KHSG Final Design on June 3-4, 2015, prior to issuance for bid solicitation.
- Closeout of Buy America Audit of MSF.
- QA review of procurement document package for the Airport Guideway and Stations DB RFP.
- Resolution of four (4) major NCRs (cracked segments 1, 2, 11 and 12 of Span 17 remediation; realignment of Spans 104, 105 and 106; Drilled Shafts [Crosshole Sonic Logging Reports] quality and repairs; and Pre-Cast Segments quality and repair).
- Construction of MSF Yard Ballasted Track: Alignment, Profile, Geometry, Sub-ballast, Drainage, Ballast, Grade Crossings, Welding, Stress Relieving, Concrete Ties, etc.
- Installation and welding of rails and turnouts on top of the WOFH Guideway.
- Construction of WOFH Balanced Cantilever Segmental Span across H-1.
- Manufacturing of Carbody(s) at Ansaldo Breda and its subcontractor manufacturing facilities in Italy. First Article Inspection (FAI) of the Carbody #1 at Reggio Calabria.
- Close-out Audit of A-7 contract to include review of "Lifetime" Quality Records including NCRs, if any, and As-built Drawings.

## Buy America Compliance (Section 6.3)

### OVERVIEW and KEY ISSUES

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

## Disadvantaged Business Enterprise (Section 6.4)

### OVERVIEW

- \$24,626,953 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 5/31/15.

## Planning and Environment (Section 6.5)

### OVERVIEW

- HART's Planning and Environmental team has coordinated extensively in May 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 160 risks in the May 2015 risk register. There were 14 risks deleted and 1 new risk added for the month of May. Reviews were conducted for City Center Guideway, Environment and Permits, Utilities, Elevator/Escalator, Procurement/Contract Administration, and Safety & Security. Core Systems will be added to the June Report.
  - Risk deletions were a combination of risk acceptance and risk transfer through mitigation as HART plans packaging for the City Center Guideway and Stations Group Design Build.
  - Risk addition was limited to the possible escalation cost impact to the Elevator/Escalator contract due to the repackaging of the West Side Station Group into three separate packages.

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 and 2016, as growth in island permitted work continues at a faster rate than completion of construction work.
  - HART construction contracts are a major contributor of the construction market and may contribute as much as 25% of the total construction volume (private and public) in 2015 and 2016.
- Third party actions are taking longer than expected to resolve, exposing HART's contractors to potential delay in the performance of their work unless there are work around alternatives available to minimize risk impacts to cost or schedule.
  - Navy, HECO and University of Hawai'i issues remain critical.

**Community Outreach (Section 6.7)**OVERVIEW

- HART's construction outreach focuses on communities in the heaviest work zones, including Waipahu, Pearl City and Aiea areas.

KEY ISSUES

- HART's public outreach team connects with businesses along the Kamehameha Highway corridor as part of HART's business outreach program, which is designed to provide information, workshops and resources for businesses impacted by construction.
- HART's public information team responded to more than 120 inquiries and requests in May that came in via the agency's website, email and 24-hour hotline. Inquiries this month primarily focused on construction activities, particularly traffic impacts.

**Staffing (Section 6.8)**OVERVIEW

- The Director of Design and Construction left the program in May. HART has advertised the position as a city position and is conducting interviews. Otherwise, all key positions are filled.
- A Budget Analyst has been selected and the confirmed start date is June 8, 2015.
- The Secretary position in Planning was filled on May 1, 2015.
- The Planner V position in the Planning division has been filled with a City Civil Service employee.
- 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. An updated version is being developed that will reflect minor revisions and personnel changes.

6.1 Safety and Security

Key HART S&S 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	Rev 2 - Finalizing PHAs is on-going
Core Systems Contract (CSC) PHAs (DBOM)	Rev C	-	Received 12/15/14 – CSC updating
- Central ATC O&SHA	Rev A	-	Under Development
- 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 – high priority
- Vehicle O&SHA	Rev A	-	Under development – high priority
- 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 5/22/2015 – CSC R&R
- 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 Conformance Checklist (DCCC)			
Design Verification Status			
Contracts: DC Conformance Checklists (CEL/CILs)	% Verified	+ / - % Change	Comments:
<b>Under Construction</b>			
DB-200, MSF	99%	-	SSRC approved DCCC verification - 1/28/2015
DB-120, WOFH Guideway 38 total – Sub CEL/CIL Packages	99%	+ 1%	31 - Sub CELs/CILs, SSRC approved DCCC verification - 1/28/2015, 02/25/2015, 03/25/2015, 4/29/2015, and 5/27/2015
DB-320, KHG Guideway 39 total – Sub CEL/CIL Packages	96%	-	31 – Sub CELs/CILs, SSRC approved DCCC verification - 1/28/2015, 02/25/2015, 3/25/2015, 4/29/2015, and 5/27/2015
FD-430, Airport Utilities	100%	-	SSRC approved DCCC verification – 6/25/2014
FD-430, 7 – Shafts	90%	+ 2%	Working with designer to close the open items
<b>Under Design or in Pre-bidding Status</b>			
FD-140, West Oahu Station Group	46%	-	Designer DCCC update underway
FD-240, Farrington Hwy Station Group	30%	+ 24%	DCCC verification underway
FD-340, Kamehameha Highway Station Grp	98%	-	3 - station DCCC verification SSRC approved - 4/29/2015, 5/27/2015
DB-275, Pearl Highlands PS/Bus Transit Center	-	-	TBD - base DCCC not yet SSRC approved
FD H2R2 Ramps	96%	-	SSRC approved base DCCC - 5/27/2015
DB-xxx, Airport Guideway & Stations Grp	38%	-	On hold - contract change underway
DB-xxx, City Center Guideway & Stations Grp	-	-	On Hold - contract change underway
FD-530, City Center Utilities	-	-	On Hold - designer input is underway
FD-600, West Oahu Park & Ride	-	-	TBD - base DCCC 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 – under review –initial submission
- Train Control	-	-	Designer input underway
- SCADA	-	-	Designer input underway
- Platform Screen Gate System	-	-	Designer input underway
- MOW Vehicles	-	-	Base DCCC not yet SSRC approved
- Yard systems Bungalows	64%	-	SSRC approved base DCCC - 5/27/2015
MI-930, Elevators & Escalators	-	-	Draft base DCCC under developed
Transit ART Program	-	-	Draft base DCCC under developed

S & S Construction Specification Conformance Checklists (CSCC) - Civil Contracts Specification/Testing Conformance Checklists (STCC) - Systems Contracts			
Construction - Installation - Testing Verification Status			
Contracts	% Verified	+ / - % Change	Comments
<b>Civil Contracts Under Construction – CSCC</b>			
DB-200, MSF	24%	+ 4%	Verification underway
DB-120, WOFH Guideway	28%	+ 13%	Verification underway
DB-320, KHG Guideway	4%	+ 4%	Verification underway
DBB-505, Airport Utilities	-	-	Ready for June SSRC base CSCC approval
FD-430, Airport Section, 7 - Drilled Shafts	98%	+ 21%	Verification underway
<b>Civil Contracts Still under Design or in Bidding or Pre-bidding Phases</b>			
DBB-171, West Oahu Station Group	-	-	Draft CSCC under PM/CM review
DBB-271, Farrington Hwy Station Group	-	-	Draft CSCC under PM/CM review
DBB-371, Kamehameha Hwy Stations Grp	-	-	Draft CSCC under PM/CM review
DB-275, Pearl Highlands PS/ Bus Transit Center	-	-	TBD
DBB-385, H2R2 Ramps	-	-	SSRC approved base CSCC, 5-27-2015
DB-xxx, Airport Guideway & Stations Grp	-	-	Draft CSCC in hand – on hold pending re-design
DBB-xxx, City Center Utilities	-	-	TBD
DB-xxx, City Center Guideway & D&K Stations Grp	-	-	Draft CSCC in hand – on hold pending re-design
DBB-600, West Oahu Park & Ride	-	-	TBD
MI-930, Elevators & Escalators	-	-	Base CSCC under development
Operational CEL/CILs	-	-	CEL/CILs under development
<b>Systems Contracts - STCC</b>			
DBOM-920, Core Systems			
- System Integration Testing (SIT)			Base STCC under development
- Traction Electrification System CIL	-	-	TBD
- Communication System CIL	-	-	TBD
- Fire Detection Alarm System	-	-	TBD
- Passenger vehicle Spec/testing CIL	-	-	3 - base STCCs under development
- Train Control System (TCS)	-	-	TBD
- Supervisory Control & Data Acquisition (SCADA)	-	-	TBD
- Platform Screen Gate System (PSGS)	-	-	TBD
- MOW Vehicles	-	-	Base CSCC under review
- Yard systems Bungalows	-	-	TBD

Project-Wide Incident Activity					
Event Type	Total Number of Events since 1/1/2007	Total Number of Events for May 2015	Loss Type	Date	Event Description
Environment	12	0			
Loss or Damage	19	0			
*Reportable Occupational Injury/Illness	0	0			
Security	48	5	Theft Theft Theft Theft Theft	a) 5/4/2015 b) 5/11/2015 c) 5/16/2015 d) 5/19/2015 e) 5/25/2015	a) WOFH - Burglary of conex boxes. b) Airport - Equipment container broken into and attempted theft of company truck. c) KHG - Theft at American Electric conex box. d) WOFH - Stolen tools and materials from multiple conex boxes. e) KHG - Two trailers were broken into and power tools were stolen along with a welder.
**Loss Time Occupational Injury/Illness	6	0			
Road/Vehicle - Driving	63	5	Minor Damage Minor Damage Minor Damage Minor Damage Minor Damage	a) 5/1/2015 b) 5/8/2015 c) 5/11/2015 d) 5/24/2015 e) 5/29/2015	a) KHG - Citizen blew out tire while driving over contractor hose. b) MSF - KKJV forklift operator struck subcontractor's water truck tail light. c) WOFH - Crane operator turned crane and struck and scratched a 150W generator. d) KHG - Crane contacted a light bracket on an overhead sign fixture. e) WOFH - Citizen ran into the back of a Kiewit truck stopped at a traffic light.
Service Strike	44	7	Minor Damage Minor Damage Minor Damage Minor Damage Minor Damage Significant Damage	a) 5/7/2015 b) 5/7/2015 c) 5/12/2015 d) 5/14/2015 e) 5/19/2014 f) 5/20/2015 g) 5/27/2015	a) KHG - Excavator struck unknown direct buried interconnection line. b) KHG - Contractor struck a buried gas line. c) Airport - An abandoned concrete pipe was struck. d) Airport - Contractor backed a cone truck into Special Duty Officer's vehicle. e) WOFH - 2-inch unmarked Hawaiian Tel conduit was struck. f) Airport - Contractor struck and broke a concrete jacket around an unknown pipe. g) KHG - Contractor struck Hawaiian Tel phone line causing a service outage.
*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			May 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	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	8	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: MSF (Fire Protection, Contact Rail Installation, and Metal Wall Panels [Source and First Article Inspection]; KHG (Signal Pole Foundation); and CSC (Yard TPSS and Cabricks PSIT).
- 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 6

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	8/24 - 9/04		
	Honolulu Authority for Rapid Transportation (HART) -Security & Safety Only		15-009 SS	8/24 - 9/04		
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	5/18/15
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 6

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 6

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	8/05 - 8/06		
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 Mairtain	US Schindler - HI	15-015	9/9 - 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	9/16 - 9/17		
	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	5/20 - 5/21	

• **Key Issues**

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

- Resolution of four (4) major NCRs on the DB Contracts (WOFH and KHG) that need to be addressed and corrected to prevent recurrence and mitigate impact on the overall progress of the project. The following are the major NCRs identified on the DB Contracts:
  - **Drilled Shafts:** To date, there are 29 Open NCRs on WOFH and 15 NCRs on KHG, which are related to CSL Report. The contract requires that deep foundation elements (drilled shafts) integrity must be tested in accordance with ASTM D6760-14 Standard Test Method for Integrity Testing of Deep Foundations by Ultrasonic Crosshole Testing and HART will determine the final acceptance of each shaft based on the crosshole sonic log (CSL) report, which includes: test result, drilled shaft installation information, and analysis for the tested shaft. The evaluation of testing results will be based on the percentage decrease in velocity as correlated to the Concrete Condition Rating Criteria detailed in specification Section 31 63 30 G. If the test results do not meet the allowable requirements, a minimum 2-3-inch diameter cores per shaft will be performed by KIWC to intercept the suspected or defective zones. The disposition and corrective actions will be agreed with KIWC EOR and HART. Closing of NCRs related to the drilled shafts is a prerequisite for the construction of transition zone and the columns. Therefore, it is a QA Hold Point. To date, there are 211 and 26 drilled shafts completed on WOFH and KHG, respectively.
  - **Span 17 – NCR 00314:** The procedure for lowering a heavier and wider span was not followed during the setting of the span to the columns. The result of the error was cracked segments 17-1, 17-2, 17-11 and 17-12. KIWC is currently evaluating the damages, disposition and the proposed corrective actions. HART has requested a Remedial Plan from KIWC.
  - **Span 105 – NCR 00336:** During the setting of Span 105 to its final position, the span shifted out of alignment and made contact with adjacent Spans 104 and 106 on both ends. KIWC is currently evaluating the root cause and corrective actions to prevent recurrence.
  - **Pre-Cast Segments:** To date, there are 22 Open NCRs, out of 2,783 segments that have been cast to date on WOFH. The descriptions of the NCRs are: shear keys broken, concrete voids, concrete spalls, inserts, and drain location. These NCRs may be fixed at the Casting Yard or during the erection process at the construction site.
- QA audit of KHSG Final Design on June 3-4, 2015, and prior to issuance for bid solicitation.
- QA review of Airport Guideway and Station Group procurement documents prior to issuance of DB RFP.
- 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 and subcontractor facilities in 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.
- **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.

### 6.4 Disadvantaged Business Enterprise (DBE)

- **Activities this month**

- \$24,626,953 = total dollar participation for all DBEs on all HART contracts from 9/24/07 to 5/31/15
  - 6.08% = DBE utilization on total disbursed FTA funds received to date (\$24,626,953 divided by \$405,230,515)
  - 1.40% = DBE utilization to date on total Project FTA funds (\$24,626,953 divided by \$1,763,903,901)

*Total DBE Participation = \$24.6M  
(previous report = \$21.9M)*

Figure 17. DBE Participation this Month

DBE Participation in May		
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	\$11,354
Anil Verma Associates, Inc.	SC-HRT-1200111 FD-340	\$22,248
Dovetail Consulting	MOU-11-SO-1 MM-930	\$709,497
AMR Estimating Services	SC-HRT-1400027 MM-913	\$46,075
The Solis Group	SC-HRT-1400027 MM-913	\$71,870
PAC Electric Inc.	CT-HRT-10H0137 DB-120	\$1,657,684
PSC Consultants	SC-HRT-1400050 MM-290	\$19,179
Element Environmental	SC-HRT-1400050 MM-290	\$49,770
Bow Construction	SC-HRT-1400050 MM-290	\$421
<b>TOTAL FOR THE MONTH</b>		<b>\$2,728,283</b>

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

### 6.5 Planning and Environment

- **Activities this month**

- Programmatic Agreement Activities:
  - HART participated in the Kāko’o Meeting with Programmatic Agreement Signatory and Consulting Parties on May 21, 2015.
  - HART’s Programmatic Agreement (PA) team met with SHPD on May 5, 2015, as part of ongoing consultation with the division.
- Planning, Environmental, and Cultural Activities:
  - HART hosted a meeting with the Project’s recognized cultural descendants on May 6, 2015.
  - HART provided an update to the O’ahu Island Burial Council (OIBC) on May 13, 2015.
  - HART continues to work with SHPD to seek concurrence on all HRS 6E related issues.
  - HART has submitted Post-ROD documentation for the Middle Street Station and Emergency Backup Generators to the FTA for review and is awaiting comments for finalization.
  - 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.

- HART continues to work with the City Department of Parks and Recreation and community stakeholders to relocate trees which are affected by rail project construction. About 10 trees were relocated into Neal Blaisdell Park, Central Oahu Regional Park, and the Waiau District Park, and other trees were planted at Aloha Stadium as mitigation.
  - HART submitted the Quarterly Mitigation Report for the First Quarter of 2015 to FTA and PMOC.
  - Revision 1 of the Mitigation Monitoring Program (MMP) was completed and is under review. The revised MMP will be distributed to existing contractors and included in upcoming bid documents upon final approval.
- **Looking Ahead**
    - 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 Kāko'o Meetings with Programmatic Agreement Signatory and Consulting Parties.
    - Continue resolution of Post-ROD documentation.
    - Continue coordination with DPP and HCDA regarding transit-oriented development.

## 6.6 Risk Management

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

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

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

### **NOTES OF SIGNIFICANCE**

- Corrective actions 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.
- Airport and City Center Traffic Management Plans are being evaluated to determine additional measures that can be put in place relative to construction sequencing plan scenario developed by HART.

### **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, and E) 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.**
- 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: TBD.**
- Identify opportunities within project scope for alternative funding sources. **Actions:**
  - **Reach agreement on possible HDOT betterment projects to 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: Legislature voted to approve GET for five years at 5%. Remaining action is with the Governor and City Council for enactment.**
  - **Work with Board, City/County Honolulu and respond to frequently asked questions as needed. – Ongoing.**

**B) Utilities** – Utilities continue to be an issue for the project. 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: May 6<sup>th</sup> meeting held. Executives agree to continue to meet weekly until decisions are made.**
  - **Revise Utility Agreements accordingly. – Date: TBD.**
- Site specific solutions with respect to the 138kV, 46kV and 12kV vertical and horizontal clearance need to be agreed upon by Hawaiian Electric and HART. Affected contracts are KHG, Airport Guideway and City Center Guideway. **Action:**
  - **Secure DB Guideway design, define and evaluate relocation options due to horizontal and vertical conflict resolution needs with HECO. – Date: July 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 – June 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. **Action:**
  - **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) 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 extensive coordination required. It is apparent the approvals required are not moving as quickly 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. **Actions:**
  - **Elevate coordination with Navy for Pearl Harbor Station for schedule coordination and certainty of clearance by July. – Date: mid-July 2015.**
  - **Meet and resolve technical issues relating to Navy approvals of property access. – Date: Mar. 2015 and ongoing.**

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

Figure 18. Risk Matrix

Risk Matrix					
Legend	Low (1)	Med (2)	High (3)	Very High (4)	Significant (5)
Probability	< 10%	10% < 50%	> 50%	75% > 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 May 2015								
Current Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	May, '15 Risk Rating	Apr. '15 Risk Rating
111.05	Airport Guideway	Estimates for remaining guideway contracts may be low compared to current market conditions.	90%	5	5	4	22.5	22.5
111.06	City Center Guideway	Estimates for remaining guideway contracts may be low due to adjustments using pricing from WOFH Bid.	90%	5	5	4	22.5	22.5
36.06	City Center Guideway	Cost exposure from unexpected utility replacements and/or relocations.	75%	4	5	4	18	7.0
65.06	City Center Guideway	The relocation of the 138 kv overhead power lines may require new lines erected to provide redundancy during the 'outage.' (Temporary diversion of the 138kv line may be required if grid capacity is insufficient.)	75%	4	5	4	18	18
110.06	City Center Guideway	Real Estate market could rebound before purchase of all needed properties, greatly increasing cost of property and delaying construction if legal actions are pursued.	75%	4	5	4	18	18
6.04	Kamehameha Highway Guideway	Insufficient utility company resources available to meet the design, approvals, and/or construction schedule.	75%	4	5	3	16	16
6.06	City Center Guideway	Insufficient utility company resources available to meet the design, approvals, and/or construction schedule. (Dillingham bottleneck)	75%	4	4	4	16	8
20.03	West Oahu/Farrington Highway Guideway	Late delivery of/or acceptance of civils, stations, or systems interface to guideway results in change orders.	90%	5	3	3	15	15
16.03	West Oahu/Farrington Highway Guideway	Permits and approvals by other agencies may not be provided in a timely manner and delay the project.	75%	4	4	3	14	14
83.06	City Center Guideway	Delay of utility easement identification for City Center Guideway may result in a delay of ROW acquisition and ultimately the start of construction.	75%	4	4	3	14	14
106.13	Airport Station Group	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	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 May 2015							
Risk ID	Contract Package	Risk Description	Probability	Prob Rating	Cost Impact	Time Impact	Risk Rating
184.17	Elevator/ Escalator	There is a potential for cost escalation for delay of manufacturing and installing elevator/escalator due to reprourement of West Side Stations.	50%	2	1	0	1

Figure 21. Risks Deleted

Risks Deleted in May 2015					
Current Risk ID	Contract Package	Risk Description	Comments	Risk Rating	
				May '15	Apr '15
20.08	Core Systems Contract	Delays in access milestones of stations, or guideway interfaces to systems results in delays to core systems contractor substantial completion milestones.	HART has accepted the risk and is processing a change order.	22.5	22.5
59.06	City Center Guideway	Alignment change could impact ROW requirements not included in estimate, schedule or EIS.	HART will be prescriptive with the alignment to avoid re-opening the NEPA process.	12	12
35.06	City Center Guideway	Due to court delays, limited geotechnical information available at PE level. Additional costs for redesign may be incurred.	For the remaining few sites where geotech data was not collected, the risk is being transferred to the DB contractor and it will be apparent to bidders.	10.5	10.5
75.06	City Center Guideway	Delay to obtain property access for designers to perform preconstruction work impacts design quality and construction pricing.	Risk transfer to DB contractor. There are some past complications with permit of entry verses easement that are complicating agreement to all designers to access to some properties.	9	9
64.06	City Center Guideway	Assumption is water mains will be relocated around columns by addition of bends; this may not be allowed by BWS.	This risk is being transferred to the DB Contractor. AECOM sent information to BWS in November. No response yet. AECOM to follow up prior to NTP for their design.	7.5	7.5
4.06	City Center Guideway	Additional costs may arise through complicated stations and guideway integration.	Risk is being transferred to DB contractor to coordinate this design and construction interface.	6	6
7.06	City Center 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).	This risk is no longer likely as a result of additional data collection. Going forward, it will be treated as an unforeseen condition.	6	6
115.06	City Center Guideway	DKSG design schedule is lagging and may require redesign of guideway.	Risk transfer to DB Contractor to manage the entire design of guideway and stations.	6	6
169.06	City Center Guideway	Contractor laydown area limitation and/or conflicts on the East Segment may drive up bid prices.	Risk to be transferred to the DB contractor. HART may get involved with environmental clearance or be able to offer vacant parcels to the contractor for use.	6	6
17.05	Airport Guideway	Project design changes not covered in the FEIS may result in a need for additional environmental documentation and FTA review.	HART is taking a prescriptive approach with line and grade of the guideway. Therefore, the issue may be isolated to laydown areas.	5	5
17.06	City Center Guideway	Project design changes not covered in the FEIS may result in a need for additional environmental documentation and FTA review.	Eliminate duplicate with 59.06.	4	4
33.06	City Center Guideway	HART/CSC may require changes to design resulting in formal change orders.	Risk is being transferred to CSC contractor and minimize delays to the fixed facility contractors.	4	4
20.06	City Center Guideway	Late delivery of/ or acceptance of civils, structural or guideway contracts may delay systems installations.	Risk transfer to the DB contractor through partial access dates.	3.5	3.5
117.06	City Center Guideway	Underground obstruction delays pier/bent installation.	Risk is being transferred to the DB Contractor. Geotech boring conducted in most all column locations.	3	3

**6.7 Community Outreach**

**• Activities this month**

- With construction in the Kamehameha Highway corridor of Aiea and Pearl City in full swing, HART’s public outreach and communications team participated in several events to provide updated information on the project’s construction work, including presentations at a town hall meeting focused on transportation sponsored by the area’s lawmakers, in addition to several Neighborhood Board meetings.
- Providing accurate information to the public is essential to increasing awareness and understanding. HART’s outreach team launched an online feature designed to debunk rumors and misinformation — and provide accurate information about the project and its finances. “Myth Busters: Get the Rail Facts” was launched this month on the project website and via social media.

**• Construction Outreach**

- HART’s public outreach team also canvassed the Kamehameha Highway corridor in partnership with contractor Kiewit, to listen to concerns and feedback from businesses impacted by the project’s construction work. The one-on-one canvassing efforts also provided businesses with information about the next HART Business Alliance meetings, scheduled for June. HART’s Business Alliance meetings provide businesses with information and construction schedules specific to their areas, and include free workshops and resources for businesses of all sizes to help them successfully navigate the construction process.
- Traffic during construction is one of the top community concerns. Working with feedback received from the community regarding graduation season, HART worked with Kiewit to adjust work schedules and lane closures. HART continued to provide regular traffic updates to the media, issued weekly press releases, posted key traffic updates on its website and via social media, and included traffic updates in its weekly eBlasts.

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

- 1,801 presentations and events
- 987 Neighborhood Board meetings

Figure 22. HART participated in several outreach events this month, including a session on transit-oriented development.



HART’s public outreach team participated in the Department of Planning and Permitting’s transit-oriented development workshop.

Figure 23. HART provided project information and answered questions at several Neighborhood Board meetings this month.



HART provided a project update and answered questions about rail construction work at the Nanakuli Neighborhood Board meeting this month.

**• Community Input**

- HART’s public information team responded to more than 120 inquiries and requests in May that came in via the agency’s website, email and 24-hour hotline. Inquiries this month primarily focused on construction activities, particularly traffic impacts.

• **Look Ahead**

Coming in June:

- HART’s Business Alliance, which includes representatives from businesses along the route, meets to discuss upcoming construction work and programs to assist businesses during the construction period.
- In anticipation of work moving into urban Honolulu, HART’s outreach team continues meeting with businesses in the Dillingham and urban core area of the 20-mile route.
- HART provides media with a tour of construction work at the Rail Operations Center, which is nearing completion.

**6.8 Staffing**

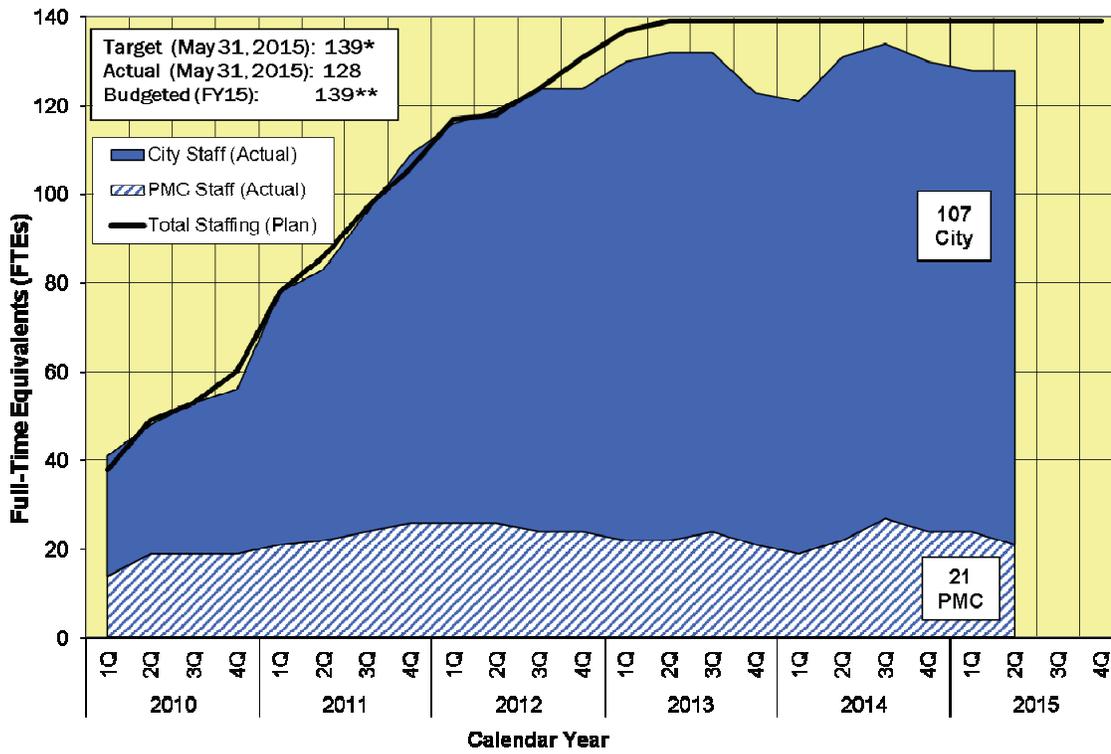
Figure 24. Staffing Activities

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/Interviewing	
Assistant Project Manager	Construction (KHG)	New (City)	Recruiting	
Assistant Project Manager	Construction (WOFH)	New (City)	Recruiting	
Traffic Engineer	Utilities & Traffic Engineering	New (City)	Recruiting	
<b>Budget and Finance</b>				
Budget Analyst	Budget and Finance	New (City)	Selected/Processing	Jun
Secretary	Budget and Finance	Existing (City)	Recruiting	
<b>Procurement</b>				
Deputy Director of Procurement & Contracts	Procurement & Contracts	Existing (City)	Recruiting/Interviewing	
Contracts Officer	Procurement & Contracts	Existing (City)	Recruiting via Civil Service	
<b>Planning, Permits &amp; Right-of-Way</b>				
Planner V (Land Use)	Planning	Existing (City)	Selected - Civil Service	Jul
Planner III* (Environmental)	Planning	Existing (City)	Recruiting	
Planner VI* (Permits /Hazmat)	Planning	Existing (City)	Recruiting	
Secretary I	Right-of-Way	Existing (City)	Selected/Processing	Jul
Secretary I	Planning	Existing (City)	Filled	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 H.*

# APPENDICES

## Appendix A. Action Items

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

Action Items						
Item No.	Item	Responsible Party	Date Identified	Date Due	Date Completed	Status
1	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 = \$510.4M*

*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 05/22/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (k\$)	Contingency Code
<b>July '12 (Bottoms-Up Estimate)</b>					
1)	FD-240	Farmington Highway Stations Group FD	Budget Transfer at Bottoms-Up Estimate from Project Scope to Contingency (contract allowance)	\$58,747.3	90.03 - Contract Allowance
2)	FD-490	Airport Section Guideway Utilities FD	Budget Transfer for Contract Award less than the ASGU FD contract budget	\$2,054.1	90.02 - Allocated Contingency
3)	MM-87.6	LEED Commissioning Services	Budget Transfer for Contract Award above the LEED Comm. Services contract budget	(\$35,023.9)	90.02 - Allocated Contingency
4)	DB-320	Kamehameha Highway Guideway DB	Budget Transfer for Contract Award above the RHG DB contract budget	(\$220,983.7)	90.02 - Allocated Contingency
5)	DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer for Ins. Covg per executed CO No. 004	\$3,995,230.1	90.02 - Allocated Contingency
			July '12 Contingency Drawdown	\$5,867,273.3	
			<b>July '12 - Ending Contingency Balance</b>	<b>\$649.4</b>	
<b>August '12</b>					
1)	FD-140	West Oahu Stations Group FD	Budget Transfer for Contract Awarded under WOSG FD contract budget	\$1,808,300.1	90.02 - Allocated Contingency
2)	FD-530	City Center Guideway Utilities FD	Budget Transfer for Contract Awarded under COSU FD contract budget	\$5,917,945.1	90.02 - Allocated Contingency
3)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 17 - Procure and Install Portable Buildings	(\$2,870,000.0)	90.02 - Allocated Contingency
			August '12 Contingency Drawdown	\$5,068,145.2	
			<b>August '12 - Ending Contingency Balance</b>	<b>\$654.5</b>	
	N/A	N/A	No Contingency Drawdown	\$0	
			<b>September '12</b>	<b>\$654.5</b>	
			<b>September '12 - Ending Contingency Balance</b>	<b>\$654.5</b>	
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 21 - Builders Risk Insurance Coverage	(\$30,693.0)	90.02 - Allocated Contingency
			October '12 Contingency Drawdown	(\$30,693.0)	
			<b>October '12 - Ending Contingency Balance</b>	<b>\$654.4</b>	
<b>November '12</b>					
1)	FD-440	Airport Stations Group FD	Budget Transfer for Contract Award under ASG FD contract budget	\$227,784.4	90.03 - Contract Allowance
2)	FD-340	Kamehameha Highway Stations Group FD	Budget Transfer for Contract Award under KHSG FD contract budget	\$202,488.9	90.03 - Contract Allowance
3)	MM-305	General Engineering Consultant	Budget Transfer to align contract budget with Committed value	(\$120,630.0)	90.02 - Allocated Contingency
			November '12 Contingency Drawdown	\$309,623.3	
			<b>November '12 - Ending Contingency Balance</b>	<b>\$654.7</b>	
<b>December '12</b>					
1)	FD-480	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 01 - Design & Engineering Cost Estimates	(\$275,000.0)	90.02 - Allocated Contingency
			December '12 Contingency Drawdown	(\$275,000.0)	
			<b>December '12 - Ending Contingency Balance</b>	<b>\$654.4</b>	
<b>January '13</b>					
1)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 01 - Akacia rd alternative analysis	(\$15,983.1)	90.02 - Allocated Contingency
			January '13 Contingency Drawdown	(\$15,983.1)	
			<b>January '13 - Ending Contingency Balance</b>	<b>\$654.4</b>	
<b>February '13</b>					
1)	DB-120	West Oahu Farmington Highway Guideway DB	Executed Change Order No. 26 - Ins. Covg Requirement/Additional BCGV at Ft. Weaver Rd	(\$1870,178.9)	90.02 - Allocated Contingency
			February '13 Contingency Drawdown	(\$1,670,178.9)	
			<b>February '13 - Ending Contingency Balance</b>	<b>\$652.8</b>	
<b>March '13</b>					
1)	FD-240	Farmington Highway Stations Group FD	Executed Contract Amendment No. 09 - Waipahu Station sewer	(\$3,892.9)	90.03 - Contract Allowance
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 08 - Ins. Covg Requirements/DBT Covers Insulated Joints	(\$48,013.0)	90.02 - Allocated Contingency
			March '13 Contingency Drawdown	(\$48,013.0)	
			<b>March '13 - Ending Balance</b>	<b>\$652.3</b>	
<b>April '13</b>					
1)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 01 - Second elevator provision	(\$81,013.9)	90.03 - Contract Allowance
2)	DB-120	West Oahu Farmington Highway Guideway DB	Budget Transfer to offset Ins. Covg Requirement for Change Order No. 26	\$1,670,178.9	90.02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Budget Transfer to offset Ins. Covg Requirement for Change Order No. 06	\$434,000.0	90.02 - Allocated Contingency
4)	DB-320	Kamehameha Highway Guideway DB	Budget Transfer to Align current budget to contract Schedule of Milestones	\$800.0	90.02 - Allocated Contingency
			April '13 Contingency Drawdown	\$2,023,765.9	
			<b>April '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	
<b>May '13</b>					
	N/A	N/A	No Contingency Drawdown	\$0	
			May '13 Contingency Drawdown	\$0	
			<b>May '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	
<b>June '13</b>					
	N/A	N/A	No Contingency Drawdown	\$0	
			June '13 Contingency Drawdown	\$0	
			<b>June '13 - Ending Contingency Balance</b>	<b>\$654.3</b>	

# HART Project Contingency Drawdown with Details

Data as of 05/22/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (FY)	Contingency Code
<b>July '13</b>					
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 04 - Antenna Engineering Design Services	<b>\$654.3</b>	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	(\$569,000)	90 02 - Allocated Contingency
4)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 09 - Yard Layout Revisions	(\$114,428)	90 02 - Allocated Contingency
5)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 10 - Train Configuration	(\$71,700)	90 02 - Allocated Contingency
6)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 11 - Preliminary Design & Supplemental Project Mtg	(\$894,888)	90 02 - Allocated Contingency
			<b>July '13 Contingency Drawdown</b>	<b>(\$6,254,106)</b>	
<b>August '13</b>					
			<b>July '13 - Ending Contingency Balance</b>	<b>\$649.1</b>	
1)	DB-120	West Oahu Farrington 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 Farrington Highway Guideway, DB	Executed Change Order No. 32 - Kalo Channel Station Mod Concept	(\$72,381)	90 02 - Allocated Contingency
3)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 34 - Traditional Cultural Property Construction Partial Suspension	(\$1,195,094)	90 02 - Allocated Contingency
4)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 36 - Honolulu Station Relocation Design	(\$490,615)	90 02 - Allocated Contingency
5)	DB-320	Kamehameha 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	(\$504,288)	90 02 - Contract Allowance
7)	MI-930	Elevator & Escalator Install/Int	Budget Transfer for Contract Awarded under ESE IM contract budget	\$3,738,472	90 02 - Allocated Contingency
			<b>August '13 Contingency Drawdown</b>	<b>(\$6,824,004)</b>	
			<b>August '13 - Ending Contingency Balance</b>	<b>\$643.2</b>	
1)	DB-120	West Oahu Farrington 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 Farrington Highway Guideway, DB	Executed Change Order No. 35 - Asphaltic Column Design Conflict	(\$120,612)	90 02 - Allocated Contingency
3)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 12 - HNTB Design Escalation	(\$823,500)	90 02 - Allocated Contingency
4)	FD-240	Farrington Highway Stations Group FD	Executed Contract Amendment No. 10 - NTP 2 Delay/Design Delay from Core Systems Contract & West Oahu Farrington Highway DB Contract	(\$270,985)	90 02 - Allocated Contingency
			<b>September '13 Contingency Drawdown</b>	<b>(\$6,116,297)</b>	
			<b>September '13 - Ending Contingency Balance</b>	<b>\$637.1</b>	
<b>October '13</b>					
			<b>September '13 - Ending Contingency Balance</b>	<b>\$637.1</b>	
1)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 13 - Ins. Covg Requirements/ Roof Access Modification	(\$267,155)	90 02 - Allocated Contingency
2)	DB-200	Maintenance & Storage Facility DB	Budget Transfer for Change Order No. 13 for Ins. Covg Requirements	\$266,800	90 02 - Allocated Contingency
3)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 37 - Ala Ike Street Mod/ wdg at LR Horton & Farrington HWY	\$24,815	90 02 - Allocated Contingency
4)	DB-04/420	Core Systems Design Build O/M	Executed Change Order No. 05 - Platform Screen Gates Systems	(\$29,301,857)	90 01 - Unallocated Contingency
5)	FD-350	Dillingham and Kakaako Stations Group FD	Budget Transfer for Contract awarded under DKSG FD contract budget	\$1,197,768	90 02 - Allocated Contingency
			<b>October '13 Contingency Drawdown</b>	<b>(\$22,134,737)</b>	
			<b>October '13 - Ending Contingency Balance</b>	<b>\$615.0</b>	
<b>November '13</b>					
			<b>October '13 - Ending Contingency Balance</b>	<b>\$615.0</b>	
1)	DB-120	West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 38 - Insurance Coverage Requirement Q4 2013	(\$1,800,000)	90 02 - Allocated Contingency
2)	DB-120	West Oahu Farrington Highway Guideway, 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	(\$1,723,000)	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	Farrington Highway Station Group FD	Budget Transfer for Contract Award for FHSG FD II	(\$2,700,265)	90 01 - Unallocated Contingency
			<b>November '13 Contingency Drawdown</b>	<b>(\$4,947,861)</b>	
			<b>November '13 - Ending Contingency Balance</b>	<b>\$610.0</b>	
<b>December '13</b>					
			<b>November '13 - Ending Contingency Balance</b>	<b>\$610.0</b>	
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 05 - Ulenia St redesign scope impact	(\$246,358)	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	(\$23,928)	90 02 - Allocated Contingency
			<b>December '13 Contingency Drawdown</b>	<b>(\$272,866)</b>	
			<b>December '13 - Ending Contingency Balance</b>	<b>\$609.8</b>	
<b>January '14</b>					
			<b>December '13 - Ending Contingency Balance</b>	<b>\$609.8</b>	
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 06 - 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 - Soil Resistance Test and Max/Sag Calculation	(\$406,153)	90 02 - Allocated Contingency
3)	MM-280	Construction Engineering & Inspection West	Budget Transfer for Contract Award less than CE&I West contract budget	\$181,088	90 02 - Allocated Contingency
4)	MM-585	Construction Engineering & Inspection East	Budget Transfer for Contract Award less than CE&I East contract budget	\$1,102,817	90 02 - Allocated Contingency
			<b>January '14 Contingency Drawdown</b>	<b>(\$1,428,718)</b>	
			<b>January '14 - Ending Contingency Balance</b>	<b>\$608.3</b>	
<b>February '14</b>					
			<b>January '14 - Ending Contingency Balance</b>	<b>\$608.3</b>	
1)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 07 - Rest & Sag Geotech Investigation	(\$732,900)	90 02 - Allocated Contingency
2)	HRT-00C	HART ODC	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract	(\$11,487)	90 02 - Allocated Contingency
3)	MM-910	CEC II	Budget Transfer for Contract Award - Archeological & Cultural Monitoring & Core Systems Support contracts	(\$4,424,173)	90 02 - Allocated Contingency
4)	MM-960	Archeological & Cultural Monitoring	Budget Transfer for Contract Award - Archeological & Cultural Monitoring contract	\$38,761	90 02 - Allocated Contingency
5)	MM-962	Core Systems Support	Budget Transfer for Contract Award - Core Systems Support contract	\$4,388,899	90 02 - Allocated Contingency
			<b>February '14 Contingency Drawdown</b>	<b>(\$132,900)</b>	
			<b>February '14 - Ending Contingency Balance</b>	<b>\$608.2</b>	

# HART Project Contingency Drawdown with Details

Data as of 05/22/15

Project #	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (Est)	Contingency Code
<b>March '14</b>				
N/A	N/A	March '14 Contingency Drawdown	\$0	
<b>March '14 - Ending Contingency Balance</b>				
			\$0	
<b>April '14</b>				
<b>March '14 - Ending Contingency Balance</b>				
			\$608.2	
1)	West Oahu Stations Group FD	Executed Contract Amendment No. 04 - East Kapolei Staff Room Pre-Final Submittal	(\$60,243)	80.03 - Contract Allowance
2)	FD-430 Airport Section Guideway, Utility FD	Executed Contract Amendment No. 08 - Notice-to-Proceed 482/Provisional Sum for Design Support during bid	(\$1,588,014)	80.03 - Contract Allowance
3)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 016 - Rail Lubricators	(\$102,000)	80.02 - Allocated Contingency
4)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 017 - Yard Layout Reconfiguration/Automated Train Operation Design	(\$2,125,000)	80.02 - Allocated Contingency
5)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 018 - Rail Material Storage Plan	(\$370,000)	80.02 - Allocated Contingency
6)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 019 - Train Wash Facility, Shortening	\$0	80.02 - Allocated Contingency
7)	DB-120 West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 041 - Precast Yard Alternative Site	(\$12,400,686)	80.02 - Allocated Contingency
8)	DB-120 West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 042 - Sandwhich Isles Communications Utility Relocation @ North South Rd	(\$46,806)	80.02 - Allocated Contingency
9)	DB-120 West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 005 - Retbar Clear Spacing Design Criteria	(\$788,049)	80.02 - Allocated Contingency
10)	DB-320 Kanehameha Highway Guideway, DB	April '14 Contingency Drawdown	(\$17,450,752)	80.02 - Allocated Contingency
<b>April '14 - Ending Contingency Balance</b>				
			\$590.7	
<b>May '14</b>				
<b>April '14 - Ending Contingency Balance</b>				
			\$590.7	
1)	West Oahu Stations Group FD	Budget Transfer for Executed Contract Amendment No. 05 - Final Design for relocated Hoopili Station	\$220,125	80.02 - Allocated Contingency
2)	Kanehameha Highway Guideway, DB	Executed Change Order No. 008 - APCC work restrictions/abandoned utilities removal	(\$505,674)	80.02 - Allocated Contingency
3)	DB-320 Kanehameha Highway Guideway, DB	Executed Change Order No. 009 - Emergency walkway/insurance covg. Requirements 2013	\$68,000	80.02 - Allocated Contingency
4)	DBOM-920 Core Systems Contract Design Build O/M	Executed Change Order No. 007 - Relocate TPSS to system site #3	\$287,391	80.02 - Allocated Contingency
5)	MM-915 HDOT M/IOT Consultant	Budget Transfer for Executed Contract Amendment No. 002 - Increase T&M contract value	(\$9,910)	80.02 - Allocated Contingency
6)	MM-915 HSE/LEED Consultant	Budget Transfer for Executed Contract Amendment No. 001 - LEED measurement and verification plan	\$22,500,000	80.01 - Unallocated Contingency
7)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 020 - CSC consolidated changes construction	\$170,000	80.02 - Allocated Contingency
8)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 025 - OSB reconfiguration	(\$22,310,016)	80.02 - Allocated Contingency
<b>May '14 Contingency Drawdown</b>				
			\$568.4	
<b>June '14</b>				
<b>May '14 - Ending Contingency Balance</b>				
			\$568.4	
1)	DB-200 Maintenance & Storage Facility DB	Board Approved RFC 00010 - Amendment 1 Non-Rail Escalation	(\$5,000,000)	80.02 - Allocated Contingency
<b>June '14 Contingency Drawdown</b>				
			(\$5,000,000)	
<b>July '14</b>				
<b>June '14 - Ending Contingency Balance</b>				
			\$563.4	
1)	DBOM-920 Core Systems Contract Design Build O/M	Executed Change Order No. 008 - Platform Screen Gates Mobilization	(\$888,184)	80.02 - Allocated Contingency
2)	ROW Real Estate/Right-of-Way	Budget Transfer for Contract Award above the Real Estate Map & Survey budget	(\$1,344,612)	80.02 - Allocated Contingency
3)	DB-200 Maintenance & Storage Facility DB	Budget Transfer to Project Contingency from remaining "known" Changes balance	\$1,007,860	80.02 - Allocated Contingency
4)	DB-120 West Oahu Farrington Highway Guideway, DB	Budget Transfer to Project Contingency from remaining "known" Changes balance	\$1,556,107	80.02 - Allocated Contingency
<b>July '14 Contingency Drawdown</b>				
			\$321,161	
<b>August '14</b>				
<b>July '14 - Ending Contingency Balance</b>				
			\$563.7	
1)	DB-320 Kanehameha Highway Guideway, DB	Executed Change Order No. 010 - Delay in issuance of Notice-to-Proceed 2 & 3	(\$1,238,000)	80.02 - Allocated Contingency
2)	West Oahu Stations Group FD	Executed Amendment No. 006 - Passenger screenings	(\$60,233)	80.02 - Allocated Contingency
3)	DBS-305 Airport Section Utility construction DBB	Budget Transfer for Contract Award above Airport Section Utility Construction original budget	\$2,755,324	80.02 - Allocated Contingency
4)	MM-946 CH Call Hazmat Removal Consultant	Budget Transfer due to scope transfer from Royto Hazmat consultant	\$410,823	80.02 - Allocated Contingency
5)	MM-945 CH Call Contractor	Budget Transfer for Contract Award above CH Call Contractor original budget	(\$130,435)	80.02 - Allocated Contingency
<b>August '14 Contingency Drawdown</b>				
			(\$4,323,166)	
<b>September '14</b>				
<b>August '14 - Ending Contingency Balance</b>				
			\$559.4	
1)	MM-350 OCIP Consultant Contract	Budget Transfer to unallocated contingency as estimate at completion is less than current budget	\$750,000	80.02 - Allocated Contingency
2)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 027 - Traditional Cultural Properties (TCP) Suspension	(\$473,593)	80.02 - Allocated Contingency
3)	DB-200 Maintenance & Storage Facility DB	Executed Change Order No. 028 - Insurance Coverage Requirements 2014	(\$1,112,000)	80.02 - Allocated Contingency
4)	DB-320 Kanehameha Highway Guideway, DB	Executed Change Order No. 011 - Revised Vehicle Criteria/Construction Safety Security Plan	(\$231,500)	80.02 - Allocated Contingency
5)	DB-320 Kanehameha Highway Guideway, DB	Executed Change Order No. 012 - Insurance Coverage Requirements 9/1/13 - 6/30/14	(\$1,400,000)	80.02 - Allocated Contingency
6)	DB-120 West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 045 - Standard Specification Revision 2.0	(\$2,660,000)	80.02 - Allocated Contingency
7)	DB-120 West Oahu Farrington Highway Guideway, DB	Executed Change Order No. 046 - Insurance Coverage Requirements 2014	(\$3,400,000)	80.02 - Allocated Contingency
8)	FD-530 City Center Guideway, Utilities FD	Executed Contract Amendment 004 - Aesthetic Station Column	(\$271,954)	80.02 - Allocated Contingency
9)	FD-530 City Center Guideway, Utilities FD	Executed Contract Amendment 005 - City Center Section Resurge Cart Scope Impact	(\$72,000)	80.02 - Allocated Contingency
10)	FD-340 Kanehameha Highway Stations Group FD	Executed Contract Amendment 001 - Special Provisions Update/Shear Wave Analysis	(\$77,932)	80.03 - Contract Allowance
11)	FD-340 Kanehameha Highway Stations Group FD	Executed Contract Amendment 005 - Historic Architect/Refurbish Highway Sign	(\$11,911)	80.03 - Contract Allowance
12)	FD-340 Kanehameha Highway Stations Group FD	Executed Contract Amendment 006 - Address Bus Shields at Aloha Station Station	(\$18,894)	80.03 - Contract Allowance
13)	FD-430 Airport Section Guideway, Utility FD	Executed Contract Amendment 005 - Address Station Column and Pearl Harbor Station Redesign	(\$28,750)	80.02 - Allocated Contingency
14)	FD-430 Airport Section Guideway, Utility FD	Executed Contract Amendment 011 - Airport Security Resurfacing Scope Impact	(\$45,000)	80.02 - Allocated Contingency
15)	FD-140 West Oahu Stations Group FD	Executed Contract Amendment 007 - Traffic Signal Contract/Utility/Drainage Access Road	(\$36,273)	80.03 - Contract Allowance
<b>September '14 Contingency Drawdown</b>				
			(\$9,386,161)	
<b>September '14 - Ending Contingency Balance</b>				
			\$550.1	

# HART Project Contingency Drawdown with Details

Data as of 05/22/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (+/-)	Contingency Code
<b>October '14</b>					
1)	DBOM-920	Core Systems Contract Design Build OM	Executed Change Order No. 009 - WQFH Guideway Alignment for CSC	\$550.1	90.02 - Allocated Contingency
2)	DB-200	Maintenance & Storage Facility DB	Executed Change Order No. 028 - Escalation due to Schedule Impacts	(\$3,500,000)	90.01 - Unallocated Contingency
3)	DB-320	Kamehameha Highway Guideway DB	Executed Change Order No. 013 - Station Load & Configuration Mods.	(\$1,350,000)	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	Alford Stations Group FD	Executed Contract Amendment No. 002 - Extension of PM Services	(\$790,000)	90.02 - Allocated Contingency
6)	FD-440	Alford Stations Group FD	Executed Contract Amendment No. 003 - Add Pedestrian Bridges to HIA Stations	(\$454,840)	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	(\$768,756)	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/AOR	(\$48,538)	90.01 - Unallocated Contingency
11)	FD-140	West Oahu Stations Group FD	Executed Contract Amendment No. 010 - Temporary Parking Lot Near UHWO/UHWO & Hopipi Sewage Holding Tank	(\$102,268)	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>(\$ 16,307,138)</b>	
<b>October '14 - Ending Contingency Balance</b>				<b>\$531.8</b>	
<b>November '14</b>					
1)	DBOM-920	Core Systems Contract Design Build OM	Executed Change Order No. 012 - Delete Ticket Vending Machines	\$10,350,000	90.02 - Allocated Contingency
2)	FD-550	Billingham Kaka'ako Stations Group FD	Executed Contract Amendment No. 002 - General Excise Tax Credit	\$385,568	90.02 - Allocated Contingency
<b>November '14 Contingency Drawdown</b>				<b>\$ 10,735,568</b>	
<b>November '14 - Ending Contingency Balance</b>				<b>\$542.49</b>	
<b>December '14</b>					
1)	DBOM-920	Core Systems Contract Design Build OM	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 OM	Executed Change Order No. 013 - HECO Connection Changes	(\$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	(\$18,000,000)	90.01 - Unallocated Contingency
<b>December '14 Contingency Drawdown</b>				<b>(\$ 18,713,715)</b>	
<b>December '14 - Ending Contingency Balance</b>				<b>\$523.78</b>	
<b>January '15</b>					
1)	DBOM-920	Core Systems Contract Design Build OM	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	(\$484,413)	90.01 - Unallocated Contingency
3)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 051 - Escalation due to Schedule Impacts	(\$31,416)	90.01 - Unallocated Contingency
4)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 052 - Escalation due to Schedule Impacts	(\$19,133)	90.01 - Unallocated Contingency
5)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 053 - Escalation due to Schedule Impacts	(\$1,663)	90.01 - Unallocated Contingency
6)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 054 - Escalation due to Schedule Impacts	(\$716,659)	90.01 - Unallocated Contingency
7)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 055 - Escalation due to Schedule Impacts	(\$177,177)	90.01 - Unallocated Contingency
8)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 056 - Escalation due to Schedule Impacts	(\$102,819)	90.01 - Unallocated Contingency
9)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 057 - Escalation due to Schedule Impacts	(\$77,863)	90.01 - Unallocated Contingency
10)	DBOM-920	Core Systems Contract Design Build OM	Executed Contract Amendment No. 012 - Eliminate Secondary Emergency Access at MSP	\$50,000	90.02 - Allocated Contingency
11)	FD-430	Airport Section Guideway Utilities FD	Executed Contract Amendment No. 004 - Ala Moana Transit Ctr-Chinatown Sta	(\$58,700)	90.02 - Allocated Contingency
12)	FD-550	Billingham Kaka'ako Stations Group FD	Executed Contract Amendment No. 004 - Ala Moana Transit Ctr-Chinatown Sta	(\$480,017)	90.02 - Allocated Contingency
13)	FD-550	Billingham Kaka'ako Stations Group FD	Executed Contract Amendment No. 004 - Ala Moana Transit Ctr-Chinatown Sta	(\$618,117)	90.02 - Allocated Contingency
14)	FD-240	Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 005 - Addition of Elie Ramps to FHSG Stations	(\$177,444)	90.02 - Allocated Contingency
15)	FD-240	Farrington Highway Stations Group-2 FD	Executed Contract Amendment No. 005 - 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 - MGS to West Loch and Waipahu Order Design	(\$38,000)	90.02 - Allocated Contingency
<b>January '15 Contingency Drawdown</b>				<b>(\$3,988,243)</b>	
<b>January '15 - Ending Contingency Balance</b>				<b>\$519.79</b>	
<b>February '15</b>					
1)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 058 - Kalo Drainage Channel/Geotechnical	\$667,501	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 - Waialeale Scour Design Actuals	(\$288,494)	90.02 - Allocated Contingency
4)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 061 - Kalo Scour Design Actuals	(\$636,571)	90.02 - Allocated Contingency
5)	DB-120	West Oahu Farrington Highway Guideway DB	Executed Change Order No. 062 - 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. 063 - Procurement & Delivery LCC Modular Blob	(\$1,919,024)	90.01 - Unallocated Contingency
<b>February '15 Contingency Drawdown</b>				<b>(\$4,196,864)</b>	
<b>February '15 - Ending Contingency Balance</b>				<b>\$515.59</b>	
<b>March '15</b>					
1)	DBOM-920	Core Systems Contract Design Build OM	Executed Change Amendment No. 015 - Test and Storage Track Changes at MSP	(\$2,910,000)	90.02 - Allocated Contingency
2)	FD-140	West Oahu Stations Group FD	Executed Change Amendment No. 013 - WQFS Rebid and VE Items 4:88 Bay Station Canopy Roofs, Change to CSC Dev location	(\$245,000)	90.02 - Contract Allowance
3)	FD-140	West Oahu Stations Group FD	Executed Change Amendment No. 016 - Management Extension thru October 2014	(\$352,500)	90.02 - Allocated Contingency
4)	DBE-525	Airport Section Guideway 7 Pier Construction	Executed Change Order No. 001 - UDOT A Utility Relocation at Piers	(\$480,863)	90.02 - Allocated Contingency
5)	FD-340	Kamehameha Highway Stations Group FD	Executed Change Amendment No. 006 - Misc. RFIs Interface Items	(\$309,176)	90.02 - Allocated Contingency
6)	FD-340	Kamehameha Highway Stations Group FD	Executed Change Amendment No. 006 - Aloha Stadium Low Impact Development Requirement	(\$43,000)	90.03 - Contract Allowance
<b>March '15 Contingency Drawdown</b>				<b>(\$4,370,539)</b>	
<b>March '15 - Ending Contingency Balance</b>				<b>\$510.68</b>	

### HART Project Contingency Drawdown with Details

Data as of 05/22/15

#	Project No.	Project Desc.	Budget Transfer/Change Description	Contingency Drawdown (\$)	Contingency Code
<b>April '15</b>				<b>\$510.68</b>	
1)	FD-140	West Oahu Stations Group FD	Redesign of East Kapolei Escalator	(\$66,000)	90.02 - Allocated Contingency
2)	FD-140	West Oahu Stations Group FD	Hopili Grading	(\$175,000)	90.03 - Contract Allowance
3)	FD-140	West Oahu Stations Group FD	Redesign of TPSS Trench at SS3 and CSC Cabinets at East Kapolei	(\$28,000)	90.02 - Allocated Contingency
4)	DBB-525	Airport Section Guideway 7 Pier Construction	Contractor to Perform CSL Testing	(\$17,978)	90.02 - Allocated Contingency
5)	DBB-120	West Oahu Fannington Highway Guideway DB	Hazmat Assessment for LCC Portables	(\$3,174)	90.02 - Allocated Contingency
April '15 Contingency Drawdown				<b>(\$296,552)</b>	
<b>*May '15 - Board Approved Changes Only - Pending Execution</b>				<b>\$510.39</b>	
	N/A	N/A	NO changes brought to the board this period	\$0	
Subtotal Board Approved Contingency Drawdown				\$0	
<b>May '15 - Ending Contingency Balance (Pending Execution)</b>				<b>\$510.39</b>	

Appendix C. Project Cost Reports (data as of April 24, 2015)

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

Project Costs by Contract



Costs Reported as of Month Ending: April 2015

Project Monthly Cost Report by Contract - One Line Summary

Page: 1 of 3

CPP No.	Title	A		B		C=A+B		D		E		F	
		Original	Changes	COMMITTED	Current*	AFE**	AFE**	Incurred To Date	Incurred To Date	PERCENT	PERCENT		
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	0	15,348,443	0	0	0	0	14,925,228	0	0	37%
CCH-101	HART/ City Dept of BFS	105,092	0	0	105,092	0	0	0	0	0	0	0	0%
CCH-102	HART/ City DDC Land Division	256,201	0	0	256,201	0	0	0	0	173,182	0	0	68%
CCH-107	HART/ City Corporation Counsel (CDR)	1,692,366	0	0	1,692,366	0	0	0	0	149,466	0	0	9%
CCH-108	Board of Water Supply (BWS)	928,325	0	0	928,325	0	0	0	0	928,325	0	0	100%
DB-120	West Oahu/Farrington Hwy Guideway	482,924,000	140,682,472	623,606,472	623,606,472	623,606,472	0	0	0	387,568,591	0	0	62%
DB-200	Maintenance & Storage Facility DB	195,238,000	79,550,008	274,808,008	274,808,008	207,838,742	0	0	0	194,183,226	0	0	71%
DB-320	Kamehameha Hwy Guideway DB	372,150,000	16,365,363	388,515,363	388,515,363	388,515,363	0	0	0	199,117,289	0	0	36%
DBB-165	SPCD - West Side SG Construction	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-275	SPCD-Pearl Highlands Pkg. Str. Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-450	SPCD-Airport Section Utility Reloc.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-460	SPCD-Airport Guideway/Util. Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-470	SPCD-Airport Station Group Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-505	Airport Section Utilities Constr.	28,413,974	0	28,413,974	28,413,974	27,383,022	0	0	0	1,279,386	0	0	5%
DBB-510	City Center Section Utilities Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-520	SPCD-Airport-City Center Gdwy Cntr.	3,973,000	0	3,973,000	3,973,000	3,973,000	0	0	0	0	0	0	0%
DBB-525	Airport Section Guideway 7 Pier Cnstr	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-550	SPCD-City Segment Util Relocations	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-560	SPCD-City Center Guideway Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-570	SPCD-Dillingham Stat Group Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-572	SPCD-City Center Station Constr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-580	SPCD-Dillingham/Kaka'ako SG Cntr.	0	0	0	0	0	0	0	0	0	0	0	0%
DBB-600	Park-and-Ride Lts Construction	0	0	0	0	0	0	0	0	0	0	0	0%
DBO M-920	Core Systems Design Build O/M	573,782,793	21,243,044	595,025,837	595,025,837	579,110,825	0	0	0	126,214,247	0	0	21%
FD-140	West Oahu Station Group, FD	7,789,000	2,225,305	10,014,305	10,014,305	9,187,505	0	0	0	8,923,882	0	0	89%
FD-240	Farrington Highway Stations Group 2	9,300,696	4,897,349	14,198,045	14,198,045	12,990,376	0	0	0	12,367,564	0	0	87%
FD-245	SPCD-Pearl Highlands Pkg. Str. FD	0	0	0	0	0	0	0	0	0	0	0	0%
FD-340	Kamehameha Hwy Station Group, FD	8,702,592	309,176	9,011,768	9,011,768	8,356,672	0	0	0	8,219,319	0	0	91%
FD-430	Airport Sect. Guideway/Utilities FD	38,840,960	3,769,872	42,610,832	42,610,832	42,610,832	0	0	0	39,771,629	0	0	93%
FD-440	Airport Station Group FD	10,177,365	1,224,840	11,402,205	11,402,205	10,372,862	0	0	0	9,718,742	0	0	85%
FD-530	City Center Guideway/Utilities FD	43,948,220	2,295,303	46,183,523	46,183,523	43,587,202	0	0	0	38,057,052	0	0	82%
FD-542	SPCD-City Center Stations(3), FD	0	0	0	0	0	0	0	0	0	0	0	0%

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\* Current Committed = Original Contract + CCO /Amendment

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

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

Page: 2 of 3

C/P/No	Title	A		B		C=A+B		D		E		F	
		Original	COMMITTED Changes	Current*	Current*	AFE	AFE**	INCURRED	INCURRED To Date	PERCENT	PERCENT		
FD-550	Dillingham and Kaka'ako S.G. FD	18,321,318	652,529	18,974,447	15,399,142	10,667,500	56%						
FD-600	Park-and-Ride Lcfs Final Design	0	0	0	0	0	0%						
HRT-200	HART Labor	37,951,942	0	37,951,942	0	37,519,021	99%						
HRT-201	HART ODC Contracts	15,759,154	0	15,759,154	0	15,114,711	96%						
M1-900	Project Wide Fare Collection DFI	0	0	0	0	0	0%						
M1-930	Elevators & Escalators Install/Maint	50,982,714	0	50,982,714	5,442,108	3,879,298	8%						
MM-180	SPCD-West Oahu/Farrington Stat CEI	0	0	0	0	0	0%						
MM-280	SPCD-WOHH/KHSG CE&I (REPA CKA GED)	0	0	0	0	0	0%						
MM-290	Construction Engrg. & Inspection West	54,232,480	0	54,232,480	16,650,000	9,577,079	18%						
MM-385	SPCD-Pearl Highlands Garage Rmpps CEI	0	0	0	0	0	0%						
MM480	SPCD-Airport Guideway/Utilities CEI	0	0	0	0	0	0%						
MM-500	SPCD-By MM9-59 CEI East	0	0	0	0	0	0%						
MM-525	SPCD-By MM9-59 CEI East	0	0	0	0	0	0%						
MM-580	SPCD-City Center Guideway/UH CEI	0	0	0	0	0	0%						
MM-590	SPCD-By MM9-59 CEI East	0	0	0	0	0	0%						
MM-595	Construction Engrg. & Inspection East	63,083,417	0	63,083,417	15,257,000	8,658,069	14%						
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	30,548,966	92%						
MM-905	MM-905 Gen Engrg Const EIS/PE	0	78,564,942	78,564,942	78,564,942	74,157,822	94%						
MM-910	MM-910 Gen Engrg Const FD-Construct	150,000,000	0	150,000,000	150,000,000	149,306,913	100%						
MM-913	MM-913 Gen Engrg Re compete	46,149,277	0	46,149,277	13,078,208	15,848,848	34%						
MM-915	HDOT Traffic Mgmt. Consult.	1,600,000	1,400,000	3,000,000	4,000,000	2,249,114	75%						
MM-920	HDOT Coordination Const WOFH	3,000,000	7,500,000	10,500,000	10,000,000	6,156,993	59%						
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	1,972,832	31%						
MM-923	HDOT Coordination Const City Center	0	0	0	0	0	0%						
MM-925	HDOT Labor - Highway Group	550,000	0	550,000	1,815,633	1,406,234	256%						
MM-926	HDOT Labor - Airport Group	0	0	0	0	0	0%						
MM-930	HDOT State SDR Manager & Consultant	1,272,400	583,142	1,855,542	843,167	861,003	36%						
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	481,434	48%						

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\* Current Committed = Original Contract + CCO/Amendment

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

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Costs Reported as of Month Ending: April 2015

Project Monthly Cost Report by Contract - One Line Summary

Page: 3 of 3

CPP No	Title	A		B COMMITTED Changes	C=A+B Current *	D AFE AFE**	E INCURRED Incurred To Date	F PERCENT %
		Original	Current *					
MM-945	On-Call Contractor	1,000,000	1,999,951	999,951	1,999,951	1,799,951	1,044,886	52%
MM-946	On-Call Hazmat Removal Contractor	3,075,000	3,075,000	0	3,075,000	1,000,000	1,867,277	61%
MM-950	OCIP Consultant	1,250,000	1,250,000	0	1,250,000	833,750	833,750	67%
MM-951	Owner-Controlled Insurance Program	41,000,000	41,000,000	0	41,000,000	0	19,584,117	48%
MM-960	Archaeological & Cultural Monitoring	459,517	459,517	0	459,517	459,517	318,512	69%
MM-962	Core Systems Support	43,988,989	43,988,989	0	43,988,989	3,600,000	7,081,934	16%
MM-964	Safety and Security Consultant	4,699,573	4,699,573	0	4,699,573	2,500,000	1,562,760	34%
MM-975	LEED Commissioning Services for MSF	278,630	288,540	9,910	288,540	288,540	58,660	20%
OTHER	Project Wide	0	0	0	0	0	0	0%
PA-101	Programmatic Agreement Humanities	0	0	0	0	0	0	0%
PA-102	Programmatic Agreement HPC	400,000	400,000	0	400,000	2,000,000	137,683	34%
PA-103	Programmatic Agreement HPC Park Impr	0	0	0	0	0	0	0%
ROW	Real Estate / Right-of-Way	89,885,511	89,885,511	0	89,885,511	121,992	78,542,753	87%
UTIL	Utilities by Utility Companies	90,560,619	98,588,275	8,027,656	98,588,275	78,904,597	18,862,734	19%
<b>Total Project:</b>		<b>2,612,188,226</b>	<b>2,979,264,993</b>	<b>367,076,767</b>	<b>2,979,264,993</b>	<b>2,420,955,115</b>	<b>1,490,398,979</b>	

\* Current Committed = Original Contract + CCO/Amendment

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

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Project Costs by SCC – Summary

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

Page: 1 of 1



SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G	I
		Baseline	Transfers	Current	COMMITTED	Current*	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	39,375,055	1,153,590,202	544,258,648	30,545,087	0	1,153,590,202	0	177,160,122	0	177,160,122	0
20.	Stations Stops Terminals, Intermodal	421,804,740	(25,138,472)	396,666,268	50,982,714	0	0	396,666,268	0	3,879,288	0	3,879,288	0
30.	Support Facilities: Yards, Shops, Admin	92,535,015	21,771,122	114,306,137	114,661,137	18,317,473	0	114,306,137	0	64,848,121	0	64,848,121	0
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	424,088,518	0	424,088,518	0
50.	Systems	221,284,301	26,296,231	247,580,532	232,420,319	27,038,099	0	247,580,532	0	25,075,274	0	25,075,274	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	82,270,306	0	82,270,306	0
70.	Vehicles	186,829,020	4,713,997	191,543,017	191,474,521	1,448,224	0	191,543,017	0	21,203,394	0	21,203,394	0
80.	Professional Services	1,087,830,119	14,870,846	1,102,700,965	1,026,416,089	127,767,073	(9,661,882)	1,102,700,965	0	685,427,384	0	685,427,384	0
	A.C. Provisional Pay Requests	0	0	0	0	0	0	0	0	6,050,000	0	6,050,000	0
<b>Subtotal:</b>		4,305,074,410	133,158,929	4,438,233,339	2,971,920,479	367,259,120	(4,932,186)	4,438,233,339	0	1,490,012,418	0	1,490,012,418	0
<b>2. NTP</b>													
	NTP Authorized For Expenditure	0	0	0	0	2,049,698,706	0	0	0	0	0	0	0
<b>Subtotal:</b>		0	0	0	0	2,049,698,706	0	0	0	0	0	0	0
<b>3. Contingency</b>													
	CONTR Allocated Contingency	541,689,348	(77,750,708)	463,938,635	7,344,515	3,997,289	237,129,383	463,938,635	0	386,561	0	386,561	0
	PRJ Unallocated Contingency	101,871,170	(55,408,221)	46,462,949	0	0	0	46,462,949	0	0	0	0	0
<b>Subtotal:</b>		643,560,513	(133,158,929)	510,401,584	7,344,515	3,997,289	237,129,383	510,401,584	0	386,561	0	386,561	0
<b>4. Finance Charges - Eligible</b>													
	OTH Finance Charges	173,058,243	0	173,058,243	0	0	0	173,058,243	0	0	0	0	0
<b>Subtotal:</b>		173,058,243	0	173,058,243	0	0	0	173,058,243	0	0	0	0	0
<b>FTA TOTAL PROJECT COSTS</b>		<b>5,121,693,166</b>	<b>0</b>	<b>5,121,693,166</b>	<b>2,979,264,993</b>	<b>2,420,955,115</b>	<b>232,197,197</b>	<b>5,121,693,166</b>	<b>0</b>	<b>1,490,398,979</b>	<b>0</b>	<b>1,490,398,979</b>	<b>0</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	0	0	0
<b>Subtotal:</b>		42,000,000	0	42,000,000	0	0	0	42,000,000	0	0	0	0	0
<b>INELIGIBLE COSTS</b>		<b>42,000,000</b>	<b>0</b>	<b>42,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Project:</b>		<b>5,163,693,166</b>	<b>0</b>	<b>5,163,693,166</b>	<b>2,979,264,993</b>	<b>2,420,955,115</b>	<b>232,197,197</b>	<b>5,163,693,166</b>	<b>0</b>	<b>1,490,398,979</b>	<b>0</b>	<b>1,490,398,979</b>	<b>0</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

Project Costs by SCC – Level 2

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

Page: 1 of 3



SCC	Title	A		B		C=A+B		D		E		F		G		H=C-G		I	
		Baseline	Transfers	BUDGET	Transfers	Current	COMMITTED	Current*	AFE**	AFE**	Changes ID'd***	ESTIMATE AT COMPLETION	Est. At Completion***	Variance	Incurred To Date				
<b>1. Subtotal 10 - 80 SCC Costs</b>																			
10.00	Guideway & Track Elements	1,114,215,147	39,375,055	1,153,590,202	544,258,648	30,545,087	0	1,153,590,202	0	1,153,590,202	0	177,160,122	0	177,160,122	0	17,378	0	130,853,457	0
10.02	Guideway: At-grade semi-exclusive	0	17,378	17,378	17,378	17,378	0	17,378	0	17,378	0	17,378	0	17,378	0	17,378	0	130,853,457	0
10.04	Guideway: Aerial Structure	1,022,380,871	36,381,516	1,058,762,187	458,938,433	20,865,982	0	1,058,762,187	0	1,058,762,187	0	17,378	0	1,058,762,187	0	17,378	0	130,853,457	0
10.08	Guideway: Retained Cut or Fill	7,482,944	(1,056,688)	6,426,256	6,426,256	0	0	6,426,256	0	6,426,256	0	0	0	6,426,256	0	0	0	0	0
10.09	Track: Direct Fixation	79,347,205	3,097,822	82,445,027	74,637,831	9,630,851	0	82,445,027	0	82,445,027	0	46,289,287	0	82,445,027	0	46,289,287	0	46,289,287	0
10.11	Track: Ballasted	3,293,724	(595,849)	2,697,875	2,697,875	0	0	2,697,875	0	2,697,875	0	0	0	2,697,875	0	0	0	0	0
10.12	Track: Special (Switches, turnouts)	1,700,603	1,530,876	3,231,479	1,530,876	30,876	0	3,231,479	0	3,231,479	0	0	0	3,231,479	0	0	0	0	0
20. Stations/ Stops/Terminals: Intermodal	421,804,740	(23,139,472)	396,666,268	50,982,714	0	0	0	396,666,268	0	396,666,268	0	3,879,298	0	3,879,298	0	3,879,298	0	3,879,298	0
20.01	At-grade station, stop, shelter, ...	6,111,332	0	6,111,332	0	0	0	6,111,332	0	6,111,332	0	0	0	6,111,332	0	0	0	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	273,163,457	0	0	0	273,163,457	0	0	0	0	0
20.06	Automobile parking multi-story str	66,408,765	0	66,408,765	0	0	0	66,408,765	0	66,408,765	0	0	0	66,408,765	0	0	0	0	0
20.07	Elevators, Escalators	54,721,186	(3,739,472)	50,982,714	50,982,714	0	0	50,982,714	0	50,982,714	0	0	0	50,982,714	0	0	0	3,879,298	0
30. Support Facilities: Yards, Shops, Admin	92,535,015	21,771,122	114,306,137	114,306,137	114,306,137	18,317,473	0	114,306,137	0	114,306,137	0	64,848,121	0	64,848,121	0	64,848,121	0	64,848,121	0
30.02	Light Maintenance Facility	7,591,888	(5,095)	7,586,793	7,586,793	0	0	7,586,793	0	7,586,793	0	1,390,906	0	1,390,906	0	1,390,906	0	1,390,906	0
30.03	Heavy Maintenance Facility	38,099,138	4,595,814	42,694,952	43,049,952	5,192,922	0	42,694,952	0	42,694,952	0	18,211,841	0	18,211,841	0	18,211,841	0	18,211,841	0
30.04	Storage or Maintenance of Way Buil	7,797,460	964,571	8,762,031	8,762,031	1,026,121	0	8,762,031	0	8,762,031	0	3,552,120	0	3,552,120	0	3,552,120	0	3,552,120	0
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	55,262,361	0	41,693,254	0	41,693,254	0	41,693,254	0	41,693,254	0
40. Sitemwork & Special Conditions	983,178,121	50,741,529	1,033,919,650	719,491,720	181,815,344	(270,304)	0	1,033,919,650	0	1,033,919,650	0	424,098,518	0	424,098,518	0	424,098,518	0	424,098,518	0
40.01	Demolition, Clearing, Earthwork	29,980,158	(1,741,059)	28,239,099	8,589,446	632,302	0	28,239,099	0	28,239,099	0	1,354,455	0	1,354,455	0	1,354,455	0	1,354,455	0
40.02	Site Utilities, Utility Relocation	299,449,756	9,394,408	308,834,164	201,049,008	146,381,176	0	308,834,164	0	308,834,164	0	57,074,792	0	57,074,792	0	57,074,792	0	57,074,792	0
40.03	Haz. mat'l, contain'd soil removal	9,199,237	(5,421,634)	3,777,603	3,091,085	16,085	0	3,777,603	0	3,777,603	0	1,883,362	0	1,883,362	0	1,883,362	0	1,883,362	0
40.04	Environmental Mitigation	26,979,122	4,976,801	31,955,923	16,545,497	2,689	0	31,955,923	0	31,955,923	0	8,539,465	0	8,539,465	0	8,539,465	0	8,539,465	0
40.05	Site structures, retaining walls,	7,998,960	1,194,077	9,193,037	8,974,511	71,663	0	9,193,037	0	9,193,037	0	2,436,091	0	2,436,091	0	2,436,091	0	2,436,091	0
40.06	Pedestrian/bike access/landscaping	41,073,897	741,177	41,815,074	4,991,868	(4,566)	0	41,815,074	0	41,815,074	0	50,000	0	50,000	0	50,000	0	50,000	0
40.07	Auto, bus, van accessways	181,979,367	(10,796,852)	171,182,515	36,270,071	1,501,555	0	171,182,515	0	171,182,515	0	3,965,621	0	3,965,621	0	3,965,621	0	3,965,621	0
40.08	Temporary Facilities/Indirect Cost	386,517,824	52,464,611	438,982,435	438,982,435	144,897,440	0	438,982,435	0	438,982,435	0	348,794,732	0	348,794,732	0	348,794,732	0	348,794,732	0
50. Systems	221,284,301	26,296,231	247,580,532	232,420,819	27,038,099	0	0	247,580,532	0	247,580,532	0	25,075,274	0	25,075,274	0	25,075,274	0	25,075,274	0
50.01	Train control and signals	81,382,556	24,391,140	106,363,696	106,363,696	23,961,050	0	106,363,696	0	106,363,696	0	2,250,972	0	2,250,972	0	2,250,972	0	2,250,972	0
50.02	Traffic signals and crossing prot.	10,458,226	(206,890)	10,251,336	0	0	0	10,251,336	0	10,251,336	0	0	0	10,251,336	0	0	0	0	0
50.03	Traction power supply: substation	29,500,926	1,379,890	30,880,806	30,880,806	(87,485)	0	30,880,806	0	30,880,806	0	3,462,747	0	3,462,747	0	3,462,747	0	3,462,747	0
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	37,937,988	0	13,770,088	0	13,770,088	0	13,770,088	0	13,770,088	0

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\* 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



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

SCC	Title	A		B		C=A+B		D	E	F	G	H=C-G		I
		Baseline	Budget	Transfers	Current	COMMITTED	AFE					ESTIMATE AT COMPLETION	INCURRED	
					Current	Current*	AFE**	Changes ID'd***	Est. At Completion****	Variance	Incurred To Date			
<b>1. Subtotal 10 - 80 SCC Costs</b>														
50. Systems	221,284,301	26,296,231	247,580,532	232,420,319	27,035,939	0	247,580,532	0	247,580,532	0	25,075,274	0	25,075,274	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	9,843,368	0
50.06 Fare collection system and equipm	9,159,277	(10,291,178)	(1,131,901)	(1,131,901)	(10,330,000)	0	(1,131,901)	0	(1,131,901)	0	(1,131,901)	0	(1,131,901)	0
50.07 Central Control	3,613,827	(180,036)	3,453,791	3,453,791	0	0	3,453,791	0	3,453,791	0	0	0	0	0
80. ROW, Land, Existing Improvements	197,397,947	528,621	197,926,568	93,215,331	329,820	5,000,000	197,926,568	5,000,000	197,926,568	0	82,270,306	0	82,270,306	0
80.01 Purchase or lease of real estate	179,360,664	250,821	179,611,485	86,269,654	52,020	5,000,000	179,611,485	5,000,000	179,611,485	0	74,304,820	0	74,304,820	0
80.02 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	7,965,486	0	7,965,486	0
70. Vehicles	186,829,020	4,713,997	191,543,017	191,474,521	1,446,224	0	191,543,017	0	191,543,017	0	21,203,394	0	21,203,394	0
70.01 Light Rail	186,721,386	5,915,687	192,637,073	172,568,577	1,446,224	0	192,637,073	0	192,637,073	0	14,473,908	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	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	0	0
80. Professional Services	1,087,830,119	14,870,846	1,102,700,965	1,026,416,089	127,767,073	(9,661,882)	1,102,700,965	(9,661,882)	1,102,700,965	0	685,427,384	0	685,427,384	0
80.01 Preliminary Engineering	34,055,262	24,644,185	118,639,447	109,567,127	20,905,682	0	118,639,447	0	118,639,447	0	101,789,664	0	101,789,664	0
80.02 Final Design	228,321,632	(5,221,555)	223,100,077	206,141,880	31,225,953	820,779	223,100,077	820,779	223,100,077	0	154,982,516	0	154,982,516	0
80.03 Project Management Design & Cons	363,849,768	(44,051,192)	319,798,586	356,880,049	65,946,725	(9,707,524)	319,798,586	(9,707,524)	319,798,586	0	282,151,493	0	282,151,493	0
80.04 Constr. Admin. & Management	199,656,728	(35,961,872)	163,694,857	158,430,936	40,457,664	672	163,694,857	672	163,694,857	0	65,233,877	0	65,233,877	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	21,377,167	0	21,377,167	0
80.06 Legal; Permits; Review Fees ect..	67,641,005	(211,096)	67,429,919	35,564,005	2,516,420	0	67,429,919	2,516,420	67,429,919	0	17,970,925	0	17,970,925	0
80.07 Surveys, Testing, Investigation, I	21,759,336	47,121,102	68,880,438	67,789,437	1,463,121	0	68,880,438	0	68,880,438	0	22,534,237	0	22,534,237	0
80.08 Start up	65,996,664	(230,695)	65,765,969	48,868,977	961,909	(775,809)	65,765,969	(775,809)	65,765,969	0	19,387,565	0	19,387,565	0
A.C. Provisional Pay Requests	0	0	0	0	0	0	0	0	0	0	6,050,000	0	6,050,000	0
ACR Provisional Request For Payment	0	0	0	0	0	0	0	0	0	0	6,050,000	0	6,050,000	0
<b>Subtotal:</b>	4,305,074,410	133,158,929	4,438,233,339	2,971,920,479	367,259,120	(4,932,186)	4,438,233,339	(4,932,186)	4,438,233,339	0	1,490,012,418	0	1,490,012,418	0
<b>2. NTP</b>														
NTP Authorized For Expenditure	0	0	0	0	0	0	2,049,698,706	0	2,049,698,706	0	0	0	0	0
NTP Notice To Proceed	0	0	0	0	0	0	2,049,698,706	0	2,049,698,706	0	0	0	0	0
<b>Subtotal:</b>	0	0	0	0	0	0	2,049,698,706	0	2,049,698,706	0	0	0	0	0

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



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

SCC	Title	A Baseline	B Transfers	C-A+B Current	D COMMITTED Current*	E AFE** AFE**	F Changes ID'd*** Est. At Completion****	G ESTIMATE AT COMPLETION Est. At Completion****	H=C-G Variance	I INCURRED Incurred To Date
<b>3. Contingency</b>										
CNTR	Allocated Contingency	541,689,343	(77,750,708)	463,938,635	7,344,515	3,937,289	237,129,383	463,938,635	0	386,561
90.02	Allocated Contract Contingency	540,101,323	(80,190,188)	459,911,142	3,937,289	3,937,289	229,663,584	469,911,142	0	386,561
90.03	Allowances	1,588,014	2,439,479	4,027,493	3,347,226	0	7,465,799	4,027,493	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	(133,158,929)	510,401,584	7,344,515	3,937,289	237,129,383	510,401,584	0	386,561
<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</b>										
		0	0	5,121,693,166	2,379,264,993	2,420,955,115	232,197,197	5,121,693,166	0	1,480,398,979
<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</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	2,379,264,993	2,420,955,115	232,197,197	5,163,693,166	0	1,490,398,979

\* 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-650	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 '15
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
MM-947	On-Call Construction Contractor II	Royal Contracting Co. Ltd.	Mar 17 '15	May 21 '15	May 21 '15	May 21 '20
DBB-385	Ramp H2R2	Royal Contracting Co. Ltd.	Jan 30 '15	May 18 '15	May 18 '15	Jun 17 '16
DBB-505	Airport Section Utilities Construction	Nan, Inc.	Dec 17 '13	Jun 30 '14	Oct 6 '14	Dec 22 '15
DBB-525	Airport Section Guideway Seven (7) Pier Construction Contract	HDCC / CJA JV	Jul 09 '14	Sep 18 '14	Sep 18 '14	Apr 22 '15

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
MM-970	Fare Collection System Technical Support Consultant	Mar 24 '15	Apr 27 '15	-	TBD	TBD
MM-596	Construction Engineering and Inspection (CE&I) II Contract	Mar 25 '15	May 20 '15	-	TBD	TBD
DB-450	Airport Guideway and Stations	Apr 07 '15	Jul 21 '15	Jan 26 '16	Mar 14 '16 Jun 14 '16	Jul 19 '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	TBD	TBD	-	TBD	TBD
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. Vehicle Carshell Progress Tracker

HONOLULU AB FABRICATION TRACKER

CAR SHELL SERIAL NUMBER	CENTER ROOF ASSY & WELDING (2 PANEL SET)	CENTER FLOOR ASSY & WELDING (2 PANEL SET)	CENTER ROOF MACHINING	CENTER FLOOR MACHINING (2 PANEL SET)	ROOF ASSY & WELDING	FINAL ROOF ASSY & WELDING TEST	UNDER FRAME ASSY & WELDING	FINAL UNDERFRAME ASSY & INSPECTION	UNDERFRAME CLEANING AND PAINTING	CAR SHELL ASSY & WELDING 1	CAR SHELL ASSY & WELDING 2	CAR SHELL CALIBRATION	WATER TEST	PAINTING	INSULATION	FLOORING	CAR SHELL FINAL INSPECTION & WEIGHING	COMPLETED CAR SHELL
M/001												5/23/2015						7/19/2015
E/001												5/23/2015						7/19/2015
M/002												5/23/2015						7/19/2015
E/002	E/003		E/003									5/23/2015						7/19/2015
M/003												8/22/2015						10/8/2015
E/003												8/22/2015						10/8/2015
M/004												8/22/2015						10/8/2015
E/004												8/22/2015						10/8/2015
M/005												8/22/2015						10/8/2015
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Date: 5/20/2015



CHANGED



NON CONFORMITY



COMPLETE  
IN PROCESS

## Appendix F. DBE Participation

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

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

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

DBE Participation (9/24/07 to 5/31/15)						
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	\$4,387,962	\$4,387,962
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	\$190,609	\$5,739,894
Lawson & Associates	541690	O	F	SC-HRT-11H0131 MM-905	\$740,962	
				SC-DTS-0700001 **** MM-910	\$150,141	
				SC-HRT-1400061 MM-964	\$619,800	\$1,510,903
Gary K. Omori	541618	APA	M	SC-HRT-11H0131 MM-905	\$388,609	
				SC-DTS-0700001 **** MM-910	\$392,920	\$781,529

DBE Participation (9/24/07 to 5/31/15)						
DBE Firm	NAICS Code	Race	Sex	Contract Number	Participation to Date	Total DBE Participation
Pat Lee & Assoc.	541618	APA	M	SC-HRT-11H0131 MM-905	\$402,791	
				SC-DTS-0700001 **** MM-910	\$374,110	\$776,901
212 Harakawa	541430	APA	F	SC-HRT-11H0131 MM-905	\$358,141	
				SC-DTS-0700001 **** MM-910	\$354,758	\$712,899
JAD & Associates	541330	APA	M	SC-DTS-0700001 **** MM-910	\$508,355	\$508,355
Pacific Architects	541310	APA	M	SC-DTS-0700001 **** MM-910	\$39,273	\$39,273
Nagame Okawa*	541310	APA	M	SC-DTS-0700001 MM-910	\$67,014	\$67,014
Consulting Structural Hawaii	541330	APA	M	SC-DTS-0700001 **** MM-910	\$298,557	\$298,557
Bright Light Marketing Group	541613	APA	F	SC-HRT-1200038 FD-430	\$162,813	
				SC-HRT-1200149 FD-530	\$191,227	
				SC-HRT-1300022 FD-440	\$134,912	\$488,952
Ki Concepts	541320	APA	M	SC-HRT-1200077 MM-922/923	\$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	\$3,303,778	\$3,303,778
AMR Estimating Services ***	541330	HA	M	SC-HRT-11H0131 MM-905	\$135,281	
				SC-HRT-1400027 MM-913	\$515,149	\$650,430
The Nakoa Companies	541620	NA	M	CT-HRT-1200106 DBOM-920	\$3,843	\$3,843
Hawaiiya Technologies	238210	APA	F	CT-HRT-10H0449 DB-200	\$27,514	
				CT-HRT-1200106 DBOM-920	\$20,142	\$47,656
Element Environmental	541620	APA	M	SC-HRT-1400050 MM-290	\$437,314	\$437,314
PSC Consultants	541330	APA	M	SC-HRT-1400050 MM-290	\$23,656	\$23,656
Bow Construction Management	541330	APA	M	SC-HRT-1400050 MM-290	\$117,763	\$117,763
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	\$583,617	\$583,617
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	\$797,018	\$797,018
Dovetail Consulting	541330	BA	F	MOU-11-SO-1 MM-930	\$709,497	\$709,497
<b>Total</b>						<b>\$24,626,953</b>

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

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

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

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

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

**Race Categories**

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

**Appendix G. Risk**

Risk by Contract Package				
Contract Packages	Apr. 2015 # of Risks	May 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	0	0
Kamehameha Highway Guideway	18	18	0	0
Core Systems Contract	9	8	0	1
Elevator/Escalator	2	3	1	0
Airport Utilities	2	2	0	0
Farrington Highway Stations	5	5	0	0
West Oahu Stations	5	5	0	0
Kam. Highway Stations	8	8	0	0
Airport Guideway	19	18	0	1
City Center Guideway	41	29	0	12
Airport Section Stations	16	16	0	0
City Center Section Stations	14	14	0	0
<b>Total</b>	<b>173</b>	<b>160</b>	<b>1</b>	<b>14</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	April 2015 Update # of Risks				May 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 Garage	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	9	1	4	4	8	0	4	4
Elevator/Escalator	2	0	2	0	3	0	2	1
Airport Utilities	2	1	1	0	2	1	1	0
Farrington Highway Stations	5	0	5	0	5	1	4	0
West Oahu Stations	5	0	5	0	5	0	5	0
Kam. Highway Stations	8	0	3	5	8	0	3	5
Airport Guideway	19	3	14	2	18	3	13	2
City Center Guideway	41	9	27	5	29	11	15	3
Airport Stations	16	3	12	1	16	3	12	1
City Center Stations	14	0	12	2	14	0	12	2
<b>Total</b>	<b>173</b>	<b>23</b>	<b>117</b>	<b>33</b>	<b>160</b>	<b>25</b>	<b>103</b>	<b>32</b>

**Notes:**

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

Appendix H. Project Organization Chart

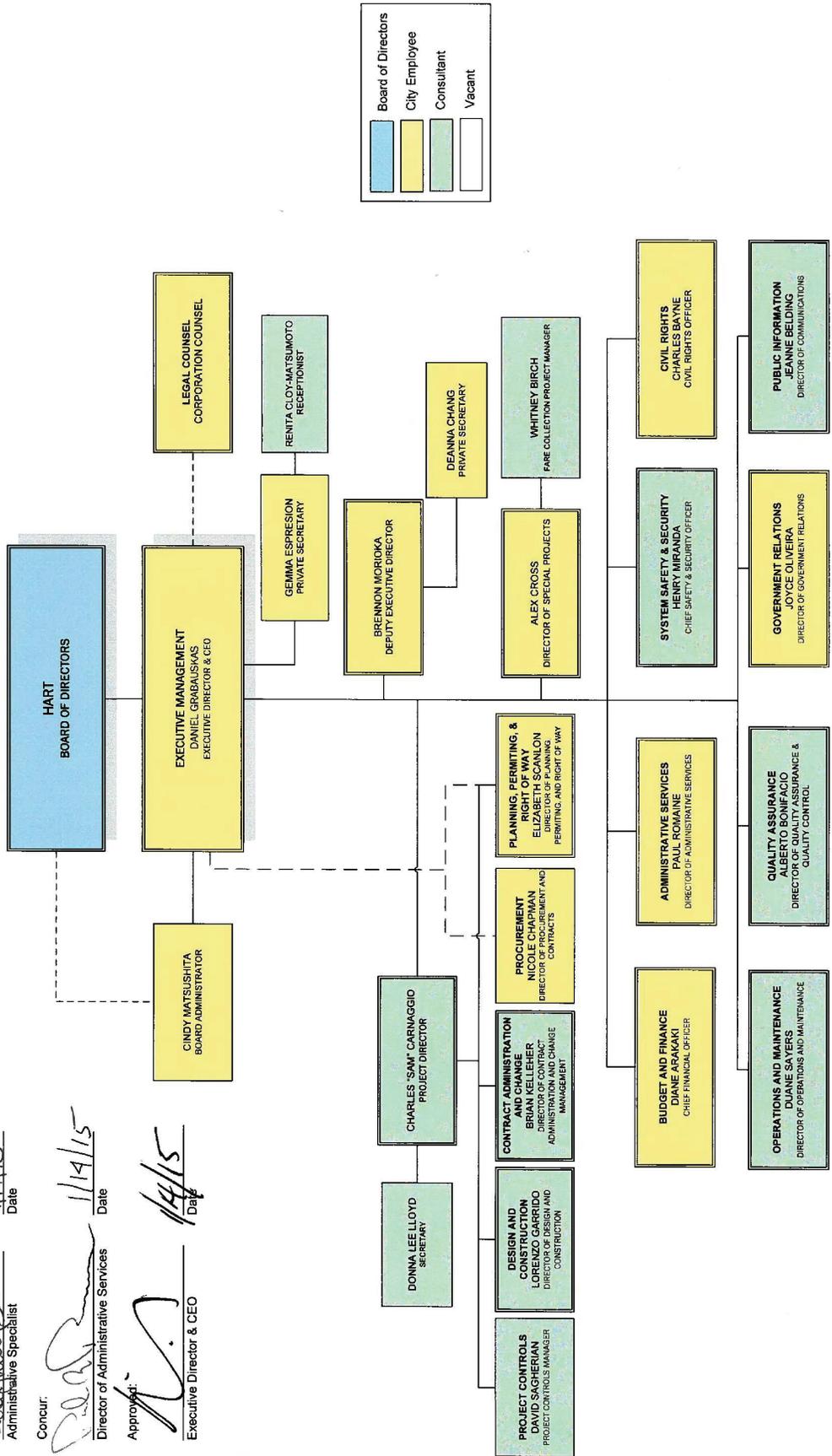
January 14, 2015

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

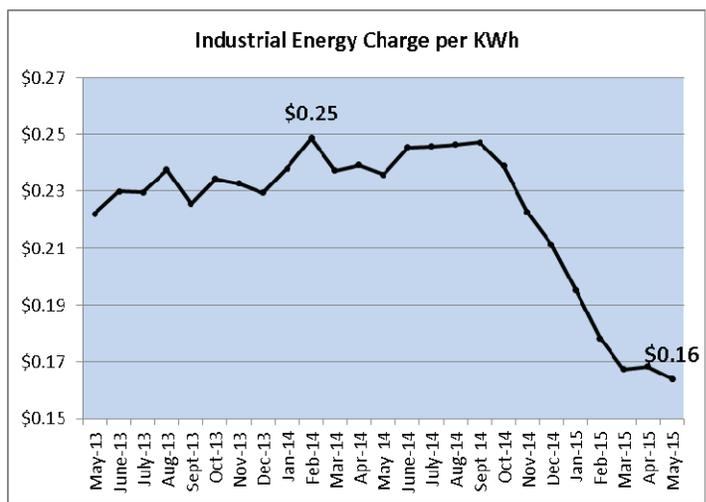
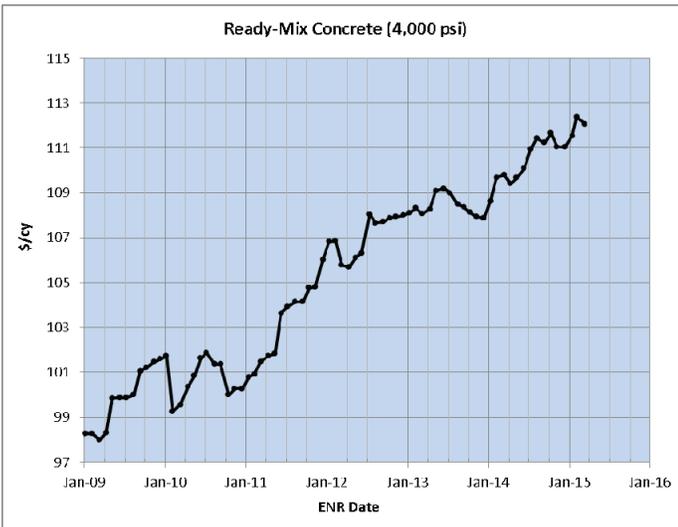
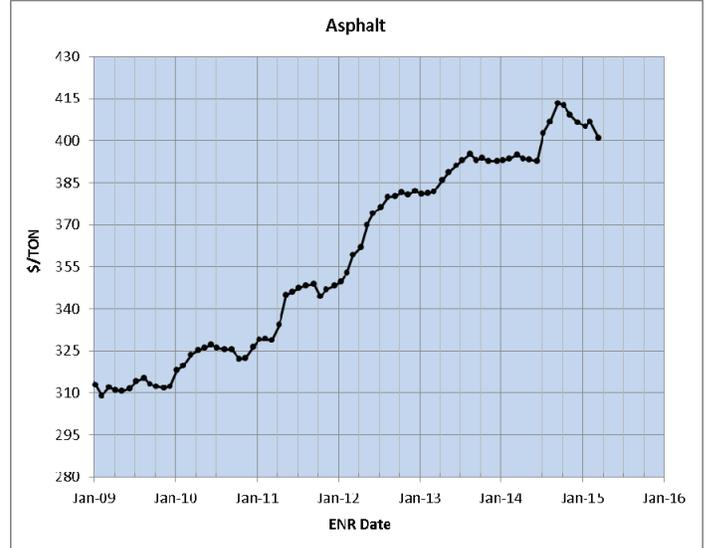
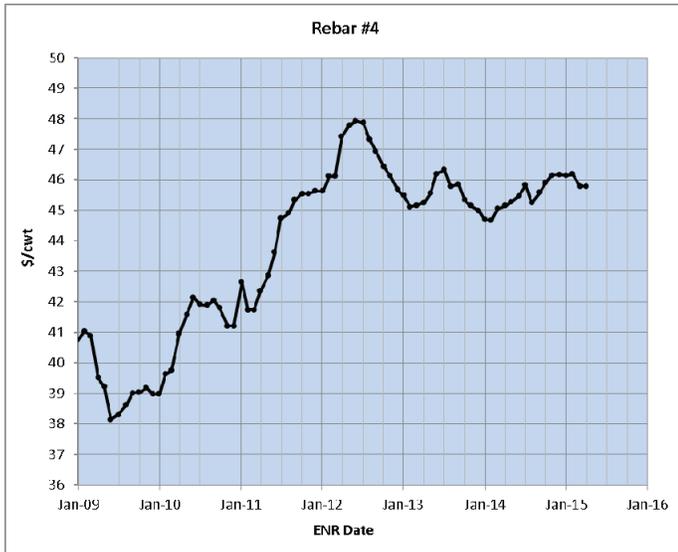
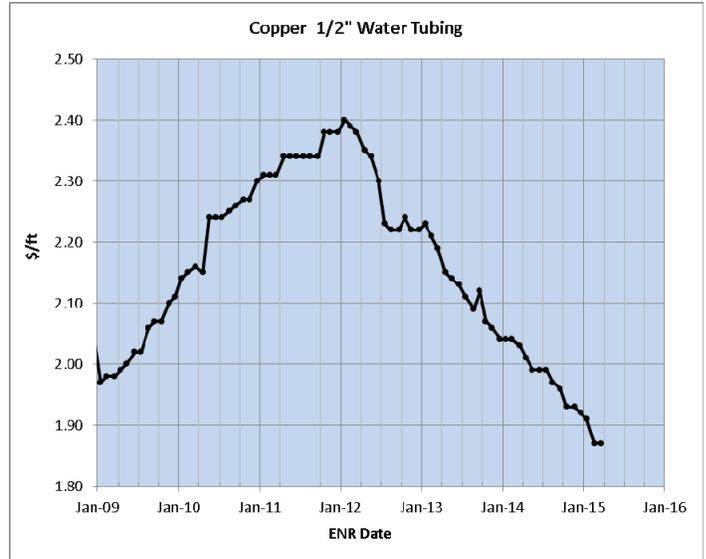
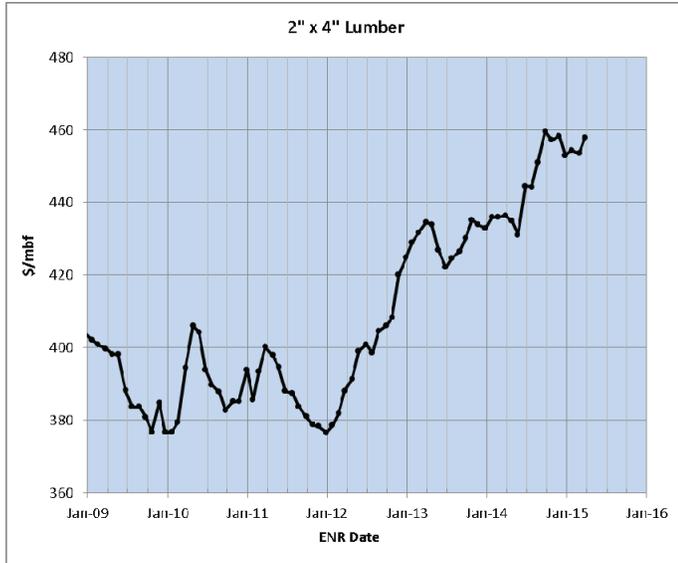


Legend for employee types:

- Board of Directors (Blue box)
- City Employee (Yellow box)
- Consultant (Green box)
- Vacant (White box)

### Appendix I. Indices on Key Commodities

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



Source: HECO: Effective Rate Summary for DS Rate

Appendix J. Project Photos



Guideway construction in West O'ahu.



Equipment storage site.



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



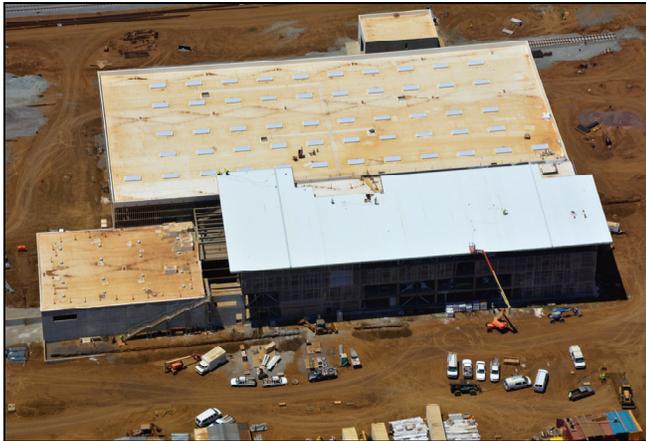
Construction near the H-1/H-2 Freeways.



Construction along Kamehameha Highway.



Future Aloha Stadium Station.



Operations and Servicing Building (OSB).



Wheel Truing Building and OSB.



Maintenance of Way Building.



Casting Yard.